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MID-CAREER CHANGERS: AN INVESTIGATION IN NON-
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MID-CAREER CHANGERS: AN INVESTIGATION OF NON-TRADITIONAL ENTRANTS INTO TEACHING

By

Patrick Halladay

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ABSTRACT

MID-CAREER CHANGERS: AN INVESTIGATION OF NON-TRADITIONAL ENTRANTS INTO TEACHING

By

Patrick Halladay

This study considers candidates entering the classroom after extensive experience in fields outside of education—career changers. Increasingly, attracting career changers is considered a prudent policy option to meet a series of classroom demands, including quality, equity, exigency, and fit. While there is wide speculation about the value career changers will bring to the classroom, little is known about their actual characteristics. This study examines three programs dedicated to preparing career changers for teaching, examining the design of the programs, the candidates they prepared, and the context that shaped the programs and candidates. The findings of this study suggest not only is there great diversity in program design, but that career changers themselves enter teaching with different sets of knowledge, skills, and experience, making classification of them as a uniform group impractical. Additionally, the local context has a strong influence on both a program's appearance and the candidates who choose to enroll. The policy aims of quality, equity, exigency, and fit appear to be, in part, in conflict with each other. If simultaneously meeting multiple policy goals proves untenable, it is incumbent upon policy makers to prioritize their aims by understanding how the local historical, economic, and demographic context structures local schools and teacher labor markets.

For my mother and father, my first teachers

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Suzanne Wilson, likewise, helped me understand the value of critiquing what you value, as opposed to blind acceptance. She also allowed me to space to examine what I valued and space to begin to put my convictions into practice. Suzanne has always shown confidence in my abilities, even while I doubted them, and was one of the few people I have encountered in my life who that insisted I can do better. She also showed me the reward in digging your own potatoes. I cannot thank her enough for her generosity.

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Dan Humphrey, though he doubtfully even remembers our conversation, shared encouraging words about my research at a time that I most needed it.

again, I leave delighted for the immutable relationships they have forged with their grandkids.

I wish I could say that my three fantastic children—Daniel, Anna, and Vivian—were helpful in completing this work, but that would be a bit of a lie. Young children and graduate school are an exhausting mix. What they did provide was a perspective on what is important in my life, giving me balance and escape from my work. Whether playing baseball in the backyard, cheering at soccer games, or giving me a well-needed hug, they showed me what really matters, while simultaneously proving that research into education is a priceless investment.

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Introduction

Many critics of traditional teacher preparation and certification have sought to create alternate pathways and recruit alternative pools of candidates to address a perceived deficit in the quality, equity, and quantity of the teaching force. For at least the past twenty years the lively and occasionally mean-spirited debate over the virtues of traditional versus alternative certification has largely defined the battle lines over how teachers should be prepared for the classroom. On one side, proponents of traditional certification argue the most effective teachers are prepared in a four or five year university-based program with a healthy mixture of foundations, content, methods, an extensive student teaching practicum, and ongoing mentoring over the first years as a practicing teacher. On the other, alternative certification advocates largely discount the value of formal instruction in methods and foundations, favoring candidates with a demonstrated knowledge base of and practical experience in a discrete subject area, academic aptitude, and a small amount of coursework, followed by rapid movement into the classroom. Or, to distill further, traditional certification supporters view teaching as a profession defined by a series of skills to be learned through study and monitored practice, while those supporting alternative certification seek disciplinary masters believing that teaching itself is a largely intuitive skill informed by and refined through experience.

Despite the relative ease with which the troops and generals in each camp can be named, the dichotomy between traditional and alternative certification is anything but dichotomous. Increasingly traditional certification more closely resembles alternative routes and vice versa. There are several viable explanations. An alternative route that includes grounding in different pedagogical approaches may earn legitimacy as it more

closely resembles popular notions of what teacher education looks like. Conversely, traditional approaches recognize that they may have to concede on portions of their program if they are to attract post-baccalaureate candidates who cannot allot the financial and time resources to dedicate two years to preparation. And advocates on all sides of the debate are noticing the drift. While some see this evolution as necessitating a return to their respective core values of professional (National Commission on Teaching and America's Future, 2003) or content-driven preparation (Haberman, 2006; Walsh & Jacobs, 2007), for others it demands a deeper inspection of the nuances of this convergence. For example, Humphrey and Wechlser suggest that

> [a]lternative certification participants and programs should not be characterized as all good or all bad. We know enough to move the debate over teacher preparation beyond sweeping generalizations and overstatements to the crafting of policies and programs that put effective teachers in every classroom. (2007, p. 30)

Categorizing individual programs along a traditional-alternative continuum according to orthodoxy alone is insufficient in describing both the content of the preparation and the candidates who fill its ranks; instead, deep study of the programs demands an appreciation of "the importance of variations—both across and within programs—in participant backgrounds, school placements, and program characteristics" (Humphrey & Wechsler, 2007, p. 30).

Certainly the alternative certification movement and its accompanying debate is one vital strand in the conversation on how to recruit and retain competent teachers. So, too, are teachers who arrive in the classroom after established careers in other fields—an increasingly popular solution in public deliberations on teacher quality. While alternative certification programs and career changers undeniably intersect, my interest lies in

exploring the range of routes open to career changers, whether called traditional, alternate, or hybrid, distinctions that are increasingly less important. It is in the spirit of Humphrey and Wechsler's work that I have embarked on this work. They caution researchers that as opposed to the programmatic level, a "better unit of analysis would be a subgroup of individuals from different programs with similar backgrounds and experience who work in the same or similar school settings" (2007, p. 30). While the program design and location may remain significant in shaping which subgroups seek particular sites, this study attempts to better understand career changers as a subgroup of interest across programs.

Public intellectuals and education researchers alike have assumed a collection of assets embodied by career changers—including intelligence, education, life experience, maturity, subject-area knowledge, discipline, race, gender, and factors motivating the change—to justify aggressive recruitment (Finn & Madigan, 2001; Hess, 2006; Johnson, Birkeland, Peske, & Munger, 2005; Kristof, 2006; Paige, 2003; Will, 2006). Although each proponent favors different combinations of characteristics, supporters are unified in their belief that career changers are a way to attract not just more, but more attractive candidates. However, as attractive as these candidates seem, it is unclear whether the career changers who actually seek certification embody the characteristics they are assumed to have. Despite many passionate calls for attracting career changers, to date research has been limited and anecdotal. (D. Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2006; Goodnough, 2004; Johnson, Birkeland et al., 2005). Therefore, those engaged in the debate surrounding the qualifications of career changers—both supporters and opponents—lack the data that describe the reality of the phenomenon.

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To take one representative example, despite a lack of systematic study into what motivates them to choose the classroom over their current jobs, marketing to potential career changers often falls almost exclusively into the toughest-job-you'll-ever-love tradition, playing on unfulfilled desires to act; to do good; to make a difference (Hawley, 1990; Johnson, Birkeland et al., 2005; Jorissen, 2003; Lutz & Hutton, 1989; Tell, 2001; Wadsworth, 2001). In contrast, those less convinced of career changers' efficacy claim that local economic or political conditions draw them to the classroom and that such candidates are likely to return to their higher paying jobs as soon the economy rebounds (Stevens & Dial, 1993).

Supporters assume career changers to be more male, minority, and professional than traditional entrants, representing a potential untapped supply to fill voids in rural and urban schools and within particular subject areas. Still, research has neither examined whether there are predictive characteristics that might help target career changers more likely to meet these staffing needs (e.g., work experience, age, test scores) nor whether such staffing needs differ from program to program based on local contexts. In short, this study is an appraisal of the extent to which the broad basket of career changers' assumed characteristics matches those presented by a sample of actual candidates and the extent to which local programs and contexts influence the characteristics of those seeking certification. This, then, is a descriptive study exploring the correspondence between the espoused values of career changers and programs that prepare them and the actualities of such candidates and programs.

The study explores a diverse cross-section of programs engaged in preparing career changers for the classroom, the candidates enrolled in them, and, ultimately, how the candidates and programs are inextricably bound up with their local contexts. While

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there has been speculation about the benefits that career changers offer to students, schools, and districts, there has been no work attempting to understand how career changers resemble and diverge from their portrayals. Still, this study is more exploratory than conclusive. I have attempted to describe the characteristics of candidates and programs in order to provide more accurate images than those we currently have.

Career changers as a group are a growing phenomenon (Liu, 2004), but what is known about them is largely assumptive. And encouraging preparation programs targeting career changers is one (though an important one) policy lever in addressing multiple concerns with the teacher labor market. Humphrey and Wechsler's call for further research allows me to investigate the characteristics of career changers, seeing how and to what extent candidates in practice reflect and differ from what is assumed about them. This study allows me to explore whether career changers constitute "a subgroup of individuals from different programs with similar backgrounds and experience." Similarly, I can investigate Humphrey and Wechsler's assertion that the program is the wrong unit of analysis. Programs are engaged in complex work trying to negotiate the demands of candidates, school districts, foundations, and state governments all while prone to local contextual factors (see Heinen & Scribner, 2007). General assumptions about a class of programs that prepares career changers are likely to overlook important differences. Even individual programs may be attempting to meet the desires of multiple actors, suggesting that candidates within a program may not present a monolithic set of experiences or motivations.

Assumptions about the efficacy of these policies fall into at least four loosely bounded categories. First, supporters claim that career changers are a source of high *quality* candidates, elevating their content knowledge, academic skills, life experience, and

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motivations for entering teaching as distinguishing them as particularly attractive candidates. Second, supporters make an *exigency* argument claiming that career changers can help alleviate various teaching shortages: in specific subject areas, in the misalignment of teachers between urban, rural, and suburban districts within local labor markets, and in meeting regional market demands in high growth areas. Third, career changers are often thought to address *equity* concerns by bringing many of these quality professionals to the most needy rural and urban schools. Finally, career changers may address endemic *fit* issues between teachers and students. As the numbers of minority and male teachers continue to decline, career changers are one policy mechanism commonly believed to stem the trend. These programs hope, as well, to uncover candidates who not only share demographic characteristics, but who possess the more intangible ability to transform common outlooks and experiences in a rapport with students, parents, and colleagues regardless of background. I have intended to trace programs, candidates, and context to better understand how they influence each other, permitting a glimpse into the strengths and limitations of policy as implemented. Pursuing the interaction of these factors allows me to make targeted policy recommendations. Understanding the diverse skills of career changers can enhance the efficacy of policy by more closely matching candidates to discrete academic needs.

Overview

Chapter 1 provides a more in depth consideration of the logic motivating the policy initiatives of quality, equity, exigency, and fit. This literature review traces the basis for the various claims and the responses of those who counter them. This chapter concludes with the presentation of the central research questions that attempt to understand whether career changers differ within and between sites and how local

context structures the observed differences.

In Chapter 2, details the methods employed in conducting the research and analyzing the data. In short, I survey three geographically diverse programs engaged in preparing large numbers of career changers. Candidates at each site completed a survey from which I selected a handful for follow-up interviews. Additionally, directors of about thirty programs from across the country completed an on-line survey seeking to sketch the range of program design and candidate characteristics. Finally, I collected public economic and demographic data on each of my three target sites to allow me to present a broader portrayal of the context in which each program operates.

In Chapters 3-5 will present the data I collected on programs, candidates, and context, respectively. Chapter 3 begins with a statistical examination of the results of program directors' survey. I set out to collect a sample of the diversity of programs preparing career changers through a survey of their directors and coordinators. These programs were housed in universities and public and private agencies and ranged in size from a half-dozen to several hundred candidates. I employed the statistical method of cluster analysis to define rough categories of programs and describe the differences between them. I then placed each of my target programs within a cluster. Next, I provide detailed information on the design and philosophy of each of the target programs including a brief programmatic history, discussion of the philosophy, outline of course sequence, candidate selection criteria, and candidate placement. Later, in my examination of local contextual factors in Chapter 5, I return to program design to link certain traits of the design to context in which the program exists.

Chapter 4 considers the candidates. I entered this research to see how candidate characteristics resembled and differed from the assumed "portrait" of career changers.

Through analysis of my interviews and survey data, I was able to identify six largely distinct portraits of candidates—classic career changers, capstoners, socially mobile, career seekers, primary caregivers, and job seekers. In this chapter I describe each, first through statistical methods, and then through the presentation of cases. Even though specific portraits were clearly associated with certain programs, no single portrait accounted for a majority of candidates at any single program. Rather, each program had several portraits represented in large numbers suggesting that individual programs were not comprised of uniform candidate characteristics, but candidates from diverse backgrounds composed the population of each. Still, while each program has a diverse composition, each also had strong trends that distinguished it from the others. Certain designs in certain regions seemed to favor certain sets of candidate characteristics.

In Chapter 5 I step back and look at the regional economic, political, and cultural context that surrounds each site in an attempt to understand the factors that may influence a program's design and candidates' motivations for enrolling. I present census and other public records focusing on cultural and economic trends in the region, including racial distribution, cost of living, starting teacher salary, unemployment rates, and educational attainment. Additionally, as relevant, I have provided historical context that has shaped the educational system or the teacher labor market of a particular region.

After presenting findings on programs, candidates, and context largely in isolation, in Chapter 6 I then begin to suggest how they are interrelated. The aim is not comparison by a set of common measures, but description in context. Site by site, I consider how the context helps explain program design and candidate characteristics for each of my target sites. While one region's high teacher salaries and high level of educational attainment help accounts for the prevalence of candidates from strong

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academic and high income background, the challenges of high needs schools in an poor

urban district coupled with historic conflict between these urban and suburban

communities help to explain the comparatively low academic and income status of many

candidates in another, and the vast distances of the rural west suggest a rationale for the

on-line design of the third. At the end of this chapter, I return to my research questions

to discuss the central findings suggested by the data: the diversity of the career changer

population, the primacy of local context, and the proclivity of certain portraits to specific

programs.

In Chapter 7 I return to the four policy aims of quality, equity, exigency, and fit

laid out in Chapter 2. Now I muster my findings to consider the strengths and limitations

of career changers as a viable policy lever to meet these desired ends. The answers are

not simple. To varying degrees, career changers do help ameliorate the problems raised

by each policy goal. However, their effectiveness seems to be specific to the context in

which the program and candidates are situated. Some program designs are more

effective in attracting high quality candidates, while others are more successful in

addressing district or classroom staffing needs. A programs' efficacy in addressing a

particular policy aim is largely constrained by the realities of its environment. After

enumerating limitations of the study, I conclude by arguing that teacher preparation

policies must be constructed in light of contextual variation and the relative emphasis

placed on the factors of effectiveness and efficiency; or, alternatively, quality, equity,

exigency, and fit.

Finally, I should clarify that this study is not an attempt to compare sites and

candidates to each other, but to fully account for programs and candidates within their

unique local contexts. While I do highlight differences between programs, it is my intent

to use these differences to better understand the diversity of options and describe their individual distinctiveness. Ultimately, while some patterns surface across programs, this study suggests the capacities of each program and talents of the candidates they attract favor meeting a particular prioritization of policy goals.

Chapter 1

Literature Review and Research Questions

Debate over what traits constitute a good teaching candidate are far from new, in the US dating at least to the first half of the 1800s when Vermont opened the nation's first teacher training school (Haberman, 2006). A few years later the Boston "masters" attacked the credentials of the first graduates of the Massachusetts normal schools (Herbst, 1989). Although a simplification, the masters considered their own intelligence, subject-area knowledge, and maturity to make them superior teachers to the young, female normal school graduates who lacked a full college education. In many ways, this remains the same debate that today underlies the logic of advocates of career changers. When compared to the stereotype of a traditionally prepared teacher—young, female, and lacking deep subject-area preparation— career changers' maturity, intelligence, worldliness, and disciplinary mastery offer a potentially attractive alternative. In the following discussion my goal is neither to quarrel with this logic nor to accept it blindly, but to collect and present it.

There is a popular belief that attracting professionals from other occupations to education improve the quality of teaching, increase equity, meet exigency demands, and provide a better fit between candidate placement than offered by candidates straight fout of undergraduate programs alone. Advocates of "the most promising candidates—those who have been successful in other careers" (Ruenzel, 2002, p. 48)—believe when compared to the typical traditionally prepared teacher candidate CCs will bring enhanced knowledge, skills, life experiences, and motivations to their instruction while

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easing teaching shortages in the hardest to staff schools and subjects with more attractive

candidates.

This review will attempt to present the policy aims forwarded by supporters of

career changers. The study will then systematically test to what extent CCs meet these

policy goals.

Before I go further, it is worth noting that most of the citations in this review are

not from research articles. There has, in fact, been almost no research into the

characteristics or effectiveness of career changers. A lack of data has slowed neither

supporters nor opponents in registering their opinions of the relative merits of drawing

career changers into the classroom. And while many articles cited do come from

educational researchers, they are typically opinionated articles that draw largely on

anecdotal evidence or originate in the more popular press. Op-ed columnists, journalists,

philanthropists, and politicians have elevated or denigrated career changers depending on

their goals. Together, this universe of articles makes policy claims and are often intended

precisely to influence the construction of policy.

Career changers as a response to teacher quality

In their recent study of alterative routes to certification, the Project on the Next

Generation of Teachers laid out three perceived advantages in the quality of career

changers over traditional teacher candidates: their knowledge, skills, and life experiences

(Johnson, Birkeland et al., 2005). I will add a fourth, motivation for becoming teachers,

as CCs are portrayed as entering the profession out of altruism. For this discussion, I will

adopt these labels as an organizational tool. However, there is significant crossover

between the categories. In which category a particular characteristic best fits is,

ultimately, insignificant. Additionally, I will return to this definition of quality throughout

this study. There are many possible ways that quality could be defined, each with their own merits and detractions. Here, I am adopting one used to highlight a particular set of talents that proponents value and believe career changers embody. My use of this definition is uncritical and should neither be read as endorsement of nor resistance to this particular conception of quality. Rather, it is simply the one most readily forwarded in support of career changers.

Knowledge

Knowledge, as used by Project on the Next Generation of Teachers, refers largely to subject area expertise. Proficiency in a specific discipline is among the most common rationales in support of drawing career changers into teaching. CCs, in contrast to many traditional teacher candidates, have typically earned a disciplinary major—biology or chemistry, instead of science education—for their undergraduate degree. Additionally, some CCs will have earned graduate degrees in their discipline or an associated field. This academic knowledge is assumed to prepare them to teach their discipline in school, or "that any intelligent person with subject-matter knowledge can teach with little or no pedagogical training" (Liu, Johnson, & Peske, 2004, p. 226).

One example typical of arguments made by advocates of CCs tells of a disillusioned doctoral student whose extensive study of history is insufficient to qualify him to teach the subject in a public high school (Ruenzel, 2002). Likewise, Finn and Madigan (2001) tell of a retired engineer who becomes a talented middle school math teacher. Kristof (2006) wishes public schools would hire doctors to teach anatomy or businessmen with experience working in Asia to teach Japanese. And others cite the promise of chemists teaching science, CPAs teaching math, or journalists teaching writing (Gimbert,

Cristol, Wallace, & Sene, 2005; Goodnough, 2004; Hawley, 1990; Johnson, Birkeland et al., 2005; Kristof, 2006; Peske, Liu, Johnson, Kauffman, & Kardos, 2001; Shen, 1997).

To many critics of traditional routes and traditional candidates, subject-area knowledge is the primary determinant of a candidate's qualifications to teach. Programs designed to expedite certification of teacher candidates who already hold at least a bachelor's degree promote candidates' subject area knowledge as both attractive and requisite for entry. New Jersey's statewide alternative preparation program demands a degree in an academic subject and passage of a subject area test (Klagholz, 2001a). The American Board for Certification of Teacher Excellence, an on-line alternative certification initiative designed with candidates like CCs in mind, requires passage of a comprehensive test of disciplinary knowledge as one component in securing licensure (American Board for Certification of Teacher Excellence, Undated). Connecticut's Alternative Route to Certification (ARC) boasts that 40% of its candidates have earned a master's degree or higher in a disciplinary subject (Connecticut Board of Governors for Higher Education, 2006). The New York City Teaching Fellows (NYCTF) looks for professionals who hold at least a subject area bachelor's degree and a college GPA above 3.0 to teach in the city's hardest-to-staff schools (Goodnough, 2000c). Similarly, the former Massachusetts Signing Bonus Program sought high achieving candidates to teach their subject area in the state's public schools (Liu et al., 2004).

In addition to subject area expertise, I expected to find supporters of CCs citing the organizational knowledge gained in their previous professional settings as justification for seeking mid-career applicants. Knowledge of work environments would seem to be a significant way in which career changers differ from a recent undergraduate with a degree in a disciplinary field. I assumed proponents would argue that CCs knowledge of,

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in particular, corporate workplaces might position them as well-situated to reform public school bureaucracies. However, with the exception of discussions around the Troop-to-Teachers program (TTT), I have not encountered any literature explicitly making this argument. TTT suggests that personal discipline and order learned in the military would prove useful to teachers working in hard to staff schools (DANTES-TTT, 2005).

Skeptics of career changers' immediate aptitude for the classroom might challenge knowledge as defined by advocates as simplistic. Knowledge is equated with subject area alone. Proponents do not distinguish among fields within a disciple. For example, accountants may be cited as attractive candidates to meet math exigencies, but there is little consideration of the fit between their skill set and actual math courses taught in high schools. Is an accountant equally adept at teaching statistics, accounting, geometry, and calculus? Is an accountant capable of teaching in each of those fields? Skeptics suggest that teaching demands a high degree of specificity within a disciplinary subject (Hill, Rowan, & Ball, 2005).

Related to this is the concept of pedagogical content knowledge (PCK). Shulman's seminal article outlining the concept of PCK suggests that beyond subject area mastery pedagogical technique is a "dimension of subject matter knowledge *for teaching*….[where there is a] particular form of content knowledge that embodies the aspects of content most germane to teachability" (1986, author's emphasis). Shulman would argue that simple faith in content area knowledge is insufficient in preparing candidates for the classroom, as is a focus on "content-free skill" considering only the teaching process. In the two decades subsequent to Shulman's framing, PCK has gained wide theoretical favor, even if developing a definitive understanding of appropriate

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teacher knowledge in all disciplines has remained more abstruse (Grossman, 1989; Hill & Lubienski, 2007).

Skills

Supporters of career changers have claimed that the quality of the teaching profession will be enhanced in part because CCs are more intelligent than traditionally prepared teachers. Critiques of teaching as a low skill profession populated by practitioners of low academic ability date to well before those levied by the Boston masters and have reverberated through the discourse in the past century and a half (Ballou & Podgursky, 1995; Bestor, 1953; Herbst, 1989; Kaestle, 1983; Koerner, 1963, and others). Taken as a whole, standardized test scores (SAT/ACT) for teachers completing bachelor's degrees in education have consistently been among the lowest for college graduates, generally on par with college bound high school seniors (Gitomer, Latham, & Ziomek, 1999). When partnered with research suggesting that teacher verbal ability as measured by standardized test scores is indicative of student achievement (Ferguson, 1991), finding academically superior teachers becomes a priority (Levine, 2006). Long a perceived benefit of alternative certification generally (Liu et al., 2004), supporters of CCs likewise argue that recruiting successful professionals from other fields to enter teaching will result in smarter teachers who improve the intelligence of the teaching force and, in turn, student performance (Mathews, 2006; Ruenzel, 2002; Stein, 2002; The Teaching Commission, 2006).

One proxy for the weight lent to intelligence is evident in the pride with which programs aimed at attracting CCs tout their selectivity. Former New York City school chancellor Harold Levy presented the NYCTF as "smart people...[who] given enough time, ...will produce smart results" (Levy, quoted in Goodnough, 2000a, p. B1). The

Connecticut ARC program boasts of it stingy acceptance rate, as did the Massachusetts Signing Bonus Program (MSBP), which, in the words of the president of the state senate, sought "to attract the best and brightest to the teaching corps....We want this to be elitist and unapologetically so" (Birmingham, quoted in Liu et al., 2004, p. 226). Similarly, though not geared toward CCs, Teach for America leverages its selectivity to draw candidates with high academic qualifications. The New Teachers Project (TNTP), an outgrowth of TFA, claims a similar focus. Career changers, assumed to be largely from a professional class (Kristof, 2006; Mathews, 2006), would have previously demonstrated their intellectual abilities and would now be called upon to employ them in the classroom.

Life Experiences

Although life experiences share some overlap with knowledge, advocates cite the intangible value that candidates' experiences bring to their teaching. Primary among these are the hard-to-quantify values of maturity and worldliness. In contrast to traditional preparation where graduates either do not enter the profession or leave after a few years since they were "[f]orced to commit in their teens in order to take the required undergraduate courses" (Klagholz, 2001a, p. 12), proponents assume career changers have developed their interest in teaching over time and after exposure to multiple professional options. CCs' successes and frustrations in other careers lead them to teaching as a carefully examined life choice, allowing them time to determine their "true calling" (Haberman, 1996; Hawley, 1990; Johnson, Birkeland et al., 2005). Moreover, their experiences in the world will serve as a guide to focus the curriculum to topics of real, and real-world, importance. Like traditionally prepared teachers, CCs, too, would privilege issues they perceive as relevant. However, compared to CCs, traditional candidates' narrower experiences constrain their ability to determine what is truly

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significant (American Board for Certification of Teacher Excellence, 2005b; Ballou & Podgursky, 1998; Jorissen, 2003; Ruenzel, 2002; Shen, 1997; Zumwalt, 1996). As such, the experiences of CCs deserve to be rewarded more richly than a "22-year old just out of school" (Ruenzel, 2002, p. 47).

In addition to having their experience inform their instruction, CCs are also portrayed as serving with greater dedication. Johnson et al (2005) found that among alternatively prepared candidates, first-career teachers had a lesser long-term commitment to teaching and expressed less confidence and enthusiasm in the decision to enter the profession than did CCs. Liu's (2004) study of the Massachusetts Signing Bonus Program found first-career entrants more inclined to begin the program intending to teach for only a limited number of years.

Parenting and other work with children is a specific advantageous experience commonly lauded by proponents. Especially when compared to the above 22-year old, it seems reasonable that older CCs are more likely to have children of their own. Likewise, there is some empirical evidence suggesting that older candidates entering alternative preparation programs are more likely than younger peers to have worked with youth in community or other volunteer capacities (Haberman, 1996; Johnson, Birkeland et al., 2005; Liu et al., 2004; Lutz & Hutton, 1989). Supporters present these experiences as positively informing the practice of CCs.

I was surprised to encounter limited justification for career changers on the grounds of greater classroom control. I expected advocates to link CCs' maturity and their assumed desire to teach in the hard-to-staff schools to suggest they are better prepared to bring order to chaotic classes. Again, in my research only the military's

Troops-to-Teachers program raised classroom discipline as a significant benefit from recruiting CCs to the classroom (DANTES-TTT, 2005).

Alternative certification generally and preparation of CCs in particular is based upon "the fundamental logic...that one learns to teach by teaching" (Hawley, 1990, p. 29), that experience, both in the classroom and in broader life, is worth more than a lengthy teacher preparation class. Although some value is given to preparation, advocates for CCs assume that by placing smart, experienced people in the classroom, eventually they will figure it out. Experience, then, is the best teacher and "the cornerstone of all alternative programs" (Ruenzel, 2002, p. 47).

Motivations for Entry

Anecdotal evidence argues that career changers' rationale for entry is more altruistic— motivated by a desire to "do good"—than first-career entrants, who are determined to simply find a job (Haberman, 1996; Klagholz, 2001b; Ruenzel, 2002). Evidence of this altruism exists in the targeting of career changers in urban preparation programs, such as The New Teacher Project. Nearly all proponents who mention why CCs would choose to enter teaching list iterations of "heed[ing] the call for social responsibility" (Levy, quoted in Goodnough, 2001) as the primary motivator (American Board for Certification of Teacher Excellence, Undated; Johnson, Birkeland et al., 2005; Lutz & Hutton, 1989; Ruenzel, 2002).[1] Occasionally, a second theme emerges from the literature, focusing on professionals' dissatisfaction with the long hours, intense work, and unrewarding benefits of their previous job (Johnson, Birkeland et al., 2005; Lutz &

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[1] For the purposes of this discussion I am grouping various altruistic themes together including "making the world a better place," giving back to the community," and "spiritually satisfying work." Although there are distinctions between these motivations, they share an altruistic orientation.

Hutton, 1989; Stein, 2002; Wadsworth, 2001); instead, career changers are supposed to be willing to exchange such frustrations with the spiritual fulfillment that accompanies teaching. On only three occasions did any proponents of CCs raise more personal motivations for entering education. Two centered on teaching as compatible with family life (Stein, 2002; Wadsworth, 2001) and the third came from Abby Goodnough's book length study of a first year NYCTF teacher who stated that her life had become "too safe" (2004).

Certainly altruistic motivations explain in part why all teachers are willing to enter low status, low pay work (Farkas, Johnson, Foleno, Duffett, & Foley, 2000; Wadsworth, 2001). However, teaching has also long been attractive in part due to its ease of entry and exit, compatibility with family life, and sense of autonomy behind a closed classroom door (Johnson & Birkeland, 2003; Lortie, 1969, 1975). The absence of these factors from discussions on career changers' motivations suggests that CCs are assumed to be distinct from traditional candidates.

Career changers as a response to labor market exigencies

A second, more pragmatic, argument in favor of attracting mid-career changers to teaching is based on longstanding tensions in teacher labor markets. These exigency demands fall into three categories, subject specific, regional, and local misalignments.

Subject Area

There are discrepancies between subject areas in labor markets across the country. In general there are far more applicants for humanities, social sciences, and elementary school openings than math, science, English as a Second Language, and special education positions (Gimbert et al., 2005; Gordon, Kane, & Staiger, 2006; The Teaching Commission, 2006). In support of expanding ABCTE certification to Missouri, the

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Missouri Education Commissioner claimed that, "in Missouri last year, just one person graduating from college had majored in teaching physics" (The Associated Press, 2008), a situation hoped to be addressed by attracting more career changers to the classroom. Linked with the quality aim above, career changers are believed to come largely from professional ranks, and will include engineers, doctors, accountants, and research scientists (American Board for Certification of Teacher Excellence, 2005a; Kristof, 2006), among the subject areas in high demand. There is little mention of special education or ESL needs being met by career changers. Many programs preparing career changers do not offer certification in either of these subjects. This is consistent with the belief that career changers have particular subject-area knowledge, whereas special education and ESL do not translate directly to a single discipline.

Regional

Research suggests that teaching suffers from misalignment of supply and demand (American Association for Employment in Education Supply/Demand Research Committee, 2002; Darling-Hammond & Sykes, 2003; Ingersoll, 2001). Although there may be sufficient numbers of candidates graduating from colleges of education to fill the voids created by those leaving teaching, there are surpluses in some regions of the country and shortfalls in others. Due to multiple economic and quality of life factors, teaching jobs are more prevalent in some areas of the country than in others. Regions enjoying large population expansions, both through internal population migration and immigration from abroad, need teachers to assuage the rapid growth of students. For example, for more than a decade Clark County School District (Las Vegas) has recruited nationally and aggressively to meet their staffing needs. Other regions that have seen large population growth including the Carolinas, Texas, and California, have had

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accompanying shortages of teachers. Teacher salaries and increasing rates of retiring baby boomers have also lead to regional exigencies (Darling-Hammond & Sykes, 2003).

Local Misalignment

Within a region, it is common to see tighter labor markets in wealthier suburban districts when compared to higher needs urban and rural schools (Darling-Hammond & Sykes, 2003; Ingersoll, 2001; Johnson, Berg, & Donaldson, 2005). The lower need schools tend to have a surplus of applicants for positions while urban or rural districts can be left to fill their openings with long-term substitutes or teachers with emergency certification. For those concerned with the imbalance in teacher labor markets, career changers are an untapped supply of potential teachers more likely to teach in hard-to-staff schools and subjects (Gimbert et al., 2005; Goodnough, 2000c; Gordon et al., 2006; Johnson, Birkeland et al., 2005; Liu et al., 2004). Career changers are one potential policy mechanism to draw more teachers into high needs school, helping to reduce the labor market discrepancies. The belief that career changers enter teaching in part out of altruistic motivations, would suggest that these candidates are more willing to seeking placements in high needs settings. The popular representation of programs further supports this. NYCTF promotes the quality of its candidates recruited to teach in high needs schools (Goodnough, 2004). Likewise, ABCTE sees it's candidates as relieving "overcrowded classrooms" (American Board for Certification of Teacher Excellence, 2005a). Some have linked quality and local exigency as concurrent goals, claiming that divorcing quality and quantity is tricky and unsatisfying. Although many programs designed to attract CCs aim first to improve teacher quality, quantity grows concurrently. This is particularly so with programs aimed at recruiting teachers for hard-to-staff schools (Klagholz, 2001b). Drawing CCs into the classroom is believed to improve the quality of

teachers as they often replace long-term substitutes or teachers working under emergency

certification (Goodnough, 2000c; Gordon et al., 2006; Johnson, Birkeland et al., 2005).

Career changers as a response to equity

Closely related to local misalignments between rural and urban and suburban

districts is access to quality teachers for all students, regardless of race, color, or class.

Poor students and students of color consistently endure inordinate numbers of

uncredentialed or undercredentialed teachers across the country. This is exacerbated by

the particular challenges of retention in hard-to-staff schools. Attracting candidates with

a strong service ethic is necessary to provide a more equitable distribution of teachers to

all students. Career changers, motivated by their assumed desire for social justice, are a

potentially untapped source (Goodnough, 2001; Lutz & Hutton, 1989; Ruenzel, 2002).

Many preparation programs for career changers have been designed with training

candidates for the challenges of urban and rural schools in mind (Ingersoll, 2001). For

example, ABCTE, although not expressly directed at inequitable distribution of teachers,

claims, in the very beginning of its candidate handbook, to "evaluate our success based

on…policies that ensure that all students have the advantages of a quality teacher

regardless of income, race, parental involvement, school size or any other 'real-life'

socioeconomic factors" (2005a, p. 2). Additionally, there are career changer programs in

more rural states that work closely with districts to help meet discrete staffing needs to

ensure students receive instruction from qualified teachers.

Career changers as a response to fit

Women's role in front of the classroom has been recorded and remembered. For

several generations, schools benefited from the limited career options available to women

who filled the teacher ranks and at a low cost. This "gender subsidy" began to erode in

the 1960s and 1970s as professional options other than teaching became increasingly available. Less readily remembered is the history of minority teachers in minority schools. As with women, minority teachers—mainly African-American—suffered similar limited professional options (Anderson, 1988; Church & Sedlak, 1976; DuBois, 1996; Rury, 1989). However, while women continue to comprise a large, and once again growing, percentage of the teaching force, as other career opportunities became more readily available to minority teachers, the proportion who remain in the classroom has declined (National Education Association, 2003). Today, as desks are filled by higher percentages of black and brown students, the teachers in front of the class are increasingly white (Guarino, Santibanez, & Daley, 2006; Hussar, 1999; Leukens, Lyter, Fox, & Chandler, 2004). Career changers are considered a potential policy mechanism for reversing this trend, making teaching a more attractive option for minority professionals who have enjoyed financial success and are now looking to "do good" work in their communities.

Nationally, about fifteen percent of teachers leave the classroom or move to a new school annually (Johnson, Berg et al., 2005), many because of a unrealistic expectations of working conditions and the mores of the school community. Finding candidates who fit in the schools in which they will teach—have realistic expectations of the realities of the classrooms and understand the cultural norms of students and parents—are indicators of higher rates of teacher retention (Johnson, Berg et al., 2005). And while race is one consideration in meeting fit desires, finding teachers who understand rural mores and regional cultural diversity can make transitions more fluid for teachers and learning more effective for students. Additionally, attracting men, especially to high-needs schools, remains a goal in order to serve, in part, as a role model for boys. As with the meeting

equity demands several preparation programs for career changers have been designed to train teachers for hard-to-staff schools and subjects, and to attract men and underrepresented minorities to the classroom (Gimbert et al., 2005; Hawley, 1990; Johnson, Birkeland et al., 2005; Jorissen, 2003; Lutz & Hutton, 1989; Shen, 1997; Tell, 2001). Some evidence suggests that these programs succeed in attracting these desired candidates when compared to traditional teacher training (Johnson, Birkeland et al., 2005; Ruenzel, 2002; Shen, 1997).

Fit, though, has an additional connotation. More challenging to measure than race and gender, there is a hope that attracting career changers will reveal individuals who have perspectives in common with a particular building. Akin to shared cultural capital (Bourdieu, 1973), fit, in this sense, is not strictly limited by race or income. Rather, through study or experience, a portion of career changers are hoped to be able to forge relationships with students, parents, administrators, and their fellow teachers that build from joint values (DANTES-TTT, 2005; Finn & Madigan, 2001).

Incentive of Speed

Although more a policy mechanism than aim, that many career changer programs are also quick alternative routes does have implications in attracting candidates to the classroom. Many advocates of CCs who grant them competence based upon their quality see fast track preparation as a pragmatic tool to earn certification and "remove the barriers that are keeping thousands of talented people out of the classroom" (Paige, 2003). Assumed in this argument is that smart candidates can master curriculum and pedagogy either intuitively, experientially or a in some combination of the two (Hawley, 1990; Mathews, 2006). In their study of the Massachusetts Signing Bonus Program, Liu et al (2004) found that the $20,000 was ultimately an insignificant enticement to draw

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potential professionals from other fields into teaching; instead, the speed of the program—certification over the course of a summer—was a much more potent lure. Although teachers were certainly willing to accept the signing bonus, the larger opportunity cost was entering teaching through a traditional program—a year or more of full-time classes and the accompanying lost salary. ABCTE operates on a similar principle, going so far to praise much of the work done in colleges of education. According to ABCTE, they enter the preparation arena only to offer certification to those already prepared to teach (American Board for Certification of Teacher Excellence, Undated). And many fast track alternative certification programs geared toward CCs do value colleges of education (Johnson, Birkeland et al., 2005). NYCTF and the Connecticut ARC program both require candidates to work toward their masters degree in education concurrently with the first few years in the classroom (Connecticut Board of Governors for Higher Education, 2006; Goodnough, 2000c). And many so-called alternative certification programs are housed in traditional university-based teacher education departments or staffed by faculty from these departments. Ultimately it is the order, not the content, of the preparation that is altered in these programs.

In summary, there are four policy aims motivating the attempts to attract career changers—quality, exigency, equity, and fit.. The quality logic is organized around four factors: knowledge—CCs' subject-area expertise; skills—CCs' intelligence; life experiences—CCs' maturity and worldliness; and motivations—CCs' altruism in entering teaching. The exigency aim attempts to draw candidates to relieve labor market misalignments in particular subjects, regions, and within local markets and that CCs are an untapped market to meet regional and disciplinary labor market shortages. The equity goal borrows from the exigency claim to suggest that career changers can

ameliorate the overcrowded classrooms taught by underqualified teachers in high needs schools. Attracting career changers is also one way to attract more underrepresented minority and male teachers to classrooms. Finally, as a mechanism to attract career changers, many supporters point to the efficacy of cheaper, faster streamlined programs.

Significance

This study has several implications for better understanding the phenomenon of career changers and evaluating the programs' success in recruiting and preparing teachers for the classroom. Again, I will not be testing whether these traits assumed to make career changers more attractive candidates actually improve their instruction and student learning. Although an essential question, it is outside the scope of this project.

- **Career changers might be entering classrooms in considerable numbers.**

There has been no systematic study as to how many career changers are in the classroom. If the assumed logic is followed to its conclusion, the number could be in excess of ten percent of all entering teachers. Much of the logic calls on alternative certification programs as the preferred way to prepared career changers. Although estimates differ, some data suggests that as much as 30 percent of first-year teachers in 2004 were prepared in what were considered alternative certification programs (Feistritzer, 2005). If alternative certification programs exist in large part to qualify CCs for the classroom, it seems plausible that a large number of these alternative certification entrants may be career changers. And these numbers do not include career changers prepared in traditional education programs, a number that some observers believe could be higher than those prepared by alternate routes (Liu, 2004).

If career changers potentially constitute such a large number of practicing teachers, it seems essential that we affirm whether their assumed assets and motivations are consistent with the characteristics in practice.

- **Develop a clearer picture of what career changers look like in reality.**

The coupling of substantial speculation on the qualities of CCs with limited research basis yields only conjecture regarding their actual characteristics. This study should provide a clearer picture of these characteristics, allowing for a clarification of the actual policy questions at issue. If CCs appear, in fact, to be the knowledgeable, skilled, experienced, motivated candidates they are assumed to be, this frames preparation of career changers as a way to increase the quality of the teaching force. The policy implication then falls to developing ways to recruit more candidates like them.

If CCs appear not to resemble the picture sketched of them, and more closely resemble the novice teaching population on the whole, this frames preparation of career changers as a way to increase the quantity of teachers and fit and equity of the teaching force. This is not to say that CCs who look like the teaching force we have is bad. While the assertion that CCs are a way to improve the overall quality of the force is diminished, that many folks are interested in leaving their current work to seek jobs in teaching suggests that career changers are in fact a population that can be further tapped to meet local, regional, and disciplinary market needs. Additionally, such a finding would suggest a one-size-fits-all teacher preparation model—24 credits of teacher preparation and a semester of student teaching—does not fit the real life needs of all candidates; instead, the diversity of routes is necessary to attract career changers to the classroom. If CCs appear to be no better, but no worse than the existing teacher pool, there still may be an

important place for these programs in preparing non-traditional candidates for the classroom

- **Career changers might be more likely to seek employment in certain settings than traditional candidates.**

The findings from this study will demonstrate whether there are characteristics that tend to cluster around candidates who eventually find jobs, teach in high need areas and disciplines, and plan to stay in the classroom for an extended period of time. As the logic supporting CCs suggests they will alleviate certain staffing needs, this study might help programs to efficiently screen potential candidates to maximize a programs' impact in their target environment. Part of the logic of career changers rests on assurances that the pool of candidates will attract more men, underrepresented minorities, math/science, special education, and English as a Second Language teachers to the classroom than traditional preparation programs, meeting demands in both urban and rural settings and across needy disciplinary subjects. Investigating the accuracy of these claims would have implications both for recruitment and for understanding whether individual programs are be better situated to meet certain policy aims than others. Although predictions from this study will not have a high level of confidence, they can be suggestive of trends worthy of additional study.

- **There may be great differences between candidates based on local factors.**

In attempting to evaluate the logic of career changers, this study will be able to assess whether candidates with certain characteristics are drawn to teaching based on local factors—economic in particular. In other words, this study could potentially determine

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which characteristics are most prevalent in a particular candidate pool or whether

candidate traits are largely homogeneous across sites.

- **Certain program features may be more effective at attracting certain types of candidates than other.**

Program design and location along with the eventual teaching placements of candidates

might be a factor in determining who applies for a particular program. If there are

differences in candidate characteristics between programs that prepare candidates for a

specific district versus programs where candidates find employment in any district they

can, this study will help to expose them. Additionally, this study will help identify

whether programs targeting rural schools have candidates with characteristics distinct

from those in programs targeting suburban school and those targeting urban schools.

Such a finding would have implications for recruitment and for understanding whether

individual programs are be better situated to meet certain policy aims than others.

Research questions

The literature, policy aims, and potential significance of this study has guided me

to the following research questions to guide my data collection and analysis.

- Do career changers in practice share the knowledge, skills, life experiences, and

  motivations their advocates assume they do?
    - Are there characteristics that career changers share within sites?
    - Are there characteristics that career changers share across sites?
    - Do characteristics of career changers within sites differ from each other?
    - Do characteristics of career changers across sites differ from each other?

- Do local historical, economic, and cultural contexts influence the characteristics of candidates seeking certification?

Chapter 2

Methods

This study is largely an attempt to understand the efficacy of a policy idea by evaluating whether the assumed characteristics of career changers and the programs that prepare them match the actual characteristics of this population. This study examines the extent to which career changers resemble what they are assumed to look like, the programs that prepare them, and the context in which they are prepared. To answer these questions, I gathered three distinct sets of data—programs, candidates, and place. Briefly, three programs that prepare large percentages of career changers agreed to participate in the study. Candidates in each program completed a survey inquiring into demographic characteristics, career patterns, and academic qualifications. Based on the results of the survey I selected a handful of candidates for follow-up interviews. Additionally, I conducted an on-line survey of program directors and coordinators from across the country. I collected contextual background on my three target sites from public data including the Census Bureau, the Bureau of Labor Statistics, and state departments of education.

Methodological Rationale In many ways this study can be understood as an evaluation. The picture assumed of career changers is the basis of policy interventions intending to improve the quality and fit of candidates while meeting school equity and exigency demands. These assumptions collectively create an espoused theory. My purpose, then, is to test the theory in action. By enumerating the traits of the espoused theory, I can compare those to the traits found in my sample of actual career changers. Such comparisons will be sophisticated enough to control for various characteristics (e.g., age,

program, motivation, and education) to compare the sample as a whole to the espoused theory as well as to examine how subgroups compare to each other.

Adopting an evaluative stance, in place of a pure research stance is consistent with literature supporting evaluation as a method "to speed up the learning process by communicating what might otherwise be overlooked or wrongly perceived" (Cronbach, 1982, p. 8). In this study, I am attempting to learn whether there are central elements of the stated theory supporting career changers that have been generalized or overlooked in practice. This study will allow me to "reduce uncertainties... [and] challenge simplistic views" (Cronbach, 1982, p. 10). Cronbach further supports initiating evaluation with a qualitative investigation of "a wide variety of informants" (1982, p. 210) before creating questions that can be answered with more quantitative data. I have followed this model by first scanning both the literature advocating for career changers and seeking input from directors/coordinators of preparation programs on the rationales, designs, and challenges they face. Such initial data inform my research questions and my instrument design.

Data Sources

Each of the three sets of data—candidates, programs, and context—presented unique considerations in determining appropriate sources.

- There are many non-traditional candidates who enter the teaching field. Some have had other professional careers, others have worked as paraprofessionals in schools or other work settings, some have been engaged in raising children and been out of the workforce for several years, and there are many other permutations. It is largely uncovering the scope of this diversity that motivated this study. Since CCs are often portrayed as elite professionals looking to move to

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teaching, I chose to sample programs across the country hoping to explore the potential diversity of candidates. For the purposes of this study, I defined CCs as broadly as possible. Instead of limiting my sample to, say, professionals with at minimum a bachelor's degree—and potentially a graduate degree—in a specific subject-area discipline, I am interested in considering all potential career changers, so long as they have experience working as other than a teacher of record. Through advertising or implication career changers are commonly assumed to have had more or less continuous employment in a traditional profession (Etzoini, 1969; Larson, 1977; Wilensky, 1964, and others) for several years before deciding to leave in favor of teaching. As imagined in this literature, CCs will be doctors, lawyers, engineers, and business people who are looking to give back in some manner (Goodnough, 2000c). A broad definition of career changer allows me to include retired military personnel, tradesmen, stay-at-home parents returning to the workforce, paraprofessionals, and various other careers tracks that may be ignored by limiting my sample to professionals. Additionally, this provides a richer understanding of which non-traditional candidates are actually attempting to enter the classroom. As previous career and life experiences are central to my study, I did not consider students newly minted from undergraduate studies where candidates teach in their major, but lack significant work experience—such as TFA or Alliance for Catholic Education. Additionally, I did not consider candidates who are currently working in a school as a teacher of record. Although some candidates might be teaching in private or parochial school without certification or in public schools under an emergency certificate, I am not considering them career changers. However, I did include

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candidates who have worked as substitute teachers and are now choosing to teach as a career.

- Selecting programs also required careful consideration. There are likely career changers present in nearly all programs that prepare teachers—traditional, alternative, and everything in between. In selecting my target programs, I attempted to represent geographical diversity, as well as diversity of program designs. Before inviting programs to participate, I conducted informal interviews with program directors and coordinators sketching the roughest map of programs that prepare career changers. From these discussions I created categories based on the type of host organization that housed a program—public or private university, private organizations, state departments of education, and school districts. I attempted to find target programs that would satisfy as much of this diversity as possible, ultimately selecting one program administered by a state department of higher education (Connecticut's Alternative Route to Certification—ARC), an on-line program operated by public university (Montana State University's Northern Plains Transition to Teaching—NPTT), and a third jointly operated by a school district and a public university (University of Missouri—Saint Louis's Career Transition Program—CTP). These programs represented urban, suburban, and rural localities and were spread across the country. These programs are explored in much greater detail in the Chapter 3. I invited two additional programs to participate. One, a partnership between a private university and a school district, initially planned to participate before ultimately declining due to low enrollment and time concerns. The other, a post-baccalaureate program also operated by the University of Missouri—Saint Louis,

agreed to participate, but were ultimately not included in my analysis due to low candidate response.

In selecting program directors and coordinators to participate in the on-line survey, I was less discriminating. I cast a wide net, inviting several dozen programs that prepare candidates to participate. I included directors from all program designs and was careful to ensure geographic diversity. I located programs through several means, including a list of alternative certification programs from teach-now.org—the National Center for Alternative Certification website (2008)—ones I had encountered in the literature, referrals from colleagues, and word of mouth.

- The data sources I sought to provide contextual background on the communities in which the target sites operate were exclusively from public sources. I did not intend to gather or present exhaustive data, but rather to locate core information on economic, employment, and educational trends in each region. Chief sources included the Bureau of Labor Statistics, US Census Bureau, state departments of education, and local school districts.

Overview of Design—Data Collection and Instrumentation

Essentially there were three stages to this study: candidate surveys, semi-structured candidate interview, and program director and coordinator survey. I gathered contextual data throughout the research process.

Candidate Surveys

After roughly mapping the terrain of options, I selected programs that reflected the range of designs to find candidates to survey and interview. However, while these sites may not reflect the proportions of designs across the country, my goal was not to

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have a statistically representative sample of programs, but to explore the universe of programs in existence. In this way my sampling of programs is purposive. I selected sites in an attempt to test the tenets of the theory espoused by proponents of career changers (Miles & Huberman, 1994). Therefore, I sought to determine whether career changers' characteristics vary based on their program, the program design or selectivity, geographical location, local economic, cultural, and political factors, or urbanicity. Abbott argues using multiple cases to avoid one-step rational-action narratives where "everything dovetails to produce one result; there are no real accidents or contingencies. Nor do any of these narratives really involve actors with substantial complexity" (1992). I used multiple-case sampling hoping to encounter complexity that would add to the robustness of my findings.

I traveled to each site to survey and interview the cohort of candidates preparing to teach. For two sites, I administered the surveys in person. As the third was an on-line program in which candidates were spread out across three large western states, travel was not practical. Therefore, these candidates completed the survey on-line. Surveys were administered in the summer and fall of 2007.

The survey items were divided into four groups: reasons for leaving previous work, reasons for choosing teaching, expectations of teaching practice, and general information. The full candidate survey is included in Appendix F. Together, these questions attempted to map the rationale of career changers' move from their previous work into teaching while sketching a picture of CCs, and tracking whether motivations for entering teaching differ according to demographic, educational, and career characteristics. These questions were intended to test the logic surrounding career changers. If CCs are assumed, for example, to come from highly selective colleges and

have high ACT/SAT scores, I was curious to see if the teachers in this study reflect these assumptions.

Candidate Interviews

The interview protocol largely mirrored the survey instrument, now allowing candidates to expand upon their survey responses and allowing me to gather potentially illuminating cases of the trends revealed in the surveys. At each site, upon completion of the surveys, I scanned them to tally background characteristics of the candidates. I selected candidates in numbers roughly commensurate to their prevalence at the site to invite for interviews. Additionally, I selected a couple outliers from each site to present fertile counterexamples to prevailing trends at each site (Miles & Huberman, 1994). In total I interviewed ten candidates from the Connecticut ARC program, five from the Career Transitions Program, and seven from NPTT[2]. I transcribed all interviews and coded them according to the variables identified in my research questions—knowledge, skills, experience, and motivations. At each site I also had an opportunity to speak with the program director. Interviews were conducted in the summer and fall of 2007 and the early winter of 2008. The interview protocol is included in Appendix F.

Program Director and Coordinator Survey

I augmented my close investigation of my target programs with an on-line survey completed by program directors and coordinators from programs that prepare large proportions of career changers across the country. I sought a broad representation of program design and geographic diversity. This survey was intended to provide big

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[2] I interviewed a disproportionate number of candidates from NPTT, my final site chronologically, to learn more about an emerging trend I saw reflected in my interviews of candidates across sites. These additional interviews were post-hoc and did not skew my interpretation of the overall trends I witnessed. This will be discussed in more detail Chapter 4.

picture context to the narrower study on the focus sites, generating an approximation of the options available to mid-career professionals considering becoming teachers. Although this model could not ensure the depiction of all program models, it was intended to approach the diversity of programs in existence.

The survey was divided into several sections inquiring into program design and history, local and regional context, and candidate characteristics, recruitment, and placement. The full director and coordinator survey in included in Appendix F. Many items were structured to allow directors to give their impressions of candidates, rather than precise responses. While this limits the accuracy, this survey was conceived to point to trends rather than provide precise data on candidates. Moreover, for many of these items, programs did not systematically collect the data requested and were only able to share impressions.

Together these data were intended to generate a rough map of the options available to candidates and tell the story around the circumstances leading to the development of these programs. I supplemented these surveys with program literature publicly available through the Internet, course catalogs, and other program publications. The survey was conducted on-line in the fall of 2007.

Data Analysis[3]

My analysis of survey data fell into two main iterations and demanded dialogue with the findings from my interviews. Candidates being expansive in interviews revealed several possible subgroups within the career changer category. Using these subgroups, now called portraits, I returned to the surveys looking briefly at each candidate's

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[3] The discussion in this section intends to outline how I made sense of my data. It is expanded upon in Chapter 4, using actual data and employs more precise terminology.

responses and placing the candidate in either one of four portraits or, for time being, in an "other" pile. Using core variables I identified as proxies for knowledge, skill, and experience, I conducted a statistical procedure known as cluster analysis. Cluster analysis begins by pairing the most similar cases, continuing to add each additional case to the cluster that it most closely represents according to identified variables (Riddle Buly & Walencia, 2002; Romesburg, 1984). I conducted two separate analyses, the first diving the candidates into two clusters and the second into four. I then compared the cluster results to the portraits I had sketched as a check for their continued descriptive accuracy.

Once I had developed descriptive clusters and portraits, I was able to examine differences in the composition of candidates in each site and further compare the candidates' traits between portraits for "educationally irrelevant" (Green, 1983) traits such as race and gender.

Additionally, I coded interview transcripts along these same constructs, using candidate responses to support and supplement the data gleaned from the survey. I created an informal case report for each interview subject to surface emergent themes, with particular attention to motivations for entering teaching and the role local factors play in attracting career changers to the classroom. These interview responses were used to augment and provide depth to the portraits. I then returned to the candidates not originally placed in a portrait to see if any common themes were prevalent that described additional groups.

The analysis of the program directors and coordinators surveys was less complex. Again I conducted multiple cluster analyses to help corroborate or complicate the categories that arose from my informal interviews with directors. And again, I identified

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core variables serving as proxies for program design [4]. This allowed me to trace general trends in program design nationally as well as place my target programs in the context of others of similar design.

Validity and Reliability

In general, I was less concerned with my respondents' subjectivity than my own. Many of the characteristics I am investigating are the subjective responses of the candidates—motivations and perceptions of both their previous work and teaching. Therefore, I assumed and hoped they will provide their opinions. I did not provide my respondents with interview transcripts for their review and correction.

There were some self-report data that are of concern. Questions that ask candidates to supply their own standardized test scores and college grade point averages were of questionable validity. I had hoped to corroborate these data with similar data supplied through program applications, although access to that data proved not to be viable.

Although systematic, my initial sampling of programs and subsequent survey of directors and coordinators is not statistically representative. It is possible, likely even, that I have undersampled certain program designs and oversampled others. The survey attempted to map the terrain of options available, but may not be exhaustive of program designs. I can make no claims that the sites which participated in the survey represent a full range of potential options. In fact, there may be so many nuances in program design that any sampling method would provide an incomplete representation. As such, I have attempted to reflect the broad range of programs available to career changers with respect to programmatic features and geographical considerations.

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[4] This discussion is expanded in Chapter 3.

My own objectivity is a trickier proposition. I imagine that out of the hours of interview transcripts I have collected I would be able to provide support to many different and divergent stories of career changers. This is one motivation for engaging in a mixed methods study. If limited to the interviews, I could more easily sculpt the story I want to tell. However, the iterative nature of the analysis helped temper any potential spin I placed on the interviews. The constant dialogue between the interviews, my scanning of the surveys and the statistical analysis of the surveys helped to corroborate my findings from the various data sources and mitigate my own biases. An inability to reconcile the multiple data sources would suggest a significant shortcoming in either the survey design or my own objectivity.

Chapter 3

Investigation of Programs

My study was motivated by two central research questions. The first involves the characteristics of the career candidates. The second inquires into how the local context influences candidates and their decisions. In my attempt to understand the role of context I will examine each of the three principal programs in detail. A deep examination of these programs is neither intended to forge comparisons between them nor to make value judgments about the effectiveness of each program relative to the others, as those answers are outside the scope of this study. Rather, I am attempting to report out the design of each program on its own terms. Later, in my examination of local contextual factors, I will return to the program design to link certain traits to the local historical, economic, and cultural context in which the program exists to help understand the factors that might influence both the program design and the candidates who enrolled in them.

This chapter intends to accomplish two objectives. First, I will share findings from the directors and coordinators survey and explain how those surveys helped to expose the diversity of the programs serving career changers. Second, I will engage in a more detailed examination of the three target sites in this study, explaining the program history and design and considering the data sources at each site.

Director and Coordinator Survey

There are not only all manner of teacher preparation programs, or even alternative certification programs, but within programs conceived cognizant of career changers there are multiple designs. Programs can be housed in private or public colleges. Programs are also run by local school districts, regional education authorities, state departments of education, and private for profit and non-for-profit entities.

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Additionally, many programs include multiple agencies in their design. I set out to collect a sample of these programs through interviews, but mostly through an on-line survey of directors and coordinators of a mixture of programs across the country. I attempted to find programs that housed in a full spectrum of potential designs, as well as large and small and established and newer ones. In the end, I invited about 75 programs to take the survey, with twenty-nine completing it. The full survey is included in Appendix F. The respondents represent a sample diverse, yet likely incomplete, in size and design. Additionally, I attempted to represent geographic diversity, with programs distributed both across the country and in rural, suburban, and urban settings (See Figure 3.1). I also aimed to sample from programs administered by a wide range of agencies. Considering the caution expressed by Humphrey and Wechsler (2007), I was curious to see how programs housed in similarly positioned agencies would resemble and differ from each other, and whether the program proved helpful in exposing the tendencies of its candidates. Despite my efforts, slightly more than half of the programs responding to my survey were from public universities with the remained split more or less evenly among several other oversight agencies (See Table 3.1).

From the survey data from the twenty-nine programs I identified nine core variables that best defined the programs in terms of size, design, candidates, and students the candidates will eventually teach. While many of the survey items could be answered with discrete responses, several called for program directors or coordinators to provide their best impressions of specific conditions or approximations of candidates' qualifications and placement. As such, the results for these items can only be considered suggestive. Yet the data do provide rough picture of candidates and hint at the esteem in

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which program directors' hold candidates. These core variables are described in more detail below.

Figure 3.1

National distribution of surveyed programs
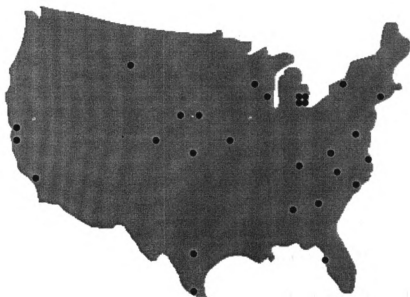
- Number of Candidates—The number of candidates differentiates programs by size helping to discriminate between large and small programs.
- Time to Teacher of Record—This variable highlights design decisions determining the length of time it would take to get candidates into the classroom as the teacher of record. This variable is on a scale of 1-5, with 1 representing placement in a classroom in the least amount of time. This variable has implications in understanding policies' exigency aims.
- Time to Full Certification—In contrast to the Time to Teacher of Record variable, measuring the time it takes a teacher to reach full certification highlights the how long at candidate will be teaching under a provisional certificate. This

variable, too, is scaled 1-5 with 1 representing full certification in the least amount of time. This variable has implications in understanding policies' quality aims.

- Level of Certification upon Entry—The certification upon entry variable is in some ways an amalgam of the previous two variables. Certification on entry suggests how a program orders preparation and practice. For a candidate entering on a provisional certification—a 1 on this scale—the program typically, but not always, demanded additional coursework. A candidate entering with full certification where all course work has been completed before becoming the teacher of record received a ranking of 2. This variable has implications in understanding policies' quality and exigency aims.

- On-line options—The on-line variable measures the increasingly common design consideration of a program's on-line availability. This variable is measured on a 1-4 scale with 1 representing programs with no on-line options and 4 programs that a fully on-line. This variable has implications in understanding policies' exigency aims.

- Stipend—Many programs, including NYCTF and Saint Louis's CTP offer the prospect of a free master's degree or, in the case of the former Massachusetts Signing Bonus Program, remuneration upon completion of the program. This is typically considered a recruitment strategy for hard to serve schools. Scaled 1-5, a lower ranking represents greater access to a stipend, while a ranking of 5 suggests no opportunity for stipend regardless of placement, merit, or need. This variable has implications in understanding policies' equity, fit, and exigency aims.

- Selectivity—This variable attempts to address the overall selectivity of undergraduate programs attended by candidates in a program. Teachers' verbal

abilities have been touted as indicative of their instructional effectiveness (Ferguson, 1991). Undergraduate college selectivity serves as a proxy variable for academic ability. The selectivity variable is only suggestive. On the survey, program directors were asked to approximate percentages of candidates who attended "not very," "moderately," and "highly" selective undergraduate institutions. This leaves great room for both individual interpretation and exaggeration of candidates' background. Selectivity has been transformed from three variables on the actual survey and scaled 1-5, with a 1 representing a candidate pool arising from the least selective colleges and 5 from the most selective. This variable has implications in understanding policies' quality aims.

- Highest degree attained—As with selectivity, the highest degree attained variable attempts to approximate the academic achievement of a program's cohort. Degree obtained is scaled from 1-5, with a 1 representing candidates on average entering with no more than an associate's degree and 5 reflecting a candidate pool comprised mostly of terminal degrees. Again, as with the selectivity variable, highest degree obtained is an approximation by the program director and liable to the same subjectivity discussed above. This variable has implications in understanding policies' quality aims.

- Placement in High Needs Schools—As many programs and proponents of career changers cite the movement as one tool in filling low performing schools with quality teachers, this final variable attempts to assess the likelihood of a program's candidates seeking initial placement in high need schools, regardless of location. Scaled 1-4, a 1 represents 75% or more of candidates placed in high need schools and a 4 represents less than 25% in such a placement. As with the selectivity and

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attainment variables above, this variable is also based on program directors' best

estimate of candidate placements. This variable has implications in

understanding policies' equity and exigency aims.

Table 3.1

Programs according to administering agency

Agency	Number of programs
Private Organization	2
Private University	4
Public University	16
Local School District	2
Regional School District	3
State	2
Total	29

Using these representative variables, I conducted a cluster analysis. The ensuing

cluster analysis derived from these variables was completed in several iterations. Here I

will provide a brief synopsis of my findings and the results of one of the analyses. For a

more thorough discussion, please see Appendix A. In total twenty-three programs were

placed in a group. Six programs were excluded due to missing data for at least one

variable. Cluster analysis will only place cases for which all data is present.

The clusters formed several patterns of interest. First, the clusters divided the

programs by size, with the largest ones placed in Cluster 1 and the smallest in Cluster 4.

With Clusters 2-4 heavy with university-based programs, this suggests that university

programs account for a smaller percentage of candidates than their frequency initially

seem to indicate. Second, in general, smaller programs and university-based programs

take longer to move from entry to teacher of record and full certification are less likely to

offer candidates a stipend and candidates are less likely to seek placements in high needs

schools. There was no noticeable difference by cluster in the certification level at which candidates entered the classroom, with only candidates in Cluster 4 entering the classroom with full certification. Third, ample on-line options seem to be common only in Cluster 2. Similarly, Cluster 4 candidates appear to have attended more selective universities than candidates in other groups and Cluster 2 candidates have attained higher degrees on average than peers in other clusters.

Table 3.2

Four-group cluster analysis of program traits

Cluster	N	Number of candidates	Time to Teacher of Record	Time to Certification	Certification level upon entry	Online options	Stipend	Selectivity	Highest Degree Attained	Placement High Need Schools
1	6	170	2.5	3.5	1.5	1	3.3	2	2.7	1.7
2	4	114	2	4.5	1	3	3.3	2.8	3.5	2.8
3	9	64	3.3	4.6	1.4	1.8	4.8	2.8	2.2	3.4
4	4	26	3	4.2	2	2	4.2	4	2.2	2.2
Tot.	*23*	*94*	*2.8*	*4.2*	*1.5*	*1.8*	*4*	*2.9*	*2.6*	*2.7*

Looking across variables, there are two additional trends I would like to briefly highlight. First, programs whose candidates had higher levels of attainment also entered the classroom the more quickly and candidates with lower levels of attainment entered the classroom more slowly. This was a consistent trend in each analysis. Second, with the exception of the four programs comprising Cluster 4, higher levels of selectivity correspond with lower levels of placement in high needs schools. Conversely, lower levels of selectivity correspond with higher rates of placement in high needs schools. I will develop the implications of these findings more thoroughly in Chapters 6 and 7.

Considered as a whole, the picture these data paint, somewhat like an impressionist canvas, surfaces broad tendencies, but close inspection reveals the details lack precision. The preponderance of university-based programs in Clusters 2-4 and their corresponding absence in Cluster 1 suggests there are real differences among programs and those differences are in part consistent with the agency housing the program. However, the diversity of design exposed by looking across Clusters 2-4 points to the oversight agency as being only suggestive of program design. Even within the large number of university-based programs, the variety of program and candidate characteristics indicates that stating a program is run by a university ultimately implies very little. Although they are addressing individual programs as well as aggregated ones, the diversity of designs is consistent with Humphrey and Wechsler's (2007; 2008) contention that the program level is the wrong unit of analysis for fully understanding the content of preparation and the characteristics of candidates. Yet, neither is it totally irrelevant. Rather, fully exposing the nuances of candidates' qualifications demands deep study of individual programs and the candidates who fill their ranks.

Table 3.3

Cluster assignment of administrative oversight categories

Cluster	Private	Private University	Public University	Local School District	Regional School District	State
1	1	-	1	1	2	1
2	-	-	3	1	-	-
3	-	3	4	-	1	1
4	-	-	4	-	-	-

In the next section of this chapter I will begin this work by detailing the design of each of my three target programs as well as the specifics on the data sources for each site. The following two chapters will take up the question of candidate characteristics, and Chapter 5 will address the local context of each site. However, before I start to engage more substantially with site-specific data, let me briefly share the relevant results of my three target sites with regards to the program directors' survey.

At each of target sites, the program director took the time to complete the on-line program survey. Before looking at their responses, I placed each site in an administrative oversight category, with the ARC program—with the Connecticut Department of Higher Education—placed in the state agency group and both CTP and NPTT placed in the public university category. As might be expected, the ARC program—an extra-university program—was placed in Cluster 1 and CTP and NPTT were placed in Cluster 2. Cluster 1was marked by larger, less selective programs in which candidates took quicker paths to the classroom as teacher of record and were more inclined to teach in high need schools. Cluster 2 was distinguished by the quickness of entrance into the classroom as a teacher of record, access to on-line instruction, and high educational attainment relative to the other clusters.

The substantial commonalities between the CTP and NPTT program that I hope will become apparent in later in this chapter as well as in subsequent ones will help to reinforce the argument that the administrative location of a program can provide essential trends in its design. It will also expose some of the dangers of aggregation, as each program, while sharing traits with those placed in their cluster diverge from the peer group in many ways. These important differences will also help corroborate that oversight, alone, is an incomplete metric; the local context is necessary to gain a full

appreciation of the candidates in a program. Let me begin by taking a closer look at these programs.

<center>*Target Programs*</center>

As I examine each program more closely, I will first briefly discuss the data sources at each site. Next, I will highlight the program design. Finally, I will present aggregate candidate data for each program.

Data Sources

With the exception of NPTT, I traveled to each program to administer surveys. My visit to ARC in June 2007 coincided with the fourth and fifth days of the candidates' preparation, instruction that had to date focused largely on formal aspects of the program, including program design, an overview of Connecticut teaching and curricular standards, and an introduction to pedagogical issues. I mailed surveys to the program director in advance of my visit and he made them available for candidates to take home to complete the day before my arrival. I then collected the surveys the morning of my first day at the site. A handful of candidates willing to complete the survey failed to receive one before my arrival and completed one after I was on site.

The 2007 ARC I cohort had a total of 122 candidates admitted. Of those five deferred admission and an additional three failed to attend despite sending in a deposit to hold their spot. In total, then, there were 114 candidates in the cohort. Of that number I received seventy-four surveys back from candidates for a response rate of sixty-five percent of the potential number of candidates.

I traveled to Saint Louis to collect data for two days in July 2007. I received data from two separate CTP cohorts. The first was about to begin their first year teaching in the Saint Louis Public Schools. They had been engaged in coursework for two weeks

upon my arrival and were to receive their teaching placements the day after my visit. Coursework to date had been largely full group instruction and focused on programmatic issues, district and state teaching and curricular standards, and general introduction to basic teaching concerns. The second cohort was composed of candidates who had already completed their first year of teaching through CTP and were enrolled in a summer course considering differentiation of instruction. The program coordinator allowed me twenty minutes at the beginning of each class session to distribute the surveys for candidates to complete. I remained in the room while candidates completed the survey to try to clarify any potential confusion associate with any survey items and collected the surveys as candidates completed them. As the program coordinator had carved time from classroom instruction for me to administer the surveys, there was not an opportunity to conduct interviews at that time.

The 2007 CTP cohort—those about to enter their first year in the classroom—had a total of forty-seven candidates. Of that forty-seven, I forty-one surveys were returned for a response rate of eighty-seven percent. The 2006 cohort—those who had just completed their first year in the classroom—had a total of eighteen candidates. Of that eighteen, I seventeen were returned, for a response rate of ninety-four percent.

As NPTT is fully on-line and covers three large western states, it is not practical to travel to actual sites to administer surveys or conduct interviews. Therefore, NPTT candidates completed an on-line version of the survey and I conducted subsequent interviews over the phone. Through coordination with the program director, I provided him with a student invitation and consent form and he forwarded the form to candidates in the winter 2006-2007 NPTT cohort with his own additional introduction about the role of this research. These candidates completed their three-course sequence in the fall

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and winter of 2006-2007 and were now, with one exception, in their first year as teachers of record in their respective classrooms. All were currently enrolled in a class considering equity, special needs, and diversity required as part of their continuing coursework in the program. Candidates were initially invited to complete the survey in October 2007. However, due to low initial response, the program director sent out a second invitation two months later.

This cohort initially had twenty-one students enrolled. I received twenty-three separate responses, although six were duplicate responses. Four candidates who completed the survey after the initial invitation, began the survey again after the second invitation before realizing that it was the same survey. One candidate began the survey three separate times, completing one full survey. In total, I received completed surveys from seventeen unique candidates, resulting in an overall response rate of eighty-one percent. At all programs some candidates did not respond to a handful of individual items causing the response rate varies slightly based on the particular item in question.

As outlined in Chapter 2, at each site, after collecting the surveys, I scanned through them tracing general trends in responses to items assessing candidate knowledge, skills, experience, and motivation. I then selected individuals whose responses reflected general trends in the data to invite for interviews. Additionally, I selected a few outliers from the group who present the potential for fertile counterexamples. I also ensured an approximately proportional representation of candidates based on age, ethnicity, and gender. In total, I invited ten candidates to sit down for interviews at ARC and all ten agreed. The interviews were conducted in a standard classroom provided to me by the program director located a few doors down from the lecture hall were the full group of candidates was meeting.

As candidates course schedule did not allow for sufficient time to conduct

interviews on-site for CTP, I invited candidates to be interviewed through an email

message. In total, I conducted five interviews with CTP candidates. I attempted to

record all the interviews, although for two interviews, I experienced some technical

problems, later rectified, and was unable to hear the responses of the interviewees. For

these, I relied on the detailed notes I took during the interview as well as further notes I

took immediately upon realizing the data had been lost. Likewise, I invited NPTT

candidates to be interviewed through email messages. In total, I invited eight candidates

to participate in interviews. Of those seven accepted, with one never responding to my

email query.

Overall, interviews lasted from fifteen to forty minutes and followed the approved

protocol, with additional occasional questions for clarification or to explore other relevant

issues raised in the interviews. All interviews were recorded and, with a handful of

exceptions, ultimately coded to reveal trends in knowledge, skills, experience, and

motivations. There were three NPTT interviews that I listened to several times, I did not

transcribe[5].

Program Design

Alternative Route to Certification—Connecticut State Department of Higher Education

Now in its twentieth-second year, Connecticut's Alternate Route to Certification

(ARC) has prepared nearly 4,000 candidates. ARC was conceived to serve dual

purposes. Primarily the program was created "by the Connecticut state legislature to

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[5] My sampling selection for interviews was slightly different for NPTT than for other sites.
I began to see an emerging trend in candidates who were stay-at-home parents now
returning to the classroom. I also noticed that the background of these parents appeared
diverse. I added three additional interviews of primary caregivers from the NPTT
candidate population to increase my own understanding of the candidates' diversity.

encourage mid-career adults with strong subject area backgrounds to become"

(Connecticut Board of Governors for Higher Education, 2008) middle school and high

school teachers. Additionally, a division of the Connecticut Department of Higher

Education, ARC was designed to pilot preparation programs to help the state's public

universities devise their own models for preparing mid career entrants. Currently it runs

two distinct programs. The standard ARC program demands a full-time commitment for

nine weeks over the summer leading to provisional certification in any Connecticut public

school. The summer program includes a series of seminars acclimating candidates to the

culture of public schools, familiarizing them with the policies and regulations, introducing

them to special education instruction, providing subject-area pedagogy, and enlisting

them in a four-week student teaching experience in a summer school. The seminars are

held in a central location on the campus of a small community college; about 125

candidates are prepared annually through the summer session. ARC II has nearly

identical requirements. However, this program is run during the school year on Friday

nights and weekends, in an attempt to accommodate candidates whose job and family

commitments make them unable to afford nine weeks of full-time coursework. ARC II

prepares a similar number of candidates as the standard program.

　　ARC prides itself on its rigor and selectivity. ARC's own literature claims that

"admission to the ARC program is highly competitive; on average, the admission rate is

20-30% of applicants" (Connecticut Board of Governors for Higher Education, 2006).

Minimum application standards include a bachelor's degree from an accredited college or

university and passing the PRAXIS I test—although waivers for this exam are available.

Additionally, candidates must meet the state certification demands for their respective

subject areas as defined by the Connecticut Department of Education. These

requirements are largely a list of bachelor's level courses to be successfully completed in the disciplinary area. For many candidates their academic major or minor covers all of these classes or calls for them to take one or two additional classes to meet the requirements. However, it is possible for a candidate to take courses in a related—or even in a disparate—subject area so long that the state guidelines are fulfilled. A major or minor in a bachelor's degree is not required. Finally, each candidate must pass the PRAXIS II subject area test in their chosen discipline. The perceived difficulty of the Praxis in certain subjects along with perceptions of the labor market precipitated a handful of candidates to seek their certification in a subject other than their major. Finally, candidates must have demonstrated a commitment to working with youth. In fact, as the student handbook reads,

> [i]f you do not have relevant experience working with youth in an on-going, organized activity (e.g., substitute teaching, tutoring, coaching, leadership of a youth activity such as scouts, etc.), you must submit a request for a waiver of this requirement in which you describe your commitment to teaching and why you believe that you would be a good role model for youth. (Connecticut Board of Governors for Higher Education, 2008)

ARC seeks candidates with "strong academic and content backgrounds as well as a wide array of life and professional experiences" (Connecticut Board of Governors for Higher Education, 2008), believing that they will translate into superior teachers. They note that several graduates have gone on to win building and district level teaching awards, and that the 2007 Connecticut Teacher of the Year is an ARC graduate. And their belief is evident in the tone of the training and in conversations with ARC personnel who cite high success rates of their graduates, especially when compared to other

alternative routes provided by other Connecticut colleges and universities. They adopt a stance suggesting that they are comfortable pitting their candidates against those from any preparation program, seemingly confident in the effectiveness of their graduates. The ARC interview questions and application rating protocol provide additional hints as to what is valued by the program. The core interview questions ask prospective candidates to reflect on how schools have changed since their days as a students and how they will meet the needs of diverse students, suggesting the program values candidates with a caring disposition (Alternate Route to Certification, 2007a). In contrast, the initial application was assessed largely according to the traits assumed by proponents of career changers. Of the thirty-six total points available on the ARC application scoring guide, twenty-five are lent to a candidate's subject area knowledge, academic skills, and work experience. The remaining were shared among various dispositions for teaching, promise for success, and other life experiences (Alternate Route to Certification, 2007b).

What remains conspicuous in absence is the lack of explicitly naming pedagogical content knowledge as a goal in the preparation. Although PCK was not mentioned in name by any site, this is of particular note in Connecticut as the state's multiple step certification program explicitly demands demonstration of acquisition and application of PCK in their teaching practice. Therefore, if ARC is failing to provide candidates with this theoretical perspective, or even the language to engage in this work, they would likewise be hindering their progress toward full state certification and hoisting the responsibility of candidates professional growth solely on the school that employs them.

One possible explanation for the PCK absence lies in the location of the program. ARC lives in the Connecticut Department of Higher Education (CDHE), whereas the Connecticut State Department of Education (CSDE) developed the BEST portfolio

assessment. If in fact PCK is fully absent from the ARC curriculum this might suggest a lack of coordination between governmental branches. While it might be incumbent upon the CDHE to remain abreast of CSDE requirements, multiple explanations—ranging from philosophical differences and turf wars to the more benign reasons of poor communication or institutional drift—could account for the lack of coordination.

I must couch this criticism with a caveat. I visited ARC early in their nine-week program and before candidates moved into subject-area groups. It is possible that in those groups—even though they lasted only a week of half-days—PCK was a central focus, especially as these groups were led by practicing teachers who presumably would be familiar with the BEST standards. However, the language of PCK was neither used in ARC literature nor in my conversations with those administering the programs. This caveat applies to my other focal programs, as well. At no program was PCK explicitly named. Still, without access to all course syllabi or even being present in classroom discussions could I definitively conclude that programs discounted PCK. However, its lack of prevalence points to a dog that didn't bark. If it is raised, it is done so either with different language, at the discretion of an instructor, or less vociferously than disciplinary knowledge alone.

Both ARC I and ARC II follow a four-stage design. Upon initial acceptance, candidates must complete a pre-program classroom observation, as well as background readings based in education foundations. The program activities include several large group seminars focused on state regulations, special education, and other state mandated information. Candidates then move into smaller groups organized around their subject area, led by master teachers. These focused methods classes include planning instruction, pedagogy, assessment, and classroom management. Following their initial coursework,

candidates complete a four-week internship in their subject area under the guidance of a cooperating teacher and an ARC supervisor. Over the summer program, several of the student teaching days are mornings only as they are limited to the school schedules provided by summer school programs. In the afternoons the students return to their methods classes for lesson reflection. Upon passing the PRAXIS II, completion of the preparation program, and receiving an initial placement, candidates are eligible to receive a "Temporary 90-Day Certificate" for the Connecticut State Department of Education. During their first three months, candidates receive transitional support in addition to district mentoring through the Beginning Educator Support and Training (BEST) program. After ninety days candidates are eligible for an Initial Educator Certificate upon recommendation from the district superintendent.

ARC provides no formal placement to candidates searching for placements, although it does host a job fair each May for candidates. Upon acceptance into the program, candidates may begin to apply for openings. In fact several candidates had already accepted positions before the summer ARC training began and several others were excused from seminars to attend job interviews. Despite the lack of formal assistance, many candidates cited ARC's reputation and track record as easing their concerns in finding a placement.

Career Transitions Program—University of Missouri—Saint Louis

In operation for a decade now, the Career Transitions Program (CTP) is dedicated to attracting candidates to the classroom interested in teaching in teaching in urban settings. A partnership between the University of Missouri-Saint Louis (UMSL), Saint Louis Public Schools (SLPS), the Missouri State Department of Elementary and Secondary Education, and the Parsons Blewett Memorial Fund, CTP is designed to

relieve critical teacher shortages in math, sciences, technology, arts, and special education in the Saint Louis Public Schools. To be eligible for CTP, candidates must have completed a bachelor's degree in a subject area in need in SLPS. For special education acceptable undergraduate majors include psychology, criminology, social work, and other human service fields. All other subjects require a degree in the field in which they will teach or in a related area (e.g., a math teacher with an engineering degree). Additionally, candidates must surpass a minimum undergraduate grade point and—before receiving full certification—must pass the appropriate PRAXIS II subject area exam. These prerequisites are consistent with those of the other programs I studied, although it is interesting to note that CTP considers human service fields as the most appropriate preparation for special education instruction.

CTP expects their candidates to have experience both working with children and working in their disciplinary field. As well, the program has a strong commitment to urban education and actively seeks candidates who share such a dedication. The program screens applications looking for candidates "who possess qualities known to be important to success in teaching in urban classrooms" (University of Missouri--Saint Louis, 2008). Consistent with their attentiveness to urban education, CTP is transparent about its social justice mission and expects to attract candidates who view teaching in the Saint Louis Public Schools as a political act. Additionally, a large portion of the coursework considers teaching from a social justice perspective with particular attention lent to issues of race and class and how they are complicated by school settings.

In effect, admission to the program also means employment by the Saint Louis Public Schools. Therefore, the university and SLPS jointly admit candidates. Likewise, applications are jointly reviewed and principals and university faculty conduct candidate

interviews together. This differs from the other programs in my study. Unlike NPTT and ARC where the program might assist candidates in finding teaching positions, acceptance into CTP and successful completion of the initial summer seminar assures a candidate of a job come fall, and that job will be in a high needs urban school.

The initial four-week summer preparation largely provides candidates with an introduction to issues of classroom management, pedagogy, and curriculum, as well as an overview on special education law and instruction. For this preparation session, most all coursework is completed as a large group, although candidates do divide into subject area groups for some activities. Upon completion of the initial four-week summer preparation, candidates receive their initial placement, entering as the teacher of record with a provisional license. During the first and second school years candidates continue their coursework, typically with classes meeting two nights a week, with an additional weekly subject area specific seminar. Over the second and third summers, candidates are also enrolled in coursework. This coursework includes classes examining foundations, methods, literacy, action research, and differentiated instruction. At the end of the third summer, and with passing the appropriate PRAXIS II exam and completion of a certification portfolio, candidates earn full Missouri certification allowing them to continue in their current placement or portable to any school district in the state. Although CTP has the shortest initial preparation period of the programs in my study, upon completion candidates have completed about thirty-five hours of coursework commensurate with a typical undergraduate teacher preparation sequence, and within approximately fifteen credits of a master's degree.

The school context for CTP candidates is essential to consider. As I mentioned above, these candidates are the only ones from my study whose teaching context has been

determined upon entry. Candidates from ARC and NPTT are free to accept any job offered to them in their region, while CTP candidates will be teaching in SLPS. An urban district facing the challenges of multi-generational poverty, racism, and low achievement, the Missouri Department of Elementary and Secondary Education has recently assumed administration of the district, creating and additional layer of turmoil. These contextual factors will be developed more fully in Chapter 5.

This combination of struggles in student achievement and administrative confusion has led to real struggles in filling teaching vacancies. The Parsons Blewett Memorial Fund was created to encourage prospective teachers to teach in the Saint Louis district. Named in honor of a turn-of-the-century SLPS superintendent, the fund, in conjunction with a grant from the Missouri Department of Elementary and Secondary Education, pays full tuition costs for all CTP candidates. In exchange, upon completion of their preparation after two years, candidates must commit to teach in SLPS for three additional years. Technically, candidates are making a commitment of five full years to the district. Upon acceptance into CTP they do not have the option of forgoing the scholarship with the intention of leaving after earning a full and portable certificate after two years. However, upon completion of the program, or anytime before completion, candidates could choose simply to quit. In those cases, candidates who fail to maintain this initial obligation must repay UMSL at a prorated cost of tuition based on the length that they did teach in SLPS. However, for the majority of candidates, CTP is a free path to certification.

Northern Plains Transition to Teaching (NPTT)—Montana State University

For the most of the decade North Plains Transition to Teaching (NPTT) has been preparing candidates for teaching across Montana, Wyoming, South Dakota, and,

occasionally, neighboring states. Founded largely to increase the talent pool for teachers entering rural classroom across the High Plains, NPTT prepares approximately sixty teachers annually, divided into three cohorts. Although the program is staffed and administered by Montana State University NPTT is a fully on-line certification program.

NPTT envisions as its mission the "recruit[ment of] highly qualified professional adults holding baccalaureate degrees appropriate to the content area at the secondary level they wish to teach" (Montana State University, 2007). As such, NPTT claims to actively pursue candidates with both extensive subject area knowledge and professional experience in their chosen discipline. Typically an undergraduate major, and often a minor, is sufficient to qualify for eventually certification. However, candidates are still required to meet state standards demanding a certain distribution of courses in a desired discipline. Additionally, passing the PRAXIS II subject area exam is also requisite for acceptance into the program.

In contrast to Montana State's standard, on-campus teacher education program, upon acceptance into NPTT candidates are required to enroll in and complete three basic preparation courses—education psychology, diversity and special needs, and curriculum, pedagogy, and assessment—in their first semester. These classes can be completed in the fall, winter, or spring before candidates enter the classroom, depending on their cohort. Upon completion of the initial three-course, nine-credit sequence, candidates earn a provisional license (the precise designation depends on the state) in their approved subject area and are free to apply for teaching positions within the three-state region. Candidates can also apply in another state if Montana State and their employer successfully petition the state's department of education for provisional certification. During their first year teaching, candidates take an additional three classes,

staggered so that candidates are enrolled in only one course at a time. During the summer following their first year teaching, candidates complete two final courses, for a program total of twenty-four credits. Upon successful completion of the internship year—where candidates are the teacher of record in their classrooms—candidates must submit a professional portfolio in order to earn full certification. Although NPTT is a non-degree program, upon completion, candidates are only six credits shy of a master's degree.

Although NPTT has extensive contacts with districts, including "several school districts such that they call us first (when they have new positions available) to get more of the kind of candidate they hired from our previous pools" (Montana State University, 2006), candidates are, ultimately, on their own in securing a teaching position. The NPTT literature is explicit that completion of the program is dependent upon finding a position, and finding a job may well require relocating to another town. The nature of rural schools is often that positions in typically lower demand subjects such as English of history are available and, even, in need. However, predicting where those jobs, along with the more common high need subjects, open is hard and finding one in the community near which a candidate is particularly challenging. In fact, several candidates are living apart from their spouses for at least a year, and another has deferred her intern year to avoid having to do so. During candidates' intern year, they are compensated commensurate to any first-year teacher in their district. In fact, the school district's only additional obligation is aid in identifying a master teacher in the district willing to assume mentorship responsibilities for the candidate. The mentor program is relatively unstructured, requiring the mentor to observe the candidate several times over the year making recommendations on honing practice. The mentor, however, has no official role

in recommending a candidate for certification. The mentor receives a stipend from the program.

Within the three-state region, tuition is equivalent for all candidates regardless of the state in which they reside. Candidates do have the opportunity to earn a full tuition voucher in exchange for a commitment to teach in an identified "high needs" school district for at least three years. However, this waiver is dependent upon employment, and no jobs are guaranteed in these districts. The US Department of Education has redefined what constitutes a high needs district. Under the new definition there are only sixteen qualifying districts in the three states, meaning that very few teachers are actually able to find employment in high needs schools. This tuition waiver is being discontinued for the 2008-2009 school year.

Despite the limited opportunities to teach in the most challenging settings, the program still views its mission as one of service, and its candidates motivated by the societal benefit teaching provides. In my discussions with the coordinator of NPTT, he spoke passionately about their desire to populate the program with "citizens" drawing a sharp distinction between the knowledge, skills, experience, and motivations of NPTT candidates and those in the standard teacher education program. "These are experienced professionals engaged in graduate level work. We are not sitting around with eighteen-year olds" (Personal Interview, 5 March 2007). He continued that the candidates' characteristics differ from those of traditional entrants in that NPTT candidates have assumed real responsibility in their families or been otherwise engaged with youth, traveled the world enjoying a richer perspective on diversity of cultures, and are scientists, engineers, and retired military personnel. In short, NPTT is "looking for fully mature citizens completely into the game of adulthood" (Personal Interview, 5

March 2007).

Aggregate Candidate Data

I will now look at data across programs to highlight the uniqueness of their

respective candidates. In table 3.4, I call upon several variables from the candidate

survey to provide a glimpse of candidate traits for each site. Below I briefly define the

variables. In Chapter 4 I will return to these variables to conduct a cluster analysis of

candidates. At that point I will discuss the rationale for selecting these variables in greater

depth.

- *Academic Major* attempts to scale undergraduate majors according to their

  disciplinary correspondence. I assigned a 2 to majors that had a direct

  disciplinary match, a 1 to applied majors, and a 0 to non-disciplinary majors. In

  the presentation of site-specific data below, I share the most common majors and

  their distribution.

- *College Ranking* borrows from Barron's College Admissions Selector, a 1-6 scale

  with a 1 representing the most selective institutions.

- *Job Relevance* attempts to scale (0-2) previous work according to the applicability of

  their skills to applied use of school subjects. A 2 represents work that demanded

  the greatest use of disciplinary knowledge. As with the academic major variable, I

  share the distribution of jobs and examples in the site-specific presentation.

- *Previous salary* presents the last salary earned by candidates before entering

  teaching.

- *Highest Degree Attained* is scaled from 1-7, with a 1 representing a bachelor's degree

  and a 7 a terminal degree.

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- *High Needs Placement* presents candidates' relative interest in seeking placement in a high needs school district. 1 represents a very high commitment; 5 displays an unwillingness to teach in a high needs district.

Table 3.4

Candidates' core variables means by program

	N	Academic Major	College Ranking	Job Relevance	Previous Salary	Highest Degree Attained	High Needs Placement
ARC	74	1.58	2.76	1.15	40,000	2.59	3.03
CTP	58	0.81	3.62	0.67	32,250	2.76	1.66
NPTT	17	1.59	3.09	1.06	24,000	2.82	2.88

Note: Previous Salary data uses median income rather than mean. With its small sample size, a single candidate with a mid-six figure salary strongly skewed NPTT results. The mean for the *Previous Salary* are as follows: ARC—$41,806; CTP—$33,762; NPTT—$53, 308.

The data above suggest each program is comprised of a unique set of candidates. ARC candidates, in aggregate, are distinguished by attending more selective undergraduate institutions, coming from higher paying jobs, and having less interest in teaching in high needs schools. When compared to candidates in other programs, those in CTP have higher rates of non-academic majors, lower rates of previous job relevance, attended less selective colleges, and are most dedicated to teaching in high needs schools. NPTT candidates share high rates of academic majors with ARC candidates, lower interest in teaching in high needs schools, and the lowest previous salaries. Looking across variables, it is worth noting that higher rates of academic majors and previous job relevance appear to correspond with lower interest in teaching in high needs schools.

ARC and NPTT candidates' majors were both strongly clustered to toward more traditionally academic disciplines (a ranking of 2 on my scale), with high numbers of English and biology majors. Among the applied majors (a ranking of 1), there were

several engineers and computer scientists. CTP candidates followed more of a bimodal pattern. A slight majority of candidates had the least academic majors, with social work, human relations, and various business and organizational studies represented. While there were few applied degrees, academic majors comprised nearly forty percent of all candidates, with psychology and biology the most common. Across CTP majors there was a high prevalence of social service majors, though this is likely because, out of my target programs, CTP was the only one preparing special education teachers. Candidates with social services majors could not have been accepted to the other programs, as they would not have had a degree that was directly transferable to a secondary discipline area. For a more complete accounting of majors by program, please see Tables B.1-B.3 in Appendix B.

As with undergraduate majors, ARC and NPTT candidates tended to have previous work experience that had more direct bearing on the discipline they were to teach, although even at these sites the most relevant work experience (a ranking of 2) was never the mode. There were no CTP candidates with a highly relevant ranking. While there were several research scientists and engineers at ARC and NPTT, applied experience such as law, disability case managers, and computer specialists were more frequent. This applied ranking (1 on my scale) was the largest at all three sites. The least relevant category (a ranking of 0) was proportionally the largest at CTP. However, candidates with previous work experience as wait staff, receptionists, and in retail sales were common across sites. Finally, candidates with some teaching experience—including paraprofessionals, long-term substitutes, and childcare workers—were widespread in all programs. For a more complete accounting of job relevance by program, please see Tables B.4-B.6 in Appendix B.

Table 3.5

Distribution of candidates according to race and gender, by percent

Program	N	Native American	African American	Asian/ Pacific Islander	Hispanic	White— Non-Hispanic	Female	Male
ARC	74	0	5	0	8	86	50	50
CTP	58	0	46	4	2	48	59	41
NPTT	17	0	0	0	0	100	65	35

Note: Totals may not add up to 100% due to rounding.

CTP is also distinct in its racial composition. It is the only program without a majority of white candidates, with nearly even numbers of African-Americans and whites. In contrast, ARC and NPTT are predominately white, although ARC does have Hispanic enrollment roughly consistent with the overall Hispanic population of the state. ARC is an exact even split between female and male candidates. CTP has a slight majority of female candidates. However, among African-American candidates, the proportion of females than their overall proportion in the programs and, correspondingly, among white candidates the proportion of male is larger than their overall proportion in the program. NPTT has the largest percentage of women, at nearly two-thirds of all candidates.

Based on aggregated candidate characteristics, CTP appears to be quite distinct from NPTT and ARC, in part demonstrating the diversity that exists within the clusters developed at the beginning of this chapter. However, looking at means alone can obscure more nuanced diversity within a group. In Chapter 4, I will look more deeply at the candidates themselves, attempting to explore these nuances.

Chapter 4

Investigation of Candidates

In the previous chapter I examined programs that prepared career changers. Now I will turn my attention to the candidates themselves. In this chapter I will begin by tracing the iterative development of the portraits using qualitative and quantitative analysis. After establishing the portraits, I provide a more developed look at each including demographic characteristics. I then return to the interviews to create "mini-cases" of representative candidates from each portrait.

Portrait Development[6]

Upon collecting surveys from candidates at each site, I divided the data according to demographic and educational items to determine candidates to invite for interviews, attempting to approximate the diversity of each program. I quickly began to see the emergence of several divergent patterns among the candidates. I will briefly highlight each.

- Socially Mobile—For these candidates, teaching represented initial entry into the professional middle class. Often coming from more meager backgrounds, completing undergraduate degrees in a non-traditional manner, and having non-professional work experience, for this portrait, teaching represented both increased social status and salary.

- Capstoners—The smallest of the four main categories, these candidates were entering teaching after retiring from long careers in various other fields. Generally, this portrait was punctuated by candidates with strong academic

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[6] For a more thorough explanation of the portrait development, please see Appendix C.

credentials and profitable careers. They planned on teaching for only a handful of years and were only tangentially motivated by salary and benefits.

- Classic Career Changers—These candidates tended to reflect the assumptions of proponent of career changers and were distinguished by their subject area knowledge and academic achievement. They were often drawn to teaching after finding their previous work financially, but not personally, rewarding. In many ways they reflected the capstoners, but tended to be a decade or more younger.

- Career Seekers—This portrait was primarily comprised of candidates under the age of 30 who either had yet to settle on a career of had quickly determined that their chosen career path was unrewarding. In general, this group had limited applicable work experience, but relatively strong academic achievement and undergraduate degrees in a disciplinary subject.

Upon observing the portraits, I briefly reexamined all of the surveys and placed most candidates in one of the four groups based on a non-rigorous analysis of their responses to key items. Several candidates were not classified, as they did not seem to fit clearly into a particular portrait.

I then used the more meticulous and objective cluster analysis to assess the accuracy of my placement of candidates. I identified key variables—many of which I previewed in the previous chapter—assessing knowledge, skills, and experience. The rationale for these variables and how they were scored are presented below.

- Knowledge—Proponents of career changers cite their greater subject area knowledge as a justification for drawing them into the classroom. I selected two proxy variables to measure candidate subject area knowledge: undergraduate major and educational attainment.

o Major—This variable attempted to measure the nature of undergraduate

   majors. I rescaled majors on a 0-2 scale. Disciplinary majors that had a

   direct classroom match such as history, math, biology, or foreign language

   received a 2. Applied majors such as accounting or engineering received a

   1. Non-disciplinary majors including social work, fine arts, and marketing

   received a 0[7].

o Highest Degree Attained—This variable attempted to measure the depth

   of knowledge candidates gained in their fields. The variable was scored on

   a 1-7 scale with 1 representing a bachelor's degree and 7 a terminal

   degree.

- Skills—Proponents, likewise, name greater intelligence as desired trait in

   teachers and a trait addressed by attracting career changers. Initially I

   intended to assess candidates' skills through three proxy variables: selectivity,

   grade point average, and standardized test scores. However, I was limited to

   self-report data for GPA, leading me to question their reliability. Additionally,

   potential differences in grades across schools and grade inflation across time

   raised concerns. The combination of inconsistent and inaccurate reporting of

   SAT and ACT scores led to similar concerns for test score reliability. As I had

   no confidence in their accuracy, I chose to drop these variables.

   o Selectivity—I measured the selectivity of a candidate's undergraduate

      institution as measured by the Barron's College Admissions Selector

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[7] This process is fraught with potential bias—for instance, how do you classify an education degree (I chose to give it a 1)? When conflicted I returned to the prevailing assumptions guiding supporters of career changers who tend to favor academic subject area knowledge over pedagogical or pedagogical content knowledge.

(College Division of Barron's Educational Series, 2006). This is a 1-6 scale with 1 representing the most selective institutions and 6 representing the least selective.

- Experience—I assessed candidate experience through previous job relevance and the salary earned in that work.

  o Job Relevance—This variable attempted to assess the applicability of a candidate's responsibilities in their previous work to the subject area they would be teaching. The variable was reclassified on a 0-2 scale. Admittedly subjective, jobs that built on subject area knowledge such as a research scientist scored higher than jobs that had no direct correlation to academic disciplines, such as childcare or waiting tables.

  o Salary—This variable intended to measure whether entering teaching was a lateral financial move or resulted in a pay cut or raise. Previous job salary was placed on 0-2 scale with previous salary above $50,000 earning a 2 and salary under $30,000 earning a 0. This was based on a rationale that for candidates rating a 2, teaching would represent a salary reduction. For candidates rating a 0, teaching would signal a salary increase.

- Age at Bachelor's Degree—From the interviews and surveys, it appeared that candidates from the socially mobile portrait tended to have non-traditional undergraduate matriculation. I developed a variable to measure the accuracy of my observation as a defining characteristic of the portrait. Again, I created a 0-2 scale with 0 representing candidates who received their bachelor's degrees by the age of 24 —the most traditional candidates, 1 representing

candidates who received their degrees between the ages of 24-30, and 2—the

least traditional—for those graduating after the age of 30.

- Date of Birth—Capstoners appeared to be distinguished from classic career

  changers in large part by age, with capstoners apparently sharing many

  similar characteristics, only twenty or more years older. Therefore, I included

  a variable for date of birth to more precisely define the clusters.

Only candidates for whom I have data on all the variables of interest can be

placed in a cluster. In total, 84 out of 149 candidates were placed by the cluster analysis.

Those who were not placed fell into a handful of categories. A few did not respond to

several items on the survey, making their placement impossible. Many of these chose not

to provide previous employment or salary. In several cases candidates explained that

they had been out of the workforce for many years, typically in these cases as the primary

caregiver for their children. A handful of other candidates were freshly out of college and

did not have any career experience. I also chose not to include an additional set of

candidates who were already practicing educators. Some of these practitioners were

working in independent or religious school without a license. Others were teaching under

an emergency certification. For them the programs presented an opportunity to gain

quick certification, and, even if they were changing jobs, they were not changing careers.

After running the cluster analysis, the resulting clusters were close approximations

of my initial portrait placement (Pearson Correlation=.717, significant at 0.01 level)

suggesting both that the clusters are reflected in the characteristics of the candidates and

that my initial skimming of survey responses were accurate. Cluster 1 proved to be a

close approximation to the socially mobile portrait. Cluster 2 reflected the career seeker

portrait. Cluster 3 was the least defined. Although the majority of the cases included in

the cluster were classic career changers, seven of the eight capstoners in my total sample were also placed in this cluster. Cluster 4 was composed strictly of classic career changers. Table 4.1 displays the clusters with their analogous portrait.

Table 4.1

Four-group cluster analysis and analogous portraits

Cluster	Analogous Portrait
1	Socially Mobile
2	Career Seekers
3	Capstoners & Classic Career Changers
4	Classic Career Changers

Table 4.2 displays the means of the variables assessing knowledge, skills, and experience for the four groups defined in the cluster analysis. Cluster 1 is characterized by academic majors that moderately reflect school subjects, registering the second highest measure of disciplinary match, again, a key assumption of supporters of career changers. However, for all other measures, Cluster 1 looks the least like the assumed picture. They attended the least competitive colleges, had jobs demanding the least discrete subject area knowledge, had low—although not quite the lowest—previous salaries, had the lowest levels of educational attainment, and earned bachelor's degrees at the oldest age. In terms of age upon entering teaching they do not differ markedly from the full sample.

Cluster 2, analogous to the career seekers, is composed largely of comparatively younger entrants into teaching. As a group they have the weakest academic majors of all candidates. The selectivity of their undergraduate institutions is in the middle of the full sample and similar to those in Cluster 3. Their relevance of their previous job to teaching is, again, in the middle. This might be expected as the career seekers in my interview

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sample have often bounced around between seasonal work and jobs that require limited experience. Their previous salary is comparatively low, although this could well be a combination of age and the types of jobs in which they have been employed. As a group, they have relatively low educational attainment, again, potentially linked to age. Cluster 2 candidates appear to have overwhelmingly followed traditional undergraduate paths, with the vast majority completing their bachelor's degree by the age of 24.

Cluster 3 candidates begin to more closely approximate the characteristics assumed by career change proponents. In most all measures they have higher academic achievement and job experience than Clusters 1 and 2. The most distinguishing characteristic of these candidates is their age and income. This is consistent with the large percent of capstoners who were placed in this cluster. Additionally, their age suggests that Cluster 3 candidates have been in the workforce for longer, rising to more responsible and higher paying jobs. There were more candidates placed in this cluster than any other.

In terms of measured characteristics, Cluster 4 candidates appear to reflect the assumed portrait of career changers most closely. They attended the most competitive colleges, majoring in academic disciplines. Their previous jobs seem to have demanded the discrete subject area expertise desired from career changers. They have the highest proportion of advanced degrees and were all traditional undergraduate students. While their pay lags behind that of Cluster 3 candidates, this might be explained by the difference in age between the two groups. Finally, it is essential to notice that although this group looks the most like the assumed career changer, they represent the smallest of the four clusters. Although these candidates do exist in practice, they appear not to be as prevalent as some might hope them to be.

Table 4.2

Means of proxy variables from cluster analysis

Cluster	N	Academic Major	College Ranking	Job Relevance	Previous Salary	Highest Degree Attained	Age at Bachelor's Degree	Date of Birth
1	19	1.37	3.65	0.37	0.79	1.95	1.53	1970
2	24	0.96	2.92	0.79	0.71	2.17	0.08	1976
3	27	1.15	2.96	1.19	1.81	3.07	0.37	1962
4	14	1.93	1.79	1.36	1.43	4.43	0.00	1977

An essential element of this study is to understand how candidates differ according to program as there has been little consideration of this question. By disaggregating the clusters by site, this begins to show that each of my three target programs tends to attract a distinct blend of cluster types. However, it is also important to recognize that despite trends in each program, with one exception, all programs attract some candidates from each cluster and from each portrait. That exception exists in the smaller NPTT program where there were no candidates placed in Cluster 1 or the corresponding socially mobile portrait.[8].

Table 4.3 displays the cluster placements and portrait assignments by program. These data suggest that there are important distinctions between the characteristics of the candidates disaggregated by program. In the ARC program, Cluster 3 is by far the single largest group. In terms of both numbers and percentage there are more Cluster 3 and Cluster 4 and capstoner and classic career changer candidates in the ARC program than either CTP or NPTT. In contrast, although present, ARC has fewer candidates defined by Clusters 1 and 2 and the socially mobile and career seeker portraits. Across ARC,

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[8] The NPTT program had only seventeen respondents (out of twenty-one enrolled) from the cohort. However, a large percentage of the candidates (seven) had been stay-at-home parents for several years and were just now reentering the workforce. Because they could provide no salary or employment data they were not included in the analysis. This will, however, be examined in greater depth later in the chapter.

there is very close correspondence between the cluster assignments and my earlier portrait placements.

CTP is noteworthy for its higher representation of candidates from Clusters 1 and 2 and the corresponding socially mobile and career seeker portraits, and lower representation of candidates from Clusters 3 and 4 and, in particular, classic career changer portrait. Again, there is relatively good correspondence between the cluster and portrait assignments. The one notable exception seems to be the discrepancy between candidates assigned to Cluster 1 and the number I placed in the socially mobile portrait, with nine more candidates placed in my initial assignment. A closer look at my data helps to explain a large part of this apparent inconsistency. There are seven more candidates assigned to portraits than to clusters from CTP. Due to instances of missing data, they were not included in the less forgiving cluster analysis, while I chose to approximate their portrait based on the available data. Of this difference, six of the seven candidates were ones that I had placed in the social mobile portrait. Again, despite the preponderance of candidates from Clusters 1 and 2, there are still several candidates who share characteristics that are more consistent with the classic career changers and capstoners.

NPTT is less relevant to this discussion. Although there is a distribution of candidates across the portraits and clusters with the one exception noted above, the sample of assigned candidates is too small to be very suggestive. Still, the comparatively large number of career seekers and Cluster 2 candidates were consistent with two NPTT candidates I interviewed who mentioned their attraction to the Mountain West after finishing their undergraduate education and their oscillation between jobs according to the seasons.

Table 4.3

Four-group cluster analysis and portrait assignment by program

Cluster	ARC	CTP	NPTT	Total
Cluster 1	9	10	0	19
%	21	29	0	23
Socially Mobile	7	19	0	26
%	15	43	0	26
Cluster 2	7	13	4	24
%	17	37	57	29
Career Seeker	8	12	4	24
%	17	27	50	24
Cluster 3	17	8	2	27
%	40	23	29	32
Capstoner	4	3	1	8
%	9	7	13	8
Cluster 4	9	4	1	14
%	21	11	14	17
Classic Career Changer	27	10	3	40
%	57	23	38	40

The cluster analysis placed most of the candidates into groups, but left many

unconsidered. As I mentioned above there are many reasons for their omission, ranging

from missing data to candidates I withheld from consideration who were too young to

have had a previous career to candidates already working in classrooms as the teacher of

record. After analyzing the clusters, I looked more closely at the outliers, examining both

interview transcripts and survey responses. There was one substantial pattern that

emerged and a second that the data suggested.

First, many of the outliers had interrupted their careers to be primary caregivers

to their children—stay-at home parents—maybe working occasional part-time jobs. In

interviews, candidates at all sites fit this profile. Although there was no single question on

the survey asking if a candidate had been a stay-at-home parent, combining items

inquiring about employment history, parenting, and the occasional additional comments

affixed to the survey hinted that many candidates reflected this portrait. A second set of the outliers gathered around candidates who for family or personal reasons needed a job immediately and chose teaching out of sincere interest in the profession, yes, but also due to a belief that teaching provided quick entry to good work in a generally attractively setting. Although these sentiments were raised with regularity in interviews, they were difficult to determine with certainty by sieving the survey data alone. Therefore, this profile appears likely to be underrepresented in my analysis.

Table 4.4

Primary caregiver and job seeker assignment by program

Program	Total Unplaced Candidates	Unplaced Candidates as % of total candidates	Primary Caregiver	%	Job Seeker	%	Other	%
ARC	27	36	11	41	4	15	12	44
CTP	13	22	3	23	3	23	8	62
NPTT	9	53	7	78	0	0	2	22
Total	49	33	21	43	7	14	22	45

Note. % represents the percent of candidates not placed in the initial portrait assignment.

Table 4.4 shows the distribution of primary caregivers and job seekers by site. For a small number of the candidates, I assigned them to a portrait based on their interviews, but most were based on my reading of their survey responses. Therefore, these are suggestive numbers lacking precision. Even making allowances for the fuzzy results, there seems to be a substantial number of primary caregivers at each site. However, this is most obvious in the NPTT program. At that site, primary caregivers comprise the single largest portrait. Primary caregivers are the second largest portrait at the ARC program and are comparatively smaller at CTP. The job seeker portrait is small at the ARC and CTP sites and apparently nonexistent among candidates at the NPTT program.

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However, let me caution again that this portrait is particularly challenging to ascertain from survey data alone. Unless candidates explicitly stated their immediate need of a job in an interview or as an additional comment on the survey, I was unable to place them in this portrait.

What is particularly notable about these two portraits is that outside of the common experience of raising children among primary caregivers and being motivated by a pressing need for employment among the job seekers, the candidates within each group have diverse characteristics. This diversity will be explored in detail later in the chapter.

Portraits

I now will expand upon each portrait providing a richer description of their characteristics. Each of the six sections will begin with a presentation of demographic attributes of the portrait and continue with and exploration of their knowledge, skills, experience, and motivation. I will conclude each portrait with an illuminating mini-case. I have included additional tables presenting portraits collectively in Appendix D to facilitate cross-portrait comparisons. Due to the diversity and the nature of the development of the primary caregiver and job seeker portraits, I have structured these sections slightly differently. For clarification, in this section I am presenting portrait, rather than cluster, data. The cluster analysis served to corroborate my observation that there are distinctions within the groups. For the first four portraits, there is close correlation between cluster and portrait data. There is no cluster data for the final two portraits as they were developed through cases not considered by the analysis. Additional mini-cases for each portrait are included in Appendix E.

Portrait A—Socially Mobile

Teaching as path to move from the working class to lower middle class is hardly a new phenomenon. The young women in New England's early teacher training schools were from a decidedly different class than the "masters" populating the academies (Herbst, 1989). For these women, teaching served as an alternative to life in the mills and a respectability associated with responsibility. And so, too, through many generations. As East Coast schools filled up with the children of recent immigrants, soon the classes were increasingly led by the children of immigrants (Rury, 1989), moving, literally and figuratively, from the slums Hell's Kitchen to a toehold in mainstream middle class America. Historically, this is a path to the middle class that is particularly common among women and underrepresented minorities. When professional options were limited, teaching provided one of the few conduits out of working class. Lortie explores teaching as a path to achieve upward mobility in greater depth than is demanded here (1975). That many career changers fit this pattern finds many historical antecedents.

Demographics

Although the roughly even split between this portrait does not reflect the historic feminization of upward mobility, the racial diversity of the portrait does. Socially mobile candidates are the most diverse of all portraits and the only portrait for which white candidates do not comprise the majority. This is to be expected for several reasons. First, simple earnings and employment patterns would predict a higher percentage of African-Americans in the working class (Bureau of Labor Statistics, 2008a, 2008b). This is also consistent with general trends in the African-American community, where "traditional" four-year college attendance is less common than in the broader community and graduation rates are lower (Carey, 2008). This also reflects historic trends where teaching was one of the very few paths of entry to higher status employment in many minority

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communities (Rury, 2002). Although many more opportunities for upward mobility have emerged for all marginalized populations in the past decades, that teaching continues to be a salient route to the middle class for candidates who have been unable to benefit from these expanded opportunities is revealing. For those who were not fortunate enough to embark on a career track upon graduation from high school (or, arguably, earlier), these programs appear to offer a delayed opportunity to earn professional status.

Table 4.5

Age, race, and gender of Socially Mobile candidates

Date of Birth (Year)	Native American (%)	African-American (%)	Asian/Pacific Islander (%)	Hispanic (%)	White— Non Hispanic (%)	Female (%)	Male (%)
1969	0	50	0	11	39	54	46

Table 4.6

Means of core variables for Socially Mobile candidates

Academic Major	College Ranking	Job Relevance	Previous Salary (Mean/ Median)	Highest Degree Attained	Age at Bachelor's Degree (Mean/ Median)	High Needs Placement
1.14	4.00	0.63	30,000/ 30,525	2.07	28.86/ 27.00	1.93

Socially mobile candidates are particularly strongly represented in CTP, the only program with a specific dedication to urban education. It is not surprising, then, that socially mobiles also have the greatest intention of teaching in high needs settings. Here the design and location of the program provides a powerful potential explanation. First, CTP candidates are prepared exclusively to teach in the Saint Louis Public Schools (SLPS). SLPS has both high percentages of African-American students and students

receiving Free or Reduced Lunch. Mirroring research on initial teacher placement, teachers, regardless of race, tend to teach in schools that have populations that reflect their ethnicity and experience (Cannata, 2007). Therefore it may not be any more surprising that minority teachers from working class backgrounds populate a program where the students are predominately African-American and poor than if upper-middle class white candidates populated a program designed at preparing teachers for higher rent suburbs. ARC and NPTT are not designed to prepare teachers for specific districts. At both sites teachers are responsible for finding jobs and can choose to apply in any district in the state (or in a three state region for NPTT), therefore permitting greater chances for selecting placements that reflect their cultural experience. Socially mobiles are also the only portrait not represented in all programs, with no candidates in NPTT.

Knowledge

Socially mobile—or, alternatively, Cluster 1—candidates' varied educational and employment experiences impact the knowledge they bring to the classroom. As I discuss in more detail below, candidates fitting this profile tend to have been non-traditional students as undergraduates, often earning a bachelor's degree in their thirties or later. As such, much of their previous work experience has not been focused on a discrete area of knowledge. This is particularly true of work relating directly to traditional school subjects. Work history tends to be most prevalent in service fields, and childcare in particular. Let me be clear. I am not insinuating that candidates in this profile lack knowledge broadly writ. Rather their work more typically demands a different type of knowledge than that demanded by school subjects. Employing the disciplinary knowledge developed in their undergraduate studies has seldom been demanded in their previous work. In terms of subject area knowledge, this could be considered analogous to

a traditionally prepared teacher entering the classroom straight out of an undergraduate preparation program. The one exception to this is a small, yet robust, number of candidates with backgrounds in music performance and visual art prepared through CTP. Many of these candidates had educational and employment backgrounds consistent with Portrait A, but also had a rich history of producing or performing their craft.

Moreover, only career seekers' undergraduate majors have a lower correspond to school subjects than social mobiles. Of the twenty-eight candidates, ten had non-academic majors (a 0 on my scale). These majors included social work, human services, and child and family development. There was also broad representation from academic majors including biology, Spanish, psychology, and political science. Of all portraits, socially mobiles has the lowest levels of educational attainment.

When socially mobile candidates enter the classroom, their subject area preparation spanned a wide breadth of subjects and age levels. However, the strong ·tendency to choose special education is notable. Candidates mentioned three motivations for special education certification. First, previous work influenced candidates' choices to enter special education. Through working with child care, as paraprofessionals, and, in one case, as a court liaison, several candidates had previously encountered students with special needs. Second, Portrait A candidates mentioned the one-on-one or small group settings common to special education as both attractive instructionally and less intimidating as a first year teacher. Finally, although candidates' did not expressly name job security as a motivation to teach special education, several candidates did mention that the demand for special education teachers would translate into easier placements.

This last motivation seems particularly salient for a population who has had a history of inconsistent employment and is now seeking more stable work.

Skills

In general the socially mobile portrait would be a candidate who comes from a working class background. Typically this candidate was a non-traditional student as an undergraduate as well. Most Portrait A candidates did not go directly to college upon high school graduation. The exceptions who did proceed straight to college typically did not graduate in five years. Additionally, these candidates received their bachelor's degrees from the least selective colleges of any portrait, often graduating from a commuter campus, a satellite campus of the public university system, or a local, small religious college. This is as should be expected, as most candidates in this category have not enjoyed the luxury of enrolling as full-time students, instead attending less expensive schools that cater to non-traditional students. It is common for socially mobile candidates to take a class or two each semester—often in the evenings—as finances and work and family schedules permit.

Experience

As a group, only twenty-nine percent of socially mobile candidates have children, the second lowest of all portraits. However, they have the second highest rate of direct previous work with children, in part reflecting the large proportion who have worked in child and foster care settings and as paraprofessionals in the schools. Overall, candidates' job relevance mean is the lowest of any portrait, with only one Portrait A candidate leaving a previous job that demanded direct use of a disciplinary knowledge. This may be slightly misleading, however, as many socially mobiles are entering the special

education classrooms where their previous work experience may be more directly applicable than a job demanding deep subject-area knowledge.

The employment history of the typical upwardly mobile candidate does not point in a consistent direction. Employment is often part-time—again to accommodate family responsibilities—and short-term. Changing jobs is common, both within an employment sector (e.g., from one retail job to another) and across sectors (e.g., from retail to child-care). Job experience is limited almost exclusively to the service sector, with rare manufacturing exceptions. Only career seekers—who on average are nine years their junior—have lower previous salaries than socially mobiles, with a median income less than $5,000 lower.

Motivations

Candidates from Portrait A share a longing for upward mobility and the status and security accompanies it. This is undeniably a significant motivation, as one candidate shared,

> It just made practical sense for me to move (into the classroom), in terms of my own professional growth, to become a faculty member, which leads to the second reason is that, in education, in my own personal experience, paraprofessionals do not receive the same recognition and support that a faculty member receives. I think that's internally and externally. Internally among certified teachers and externally in terms of job security, in terms of retirement and things of that nature. (Interview, Devin Stuart, 7 June 2007)

For many socially mobile candidates teaching would become the first salaried job and highest salary they have ever held. The relative economic security that accompanies teaching was a very real attraction. However, Portrait A candidates were not solely

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motivated by bottom-line considerations. Teaching was attractive in that it represented a natural evolution of their previous work. Many felt that their previous work and life experiences pointed directly at teaching. Candidates felt their familiarity with children provided the baseline knowledge required of the classroom. Unlike candidates from some other portraits, there was no fear associated with working with kids.

Amana Collins

"I'm doing great. I'm doing wonderful. I love my principal. I love my school. I love my students. And I am eager and I am so anxious every day to get there and work with the students." (Personal Interview, 17 September 2007)

Amana Collins is a 43-year old African-American mother of two living in an inner-ring suburb of Saint Louis. Via provisional certification through CTP, she is in her first year as a special education resource teacher in a Saint Louis elementary school. Although now just starting her classroom career, she has harbored a desire to teacher for many years. She describes an epiphanal moment back in 1992 when she accompanied a friend picking up her daughter from daycare.

> [T]he director of the daycare needed to talk with her [friend]. It was almost at the end of the day and she didn't have a replacement for this one class that her daughter was in. So the director asked me if I would sit in while she talked with my friend about whatever they wanted to talk about. And I went to this class I didn't know what to do. I just grabbed a book. I gathered all the students around on the carpet. As I read the book to them they began to get engaged and they were answering questions about the story, predicting what was going to happen next. And I fell in love right there. I was like, "This is where I wanted to be."

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And from that point on I have been trying to get into the classroom. (Amana Collins, Personal Interview, 17 September 2007)

As with many socially mobile candidates, Amana did not have a straight path to teaching. For several years, Amana worked as a recorder and clerk of the Saint Louis County Probate Court. Although her lack of influence on the proceedings in court led largely to disinterested service, at some level the she was affected by the ethos of families forced into anguished choices for their loved ones.

As she slowly progressed through her undergraduate coursework, she left her job in the courts and began substitute teaching in a Saint Louis area school district. She eventually secured a number of long-term substitute positions and was encouraged by several principals to seek certification allowing them to hire her full-time. She eventually did earn an undergraduate degree in 2004, majoring in psychology, but with some education courses, although short of the requirements for certification.

Instead of seeking teaching positions, Amana was hired by the Children's Division of city of Saint Louis as a case manager in the foster care unit. She worked with children who had been removed from their homes either helping to reunify families or to recommend placement in residential facilities or adoption. Her job placed her in the middle of working to reunify families where children had been removed or recommend children be placed in residential facilities or be put up for adoption. After working with the Children's Division for several years, Amana decided to apply for CTP to realize the goal she had set for herself more than a decade before.

Amana's knowledge, skills, and experience closely mirrors that of Portrait A candidates. She has long been dedicated to working with children and families, taking employment that put her in the middle of painful decisions about the future structure of

families. Although potentially invaluable experience to bring in tow to a special

education position punctuated by students from fractured families, Amana did not have

the knowledge generally assumed of career changers. Her work experience did not

provide applicable real-world insights into math or history. Her undergraduate major did

impart subject area knowledge likely applicable to special education instruction, but not

replicating a school subject taught in an elementary school. Additionally, her position as

a special education teacher demanded the skills of a generalist, not the assumed

disciplinary knowledge earned through academic and employment experience. Finally,

she earned her degree at a moderately selective university as a non-traditional student,

working toward her degree over several years as time, family, and finances permitted.

Amana enjoyed her work with families in the Children's Department, but was

motivated to work more closely with students in the school setting. "It all went back to me

wanting to actually be in the classroom" (Personal Interview, 17 September 2007). CTP

provided an opportunity to get into the classroom quickly, before earning full

certification. Additionally, her three outstanding student loans from her undergraduate

degree did not allow the financial luxury to enroll in a more traditional program.

Receiving a full paycheck on day one was the only way Amana could financially afford

the move to the classroom. And the first paycheck she received as a teacher in SLPS was

the largest of her life.

Proponents of career changers often forward meeting teacher demand in hard to

staff schools as a justification for drawing career changers in the schools. Although she

never overtly articulated a desire to teach in a high needs schools, the design of CTP

necessarily brings candidates only into SLPS, an urban district with systemic teacher

shortages, that traditionally struggles to fill all vacancies, often relying on permanent

substitutes. Nonetheless, Amana was largely unfazed by the demands of students in her building. When I last spoke with Amana she had only been teaching for a handful of weeks, and was striving to learn "how to teach a student with bipolar or a student that has ADHD or a student that is a slow learner" (Personal Interview, 17 September 2007), as would be expected of any first year teacher. However, Amana expressed comfort working with her colleagues, confidence in meeting the needs of the students, and general calm in mastering the curricular demands of special education.

Amana did not deny the challenges of teaching in a high needs urban school. The context of the school, though undeniably difficult, to Amana was neither unfamiliar nor particularly an act of social justice. However, she did not choose either her profession or her location strictly to "give back." Rather, teaching was providing as generous a gift to her—the fulfillment of a decade long dream coupled with the relative comforts of middle class status—as she was by teaching a high needs subject in a hard to staff school.

Portrait B—Career Seekers

The candidates in this second portrait differentiate themselves from other career changers by their age and limited career experience. They are all young—mostly under thirty—and few have had a real career track; instead they have mostly bounced from one mostly unsatisfying job to another, typically staying for a relatively short period of time. Many have postponed career ambition, moving across a state or across county to follow a significant other or experience life in a new environment upon earning their bachelor's degree. They differ, however, from the candidates in these programs whom I did not consider who entered immediately, or nearly so, after finishing their undergraduate studies and without any substantial work experience. All career seekers have had several

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years of work or travel lending them some critical distance from a candidate entering the classroom straight from college.

Just as they have been investigating, but not committing to, different communities, career seekers often have yet to decide upon teaching as a long-term career. Peske, et al, (2001) describe this as an exploring orientation to teaching, with candidates viewing teaching "as a short-term exploration, which might lead them to a longer commitment or, if they found teaching unsatisfactory, to a quick exit and shift to another line of work" (p. 306). To most of these candidates teaching is their first salaried job and a represents a personal partition between more indulgent youth and a greater responsibility associated with maturity. This portrait, along with the capstoners, represented the shortest expected career in teaching and had been considering teaching for the briefest amount of time of any group. Even those expecting lengthy careers in teaching, reserved the right to temper their forecast based on their eventual classroom experience, much as Peske predicts.

Demographics

Table 4.7

Age, race, and gender of Career Seeker candidates

Date of Birth (Year)	Native American (%)	African-American (%)	Asian/Pacific Islander (%)	Hispanic (%)	White— Non Hispanic (%)	Female (%)	Male (%)
1978	0	4	4	0	92	75	25

As a group, career seekers have the largest proportion of white candidates and the second highest of women. The racial construction is partially explained by the prevalence of career seekers from NPTT, a program with all white candidates. However, this explanation provides only limited satisfaction. In its in terms of total number, there

are more career seekers in CTP— the only program without a majority of white candidates—than any of the programs. Career seekers also account for about ten percent of ARC candidates. They are the youngest portrait by nearly a decade, in keeping with their portrayal as candidates who after completing their undergraduate education in the past five to ten years, are now exploring career options.

Table 4.8

Means of core variables for Career Seeker candidates

Academic Major	College Ranking	Job Relevance	Previous Salary (Mean/ Median)	Highest Degree Attained	Age at Bachelor's Degree (Mean/ Median)	High Needs Placement
1.00	3.08	0.74	26,340/ 25,500	2.38	23.21/22.5	2.25

Knowledge

Nearly all career seekers attended college straight out of high school, graduating in four or five years with a bachelor's degree although they had the least academic majors of any portrait. Among this group, there was a noticeable prevalence of art and music majors, in part explaining their prevalence in CTP. There was also strong representation of journalism and communications degrees. Among academic majors humanities are most common—especially English language or literature—with a scattering of science degrees. Their majors, possibly, did not prepare them for a specific career track, leading, in part, to their itinerant employment. As such there were a number of candidates from this portrait who had at least begun a master's program and a couple who had completed doctorates. In these cases, a lack of career clarity motivated graduate school. Previous success and enjoyment in their discipline led these candidates to continue their studies

irrespective of their career goals. Overall, however, their educational attainment was the second lowest of any portrait. This might be expected in part as a function of their age.

Skills

Career seekers graduated largely from selective, but not the most selective, institutions. Most candidates attended large public universities or regional campuses. A few attended smaller private schools, often with a religious identity. Compared to other portraits, their undergraduate selectivity fell in the middle and close to the average for my full sample. Only candidates from Cluster 4—the most academically successful classic career changers—attended substantially more selective colleges than career seekers.

Experience

As I indicated above, the Portrait B candidates entered their preparation program with little formal experience in their disciplinary subject and the lowest ranking of any portrait. It is the rare candidate who has found employment in a field that drew directly on academic experience. A candidate with an engineering degree and another with a chemistry degree turned to teaching after struggling to find work in their chosen field. More commonly, candidates from this group have worked a series of unrelated jobs ranging from construction to childcare to waiting tables to sales. A few have experience in classrooms as a paraprofessional or long-term substitute teacher.

Additionally, only twenty-one percent of candidates in this group have children of their own, the lowest rate of any portrait. Not surprising based on their age, but by itself not fully revealing their experience with children. In what might appear counterintuitive, career seekers had the highest percent of previous work experience directly with children, both in childcare and school settings, but also from babysitting, serving as a camp counselor, or other similar work when younger.

The highest proportion of career seekers comes from NPTT, although the portrait is represented in large numbers at each program. As with the socially mobile portrait, for Portrait B candidates teaching typically represents the highest annual salary candidates have earned and represents a graduation to higher status work. Unlike Portrait A, career seekers are younger, less likely to have kids, and took more traditional paths through college. While for socially mobile candidates teaching signifies entry into the middle class, career seekers were largely raised in middle class households.

Motivations

Despite an exploratory orientation, these candidates rarely view teaching a simply a good paying job. The candidates are excited by both the prospect of engaging in work that has a social impact and draws on their subject area knowledge. Among all portraits, only socially mobiles were more likely to seek placements in high needs schools. Many candidates expressed frustration with their previous work, deeming it unrewarding or unchallenging. In contrast, teaching's relative autonomy enticed career seekers eager to assume more responsible positions. This stands in stark contrast to candidates form classic career changers who chose teaching, in part, to simplify their lifestyle, allowing more time for family and community commitments. Again, for most Portrait B candidates, teaching is the first salaried and the most lucrative job they have ever held.

There were a small number of candidates who were not particularly attracted to teaching as a profession; instead akin to the job seeker portrait I will expand upon later, candidates, they were simply looking for a job. The quick nature of certification promised quick employment in a weak economy. As one candidate wrote in his survey, "I tried to get a job in mechanical engineering, but couldn't find one, especially in a rural area. A teaching job opened in my hometown, so I applied and got the job" (Isaiah

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Young, Survey Response, 14 January 2008). They differed from job seekers, however, in a couple of important ways. First, unlike many job seekers, the career seekers did not have previous professional work experience. Portrait B candidates are younger and did not typically have dependents.

Finally, the relatively low level of commitment demanded by their programs was an attractor. For a group of candidates identified in part by capriciousness, the target programs in this study promised quick certification and entry into the classroom. This made these programs particularly attractive to career seekers. Unsure of their long-term allegiance to teaching, these programs facilitated their exploration.

Nick Evans

"Here I am it's 7:00 on the West Coast. I'm still at school…. It's not like my friends who do real estate or banking, you know. They punch out a 5:00 and go home and do whatever they want. I take my work home with me every night." (Personal Interview, 11 February 2008)

Nick is a twenty-eight year old white male living in Portland, Oregon is in his first year teaching. As is common within this portrait, after receiving his bachelor's degree Nick spent several years working short-term jobs, exploring new careers and trying to turn avocations into room and board across the West. After earning his bachelor's degree in English from a small liberal arts college in Colorado, he worked at various times as a chef, a river guide, a travel agent, a substitute teacher, a waiter, a carpenter, and an experiential educator. He never stayed long at any one job. He endured some more tedious, if lucrative jobs in order to permit occasional lower paying, but more engaging work. Although the swath of work was broad, Nick claimed that the most rewarding jobs

were those that let him teach someone else a new skill, whether how to paddle through white water or help a group learn to work better as a team.

Although an English major, Nick spoke little of his subject area background. In contrast to capstoners for whom teaching presented a chance to return to their disciplinary roots, the actual subject area seemed secondary to Nick. Whether this reflects a difference in commitment to disciplinary knowledge or simply the relative proximities of their respective undergraduate studies or various other explanations is uncertain. What is clear is that Nick's passion centered more on serving his students than revealing the power of literature. Despite the diversity of his resume, Nick was dedicated to a career centered on teaching and learning as his eventual destiny. "[M]y main focus has always been working in education in some respect, but wasn't really my main job after I graduated from college" (Personal Interview, 11 February 2008). Still, he managed to find several jobs with educational components.

Nick's diverse experiences served him in two distinct ways. First, the assortment of jobs helped him develop a wide range of skills. His work led him to interact with people of vastly different backgrounds and in vastly different contexts. As often as he was serving a customer's whims, as, say, a waiter, he was also an expert whose ability to convey his knowledge was essential for the safety of people with whom he was working, such as leading kayaking trips into Yellowstone National Park's backcountry. Nick, therefore, began to learn to understand both how to meet a client's needs and how to present information in a way that was easy for a client to understand, one of the challenges he most enjoyed.

Secondly, Nick had explored a wide range of careers, witnessing many of the advantages and constraints in several fields. This exposure helped him determine his

priorities in an eventual career. He worked in jobs for which he had a passion only to earn a paycheck and saw the ultimate dissatisfaction such work bred. Alternately, he worked in jobs for which he only had passion discovering the limitations and unpredictability of seasonal work. His experiences helped him understand that he sought work that felt rewarding while still providing steady employment and pay. Additionally, the scope of his previous work allowed him to consider which aspects of work he found motivating and which he were intolerable, ultimately determining that service to the broader community must be at the core of his ultimate career.

Nick describes many of these jobs as leading to an evolution of his thinking about the purpose of education. Initially he wanted to teach in order

> to try and help people out, for lack of a better phrase, to try to improve their lives. To give them skills that they might enjoy. Skills and knowledge that they may might be able to use to make their life more enjoyable or more successful or just to have a good experience. (Personal Interview, 11 February 2008)

Nick's initial understanding of education as transaction found its way into much of his work and life experiences. As a Boy Scout leader and swimming teacher as teenager he felt there was particular knowledge to be imparted and it was his job to share his knowledge. In his more recent work in outdoor education, he viewed himself as being able to deliver particular experiences to his clients.

> These people are going to come with me and I'm going to show them one of the most beautiful places on Earth and I'm going to give them all this instruction and information and just give them this overall experience that they wouldn't necessarily do for themselves. (Personal Interview, 11 February 2008)

In time, this market transaction approach began to evolve into a service ethic.

Today, Nick's dedication to education centers on "making a difference" (Personal Interview, 11 February 2008). And this takes many forms. He wants to serve as a role model for his students; he wants his students to want to become informed citizens; and he wants his students themselves to become activists.

> [M]aybe it's not hard skills. Maybe it's just being really enthusiastic about the subject matter or just being a positive role model for them and that's going to help affect positive change in their life and hopefully enable them to go out and do the same no matter what they choose to do. But to sort of bring about positive experience and sort of, positive people into the world who are going to have the skills and tools and experiences to really make a difference themselves in the world. (Personal Interview, 11 February 2008)

Therefore, he is engaged in designing lessons that go "beyond the concrete skills of language arts" (Personal Interview, 11 February 2008) to help his students become critical evaluators of texts and independent thinkers.

Nick's service ethic appears to be reflected across the portrait. This is not surprising when considered in the context of the candidates. Most have spent several years in continual transition focused on—and I do not intend this as a pejorative—self interests. Jobs, housing, friends, and cities change quickly. For Nick, who has lived throughout the West over the past five years often following seasonal work, teaching signals an end to a nomadic life concentrated on individual wellbeing in favor of a serious and sustained commitment to the broader community.

As with candidates from many other portraits, NPTT provided Nick with a relatively quick and inexpensive path to the classroom. However, unlike candidates from others, for Nick and many other career seekers were as attracted by the relatively small

expense of the program as the short duration. And while Nick is adamant about the importance of getting into the classroom quickly—"that was *the* motivating factor (subject's emphasis)" (Personal Interview, 11 February 2008)—his logic is twofold. First, Nick associated a quick preparation with financial savings. Still emerging from student loans taken on as an undergraduate student and debt incurred in the years after, Nick was reluctant to enter a more standard preparation program due to the cost demanded by three or four semesters of full-time coursework. That Nick could continue to work full-time and take classes was essential. The relatively compact time commitment was an attraction to NPTT, but the reduced cost that accompanied the limited commitment was the ultimate trigger for Nick.

Second, Nick did feel like his life was becoming a bit aimless and was tiring of his nomadism.

> At the point when I was really serious about the program I didn't want to wait tables anymore. I didn't want to bartend anymore. I didn't want to work construction. I wanted to be teacher and I wanted to do that now. (Personal Interview, 11 February 2008)

NPTT, then, allowed him to quickly move into a more deliberate existence, doing work whose importance served as substantial reward.

Portrait C—Capstoners

The capstoner, a candidate entering teaching for a handful years after retiring from a successful career outside of education, is one of the most enduring images of the career changer in the popular press (For example, DANTES-TTT, 2005; Finn & Madigan, 2001; Goodnough, 2000c; Shea, 2007). In these representations, candidates have typically taken an early retirement from their career; retiring from the military after

twenty years or accepting a "golden parachute" from a Fortune 500 company are two common plot lines. After taking a year or two to adjust to retired life, these candidates quickly grow anxious believing that they can apply their skills to meet community needs, and eventually decide to seek certification. These stories also typically voice candidates surprise at the difficulty of earning certification, somewhat incredulous that their life's work did not count more toward their credential. What is surprising, then, was how close this portrait matches the retired candidates I encountered. Where the portrayal departs from the reality I witnessed is in the frequency in which I encountered capstoners. However, demographic trends suggest that these numbers could potentially jump precipitously in the next few years as the Baby Boomer generation begins to retire in large numbers. In the earlier cluster analysis, Cluster three was the closest approximation to capstoners, although that cluster also included many candidates from the classic career changer portrait.

Demographics

Almost exclusively white and male, capstoners are also the smallest of my four initial portraits, with only eight candidates across the three programs neatly fitting the descriptions. As would be expected, capstoners are also, on average, the oldest portrait by a full decade. The Baby Boomers now eligible for retirement represent the first generation where women and minorities worked consistently outside of the home. Despite the changes in the workplace, women were still much less likely to follow a linear career track, typically sacrificing professional aspirations to assume primary care-giving responsibilities for children earlier in their careers and care-giving for parents when nearing retirement. Finally, those women who remained in career-track jobs for the full working lives were most commonly employed in the "semi-professions" of social work,

nursing, and education (Etzoini, 1969), and thus, less likely to enter the classroom upon

retirement.

Table 4.9

Age, race, and gender of Capstoner candidates

Date of Birth (Year)	Native American (%)	African-American (%)	Asian/Pacific Islander (%)	Hispanic (%)	White—Non Hispanic (%)	Female (%)	Male (%)
1955	0	13	0	0	88	13	88

Table 4.10

Means of core variables for Capstoner candidates

Academic Major	College Ranking	Job Relevance	Previous Salary (Mean/ Median)	Highest Degree Attained	Age at Bachelor's Degree (Mean/ Median)	High Needs Placement
1.50	2.75	1.38	83,312/ 46,250	3.38	22.88/22.00	2.63

Additionally, the capstoners in my study came largely from business and military

backgrounds, careers that would have been much more rare for women to enter thirty

years ago then today. Likewise, despite recent narrowing in the gender gap, men made

up the vast majority of math and science majors—the norm among capstoners—coming

out of universities forty years ago. Capstoners also have the second highest median and

highest average income of any portrait. This is, again, partially explained by their age.

Their longevity has allowed them to rise to positions of prominence in their fields and

they have been remunerated commensurate with their experience. These candidates

also represent an era when employees remained in a single career for the preponderance

of their working lives. Although skewed by a couple of very large incomes, the high

mean salaries also offer a glimpse into the financial success some candidates enjoyed in their previous careers.

Knowledge

Unlike some other portraits, capstoners almost without exception followed a traditional route to their undergraduate studies. All candidates but one candidate in this group earned their bachelor's degrees by the age of twenty-three. Portrait B candidates brought solid subject area background with them to the classroom, registering, as assumed by their champions, the highest rates of academic majors. Most all majored in the discipline they were going to teach in the classroom or in a related applied field. Additionally, it was very common for capstoners to have a masters degree or higher. Their educational attainment rates were the highest of any portrait, slightly greater classic career changers. In short, their knowledge set, at least on paper, is an attractive match to school subjects. This is augmented by the strong tendency of capstoners from my sample to teach high school math and science—the subject areas that suffer the greatest shortage nationally.

Their experience and knowledge seem to translate into great confidence for the success they will enjoy in the classroom. Capstoners consistently stressed their desire to reveal the elegance of their chosen subject. Academic study combined with decades of application has translated into deep knowledge of and intimacy with the candidates' chosen subject. As such, these candidates regularly demonstrate a palpable excitement to pass their knowledge on to students. Richard Cushman was attracted by the chance to help students share his intrinsic appreciation of math. "I love math. It was my career, but I'm realizing how difficult it is to package it up in a way that makes kids interested in it....There's a lot of foundational stuff that you have to learn to get to the good stuff....It's

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a language but they're still learning the vocabulary—see spot run sort of stuff—and they haven't gotten to the Shakespeare part of mathematics" (Personal Interview, 28 January 2008).

Additionally, these candidates are regularly excited to return to a pure—as opposed to an applied—form of their subject. Although their career has been dedicated to using their knowledge to complete practical tasks, I found many of these candidates fondly recalled their academic study of their subject, often now more than twenty-fives ago. Teaching at the high school level provided the candidates, themselves, to reengage in the theoretical aspects of their subject. Finally, more frequently than their career changing peers, capstoners have begun to sketch out a preliminary pedagogical and curricular plan to try to engage their students in the subject.

Skills

The capstoners in my study attended selective colleges, ranking second among the portraits, just behind classic career changers. And there was very little variation within the group. Although all portraits had some representation from more selective institutions, all but Portrait C demonstrated a wide range of college rankings. Among capstoners elite private universities, service academies, and flagship public institutions were the norm for undergraduate study. Academic success was not new to these candidates, which may account for the subject area confidence they expressed. Assuming an approximate link between the selectivity of undergraduate institution and the rigor of education, it would seem that capstoners had gained a deep understanding of their subjects.

Experience

Capstoners had the highest job relevance rankings of any portrait other than job seekers. Their work had demanded mastery and application of disciplinary skills. Attendant with their rise to management positions over the course of their careers, they also tended to come from positions of high responsibility that were accompanied by high salaries. These candidates are used to giving orders and having supervisory responsibilities that accompany corporate or military environments. Many candidates were accustomed to focus on bottom-line considerations, whether they take the form of quarterly profit sheets or safely landing a full airplane. Likewise, they were familiar with high stress environments where success was defined largely by short-term performance with quantifiable measures.

Commonly, capstoners mentioned that their previous careers presented them with limited teaching or training experience, and that these experiences rated as among the most enjoyable and rewarding aspects of their work, helping to guide them to the classroom upon retirement. Although capstoners' teaching settings differed from standard classrooms, consistently they increased the pleasure they derived from developing mentoring relationships with those they were training, as well as feeling that they were imparting important information that had practical application to the work of those being trained.

It is important to notice the difference in cultures between the capstoners previous work and the what they are likely to encounter in the classroom. Over the course of their careers, capstoners have risen to management level positions that project authority over their subordinates. A student will not necessarily respond as readily to the authority of position as a worker would to a boss. Likewise, in capstoners' previous teaching experiences, at the least, trainees' job status was dependent upon mastering and

implementing the lessons imparted or, in the extreme, life and death was on the line in learning to pilot a fighter jet. These are different stakes than faced by a typical tenth grader in geometry class. While these candidates may have previously enjoyed the rapt attention of their trainees, the stakes were high for them as teachers, as well. A poorly taught lesson that did not engage their charges or impart the requisite knowledge were not acceptable options. Capstoners voiced an additional cultural consideration in moving to the schools. Accustomed to leadership in their previous work, some Portrait C candidates openly questioned how they might react to their new status as one of many teachers of largely equal status. While some wondered aloud how much they should share their knowledge of organizations among the faculty, others welcomed the change to what they perceived as leadership largely bounded by the classroom walls. And their experience with children was limited. Only three of the eight capstoners had children of their own, and few worked directly with children in their previous jobs.

Capstoners routinely gave their preparation programs decidedly mixed reviews. All felt they were gaining valuable and applicable knowledge. They generally rated the foundations classes as much more valuable than their peers in other portraits and found the more pragmatic sessions of less value, believing the knowledge either self-evident or easily learned on the job. Many felt that the preparation was too long and their class time was not used as efficiently as it could have been. Even in the ARC and CTP programs where the initial preparation was a matter of weeks, capstoners felt that much of the information presented was largely common sense and they did not look forward to the additional course work required during their first year teaching, fearing that it would be more of a hindrance than help to their practice. Additionally, the time and convenience

were the greatest attraction to the preparation programs, with cost or quality of preparation scoring very low as a motivating factor in choosing a program.

As I mentioned above, along with the great confidence they demonstrated in their academic discipline, these candidates had distinguished themselves from their peers in beginning to design their pedagogical and curricular approaches before starting their preparation program. They likewise expressed confidence that their combination of age, knowledge, and practical experience would combine to form a more commanding presence that translates into greater patience in the classroom and more attentive students. Their experience as authorities both in their subject area and in organizational hierarchies suggests they are not accustomed to recalcitrance. As such, it might be expected that they considered courses focusing on the daily tasks of teaching less useful.

Motivations

Capstoners are unique among the candidates I studied in that they enjoy the luxury of working by choice. Their retirement benefits and other investments are largely sufficient to sustain a comfortable living into the foreseeable future; instead they are motivated to teach for three main reasons. First, they have a deep love of their subject and feel that they can help others come to love what the subject. Although many candidates in Portrait C have long enjoyed teaching opportunities when they presented themselves, few mentioned a life-long desire to become teachers. Rather, it was more the passion for their subject that drew them into the classroom. Second, they are trying to avoid torpor in their retirement. In the crassest terms, teaching provides a way for them to get out of the house and do something that is stimulating. Finally, capstoners are motivated to do work that feels important. That they are able to apply their practical and academic knowledge to serve a civic purpose makes teaching an attractive and noble

opportunity. Additionally, they hope to serve as role models for students just as, in Richard's words, "teachers in high school are the ones who...had the biggest impact on me" (Personal Interview, 28 January 2008).

Capstoners are, in effect, teaching out of an intrinsic motivation. Or as Richard stated, "I'm not there for the money....As a consultant I can go out for a month and literally make what a teacher makes in a year" (Personal Interview, 28 January 2008). However, that they do not need to teach to support themselves or their families also makes their long-term investment relatively limited. Portrait C candidates find themselves in the enviable position of teaching on their terms. As soon as their new enterprise becomes laborious, they can leave with only the most minimal consequences. As one candidate said, "if I ever wake in the morning and think this is not fun and I'm not enjoying it and I'm not getting out of it what I want to, then I'll stop doing it" (Richard Cushman, Personal Interview, 28 January 2008). Still, most capstoners imagined themselves staying in classroom for at least ten years and several were considering eventual moves to administrative positions.

Simon Westbrook

"I mean I really enjoyed the Air Force. It was a calling. More of a calling-profession. Kind of like teaching. You are serving your country, putting your life on the line, you are working toward, hopefully, a greater good." (Personal Interview, 7 June 2007)

Simon is a 52-year old white male living in central Connecticut. When I talked with him, he was in his first days of preparation in the ARC program. He is a graduate of the US Air Force Academy and a retired Air Force pilot, splitting 22 years between active duty and the Air National Guard. During his military service he flew several combat

missions, including action in the first Gulf War. Later, he became a squadron leader and flight instructor, one of his most rewarding posts.

> I thought back to my Air Force career and said, "Gee, my best tour was as an instructor pilot. I always liked the mentoring aspects of being a flight leader teaching tactics and techniques. And I tried out substitute teaching and loved it. And as the years have gone by I find now that I enjoy teaching more than I enjoyed flying. And as the career changed I said, "Okay. It's time to bail out of this career and go into a different one." (Simon Westbrook, Personal Interview, 7 June 2007)

Like the stereotype of a fighter pilot, Simon displayed great self-confidence and a bit of bravado. His career as a pilot had molded the way he lived his life. He spoke directly and seriously, punctuating the interview with comments such as, "one of the intrinsic qualities of being a pilot is having a back-up plan" or "I'm not use to failure" (Personal Interview, 7 June 2007). Upon leaving active duty he began working full-time as commercial airline pilot, typically on international routes. In contrast to the Air Force, Simon found commercial flight staid and unrewarding.

Although a bit younger than many capstoners, Simon shares most other traits with the group. He earned both an undergraduate and master's degree in math and speaks of his subject with great reverence. Like so many capstoners, Simon had thought extensively about his instructional model. He had devised a complex set of activities—some math-based, some from other fields—to try to reach the students in the pre-algebra class he would be teaching. He expressed great confidence, though not arrogance, that his someone unorthodox pedagogy would be successful.

Simon's years as a commercial pilot typically saw him work twelve days a month, earning up to $200,000 annually. Looking for ways to pass the rest of time, he began substituting at a local school district, the same one in which he now teaches. Despite his confidence in his abilities, Simon is quick to proclaim the expertise of his peers:

> Will I be the best teacher? No, because I've seen the quality of the other teachers. I'm going to have to work really hard to become the best teacher. And I will work really hard. Whether I'll ever attain that goal, I don't know, but I'll work toward it. (Personal Interview, 7 June 2007)

He also spent free periods observing peers in other classes to improve his practice. He does not find teaching easy, but that is one of his main attractions to the profession. Unlike his career as a commercial pilot which he describes as a "boring job" where he had to "sell his soul," teaching, like the military, is a form of service toward a common goal. This lack of commitment led directly to his retirement as a commercial pilot.

> One of the things that helped move me along toward this profession was the unity and the help I got from full-time teachers as I was trying to learn....[T]hey would provide worksheets for me so I could model mine off theirs....They helped me with lesson plans construction. They helped me with timing on classes...how much material I could cover so I could stay up with them. Test analysis. So a lot of my learning has been cooperative with the teachers in the profession....We're all working together for one common goal. In this case it was the best product of the student....I don't know if you could be successful in this profession...walking into without that nurturing mentoring going on in school. I certainly couldn't have gotten to the point where I've got now....I think a huge part of the success of

a ARC graduate is how much help that they get in the school system. (Personal Interview, 7 June 2007)

Simon's views on the cooperative nature of teaching and the effort he invested in his practice before entering he ARC program help elucidate his views on the limitations of the preparation program. Although appreciative of the speed at which he could earn his certificate, he felt that many of the sessions were superficial, lacking the rigor and willingness to admit mistakes he saw as essential to grow when he trained pilots.

> [Y]ou go out and immediately put into practice what you've been studying and come back and rip yourselves to shreds with every particular mistake with a very thick skin, with the sole goal of getting better....It was sublime....You see immediate progress. (Personal Interview, 7 June 2007)

As with flight training, Simon saw the best learning as taking place on-site, followed by honest assessment of instruction by those observing the practice of a candidate.

Despite his enthusiasm for teaching, Simon still had limited long-term commitment to teaching, planning to teach between five and ten years, "depending how it goes." The challenge of the classroom was enticing, but the salary was not a significant attractor, though it did rise to the credo he shared of "get[ting] paid for something that you love doing doesn't matter if you getting paid a little or a lot" (Personal Interview, 7 June 2007). Simon was simultaneously collecting a full pension from the Air Force and full retirement benefits from the airline. If the challenge of teaching became a burden or the work an effort, he could easily leave the classroom, with his financial security in tack. However, as he was beginning his new career, such thoughts remained distant. As he sat through the preparation sessions, he was consumed by the impending first day of school.

Portrait D—Classic Career Changers

In many ways, the candidates in Portrait D are what proponents have in mind when they think of classic career changers. These candidates do closely match the basic assumptions presented in Chapter 1, and in raw numbers, they compose a plurality, although not a majority, of candidates in the study. They overwhelmingly have subject area majors and they enjoy the subject area a great deal. Moreover, their work experience has built on that subject area knowledge. For the most part they have attended competitive colleges, many coming from elite private universities. They have previous experience working with children that, when previous careers no longer seemed rewarding, influenced their decision to "give back" by entering teaching. In many ways the group closely resembles the capstoners of Portrait C, though twenty or more years younger.

As a group, classic career changers present impressive résumés, with many showing entrepreneurial dispositions that matured into financial reward. For nearly all candidates, taking a job in teaching demanded a pay cut, and often a steep one. Still, they were entering teaching enthusiastically, if cautious not to sever ties to their previous careers. Although none suggested they were going back, none discounted the possibility.

Demographics

As with their closely related—if a generation older—capstoner peers, classic career changers are also predominately white and male. However, unlike capstoners, their composition cannot be so easily explained by the unfriendly workplaces encountered by women and minorities thirty years ago. This group seems to expose a gender bias operating in the assumptions of what makes a career changer, especially when classic career changers are matched against candidates comprising the primary caregiver portrait. If, as the term implies, being career changers demands a delineated career

trajectory, males are more likely to entering teaching from a successful career than women, as the ideal of a continuous career track, at least in my sample, is more applicable to men than to women. The women in my sample who are entering teaching continue to be more likely to interrupt their employment history to raise children. There is an alternate explanation that is beyond the scope of this investigation. While men appear to be leaving successful careers to teach, it is possible that women on similar career tracks to classic career changers are simply less likely to leave their jobs for the classroom.

Table 4.11

Age, race, and gender of classic career changer candidates

Date of Birth (Year)	Native American (%)	African-American (%)	Asian/Pacific Islander (%)	Hispanic (%)	White – Non Hispanic (%)	Female (%)	Male (%)
1969	0	18	0	5	78	33	68

Table 4.12

Means of core variables for classic career changer candidates

Academic Major	College Ranking	Job Relevance	Previous Salary (Mean/ Median)	Highest Degree Attained	Age at Bachelor's Degree (Mean/ Median)	High Needs Placement
1.35	2.68	1.15	49,284/ 43,000	3.35	24.97/ 22.00	2.53

Classic career changers were by far most common at ARC with more than a third of candidates placed in the portrait. There were, likewise, large proportions at the other sites, suggesting that this portrait is vigorous across design and geography. Portrait D was also the single largest of all portraits, more than forty percent larger than any other, suggesting the assumed characteristics of career changers do indeed occur in practice.

Knowledge

Classic career changers typically have bachelor's—and often master's—degrees in an academic discipline. They have second highest rates of educational attainment, only slightly less than capstoners. They had rates of academic majors about on par with job seekers and primary caregivers, again closely trailing capstoners. Among academic majors, biology, English, history and political science were most common. Half of applied majors were in engineering fields. Non-academic majors most commonly centered on business and organizational studies. Most all followed traditional paths through college, entering immediately after high school graduation and graduating within five years. Additionally, they expressed confidence in their academic abilities; instead apprehensions about entering teaching focused on administrative duties, bureaucratic oversight, or constraints on their practice by parents, perhaps reflecting frustrations from their previous employment. In general they expressed a spirit that their academic study along with their work experience provided them with a sufficient foundation to teach their chosen subject matter effectively and with only limited guidance.

Like the capstoners, many candidates in this group also looked forward to returning to engaging in a purer form of their disciplinary subject, often stating that their previous work took them too far away from their real passion. Teaching, then, provided an opportunity to reengage in their subject and to instill a similar passion in their students. However, a surprising number of candidates were earning certification in a field outside of their academic major, and occasionally far afield. Those teaching in another discipline alternately cited ease in completing the required classes for certification, ease in securing a job, and fear of the rigor of the Praxis exam in their undergraduate discipline.

Skills

Although there was a range of college selectivity within the classic career changer portrait, most candidates had attended highly selective colleges for their bachelors' degree, masters' degree or both. As a group, Portrait D candidates attended the most selective institutions. They related positive experiences throughout their schooling and credited their professional success largely to their education. As with capstoners, these candidates' academic success coincided with attending rigorous undergraduate institutions and a solid understanding their chosen discipline.

Experiences

Classic career changers have had extensive and successful careers before they decide to enter teaching. Their jobs have typically drawn directly on their disciplinary knowledge, allowing them to bring both academic and applied knowledge to the classroom. Despite being, on average, nearly fifteen years younger than capstoners, classic career changers mean income from their previous employment was only about $3,000 less. Therefore, for most classic career changers, their move to teaching demanded a reduction in pay.

Their success in their previous work has been tempered by growing frustration with the demands work places on their family time or with creeping changes in the nature of their responsibilities, often taking them away from what initially attracted them to their work. In many cases they have become disillusioned by the corporate nature of their jobs and the continual focus on profit margins. Although they have flourished in their environment, several candidates commented that their tasks were now fraught with bottom line considerations, squandering the creativity and challenge that had once defined their work. This may in part be a reflection of ascending the corporate flow

chart. As many Portrait D candidates have been at in their jobs for ten years or more, they are beginning to assume, and quickly rejecting, middle management roles.

Additionally, the decision to leave their jobs in favor of teaching often coincided with other life changing events. For several, the birth of a child forced them to reassess values. Others had a spouse or fiancé already teaching and longed for a more compatible schedule. Others viewed teaching as demanding less of their time, albeit for reduced pay, and determined that they were willing to sacrifice income for less frenetic lifestyle. Ried O'Brien, a recent graduate of Yale Medical School who decided to teach high school biology instead of pursue a career as a physician, explained the variables he and his wife considered before he embarked on teaching:

> My wife will probably need to work....If I went the physician route I'd be a lot busier, but I'd be making a higher income, so my wife maybe wouldn't have to work and maybe do a lot of things with the kids and stuff, and I think here it will be more of a shared thing, where we're working but hopefully we'll both have time to spend with the kids and that was really important to me. Not to become a disconnected breadwinner. (Personal Interview, 7 June 2007)

This sentiment was common. More than half of the candidates had children, and often, young children. Many of these new parents found their previous work increasingly incompatible with childrearing. Yet, unlike primary caregivers, very few candidates in the group nominated their parenting experience as advantageous in preparing them to be effective classroom teachers. Rather, teaching allowed them to be better parents.

Motivations

Nearly all Portrait D candidates raised lifestyle issues as a significant motivator for entering teaching. Teaching alternately provided a means to do work that impacted the

broader community, allowed more time with family, or exit from unrewarding work. Motivations interacted with each other. Candidates cited both pushes from their old jobs and pull toward teaching as factors influencing their change. When pressed in interviews, candidates typically would differentiate between each factors' relative weight, ultimately identifying a single determining factor leading to their change. The motivations of social impact, family life, and constraints of previous work are present in each case. Although classic career changers sought work that was emotionally rewarding, they were not strongly motivated to teach in high needs schools. Rather, they seemed to believe that teaching could provide a rewarding work without dominating their personal lives.

Finally, the speed of certification proved a major motivator for classic career changers. Although they had typically enjoyed financial success in their previous work, the demands of family and mortgage limited their flexibility. Unable, or unwilling, to dedicate two years and the accompanying tuition bills and loss of income to a traditional full-time teacher preparation program, many classic career changers stated that only the existence of a fast track program could have drawn them to teaching. This was less a philosophical statement than a pragmatic one.

Tommy Lopes

> To get into the corporate world, that would require relocating, likely, huge change. Full time change in my life where I wouldn't see my family for a large part of the week, or my schedule. Whereas teaching, Wow! It fits like a glove. I don't have to give up all that time to get a degree. So, I'm not sure I would have changed careers unless my business collapsed totally and then I would have been forced into something. (Personal Interview, 7 June 2007)

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Tommy is a thirty-nine year old Hispanic male and a native of Connecticut. A Soviet and Eastern European studies major as an undergraduate student at Yale Tommy eventually found himself working in a London art gallery featuring Russian artists, despite no background in art. In the years that followed, this accidental summer job transformed into a career representing Eastern European artists in the United States, setting up gallery shows to introduce artists from the former Communist Bloc countries to the world, enticed by

> the whole idea when I first started the business was to take these legends, take these great talents that the world didn't know about and create them into legends.....[T]he whole idea of an artist creating in that sort of world, like in Eastern Europe where they were repressed. I had one artist who painted for 15 years in secret, so to me his art was created in different conditions, it was just a fascinating story and I thought he would be the next VanGogh. (Personal Interview, 7 June 2007)

After more than a decade of successful shows, traveling the world to promote artists, and taking initial stabs at creating his own art, Tommy began to tire of the demands of the work.

> So now when I wake up in the morning my business kind of takes care of it's self. I'm more of a distributor now and so I've done so many years doing this that the whole thrill and excitement about what we're going to create, it's kind of changed now. I wake up saying, "Wow! I'm almost 40 years old and is this all I'm going to do with my life? Is decorate people's homes?" (Personal Interview, 7 June 2007)

For Tommy the work had become increasing corporate. The creative flourish following the *Glasnost/Peristroka* era was followed by a generation of artists coming of age in a more

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open society, willing to alter their styles to meet consumer demand and make a sale. Although he had enjoyed financial success, he did not want to be an agent for the artists largely looking for commercial success.

Additionally, Tommy was feeling growing pressure to find work that would permit more time with his family. Trips to Singapore or Prague seemed less exotic, especially leaving his wife—an ESL teacher—at home to work and take care of their three young daughters. "I want to be on their schedule" (Personal Interview, 7 June 2007).

Although he briefly considered law school—a path he assumed he would embark upon when an undergraduate student—the three years in school followed by what he feared would be a corporate lifestyle seemed unappealing. Teaching, another profession that he had long considered, presented itself as a viable career move. Teaching allowed him the practical advantages of daily schedule and annual calendar that approximated that of his wife and daughters. The summers created time for him to continue his art business on a limited scale, and, through ARC, permitted him to enter the profession quickly. Additionally, teaching provided relief from the increasingly corporate nature of his art career. Profit and loss were not dependent on the number of sales scored. Finally, Tommy had always considered teaching a "noble profession," and had tutored high school students when in college and has long taught Sunday School at his church. These tastes of teaching convinced him that he would enjoy a career in the classroom.

Alone none of these factors would have been enough to precipitate a change. In fact, even in conjunction they were insufficient without considering the route he took to the classroom. Ultimately, it was the ease in which Tommy could earn certification that made the difference. Although he no longer had a desire to continue his art business full-time, his family constraints were real, and he respected the teaching profession:

Without ARC I would have to take either a full-time [preparation

program]…where simultaneously you should take the course work in the subject

area that you want to teach. I don't think I could have done it, because I still have

to take care of my family. I still have to travel once in a while. I still have to run

my business. But with ARC it was very clear cut. They're taking your bachelor of

arts degree and putting it to use.…[I]f I had to [attend] full-time put everything

aside and go back to college, go back to school, with my family, with my

obligations, I think I would have probably not have done it. (Personal interview, 7

June 2007)

As with three years of law school, the determining factor was the ease of entry provided

by the ARC program.

Herzberg would have named the change in the art business and the schedule it

demanded as "unhygienic" aspects of his previous work, although maybe not sufficiently

unclean to precipitate a change. Tommy's positive regard for the social impact of

teaching and the promise it provided for a friendlier family life were motivating factors.

But the determining factor, the speed with which he could change professions, provided a

path to a motivating career that elevated the unhygienic factors to a level that made his

previous work escapable. One factor, then, served as a sort of tipping point to precipitate

a career change.

Tommy did earn an academic major—he describes Soviet studies as largely a

political science major—using his knowledge of Eastern European culture, politics,

history, and language to create a unique career. However, his subject area expertise

raises a couple of questions. First, the Soviet Era ended before some of today's high

students were born. In terms of contemporary political study, the importance of Eastern

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Europe and Russia is diminished from its place two decades ago. Even granting the significance of history and Tommy's expertise and passion for the region, Tommy ultimately earned his certification is in secondary math.

Taking several courses in at a local community college to augment a relatively meager academic background in math, Tommy gained enough math credits to teach at the high school level. Taking the time to study the local job market, he feared that despite his knowledge and experience, he would not be able to find a secondary level social studies position, but knew that math jobs were plentiful. This decision—while rewarded as Tommy did quickly find a job—does address a couple assumptions of career changers entering teaching. First, Tommy, although seemingly intelligent and confident in his abilities, does not have practical experience in using math in his previous career and cannot be considered a lifelong student of the discipline. On the other hand, proponents identify career changers as a potential way to address labor market imbalances in math and science. Tommy provides such relief.

Finally, Tommy quickly raises his experience as a student as both a justification and motivation for entering teaching.

> [A]ctually I'm not a genius like a lot of people I went to school with. I went to a prep school which was very intense and I went to Yale. You know when you're learning along side these great brilliant minds in some ways it's intimidating and sometimes I felt like, "Wow! I'm in this pool of such gifted people." [A] concept that took them maybe 20 minutes to learn it took me maybe two hours to learn but yet I made it through and I did quite well. The way I did that was having good habits, learning strategies to achieve what they instinctively know....I can share my knowledge and instill confidence in them. Let them believe in

themselves. Show them kind of a role model. It's not just if you don't grasp it

right away you're in trouble. (Personal Interview, 7 June 2007)

In addition to citing this experience as serving him well as role model, Tommy also uses it

to justify his qualifications as a math teacher. His academic history demanded hard work

to keep abreast of peers. As such, Tommy considered mastering a new discipline seems

rather pedestrian, when accounting for the additional benefits of changing careers.

A note on Portraits E and F

As I outlined earlier, I initially sketched the first four portraits based on my

interviews with candidates across my sites. I then used survey data to further refine and

support them. The core assumptions of proponents of career changers have coalesced in

some form. Characteristics may support or refute the assumptions, but in some

systematic way the candidates within each portrait have shared core traits across the

domains of knowledge, skills, experience, and, to a lesser extent, motivation. However,

there remained several candidates who did not fit neatly into one of the four initial

categories in my initial placement, nor were they placed by the cluster analysis. I looked

at the individual candidates not initially placed to see if there were any commonalities

that could describe these outliers. At least two distinct patterns emerged. Yet these

patterns are distinctive not in the traits that they share, but in how they diverge from the

total sample. First, many of the outliers had interrupted their careers to be primary

caregivers to their children—stay-at home parents—maybe working occasional part-time

jobs. Though they share few traits outside of this common experience, that they have a

common experience of leaving the workforce for an extended period of time defines a

distinct life situation. Likewise, a second set of the outliers gathered around candidates

who for family or personal reasons needed a job immediately and chose teaching out of

sincere interest in the professions, sure, but also due to a belief that teaching quickly provided entry to good work in a generally attractively setting.

Each of these portraits diverges from Portraits A-D in how I formed them and in what defines them. Rather than the shared collection of knowledge, skills, and experience largely prevalent in these earlier portraits, what is common across these additional portraits is unique to the portrait itself. However, this is different than suggesting that these additional portraits are unrelated to the other categories. I choose knowledge, skills, experience, and motivation as an organizing structure as it echoed the arguments of the advocacy work surrounding career changers. If I had chosen an alternate organizing structure, or favored one of the characteristics, the candidates in Portraits E and F would have likely been intermixed with those from the A-D. Individual candidates in Portraits E and F may share either knowledge, skills, experience, or motivations with candidates from across my study. For example, if I were to sift through candidates based on motivation for entering teaching alone, individual candidates from Portraits E and F would share motivations from candidates in other portraits, and the ensuing classification would look quite different than that I have proposed here. It is not that the candidates in Portraits E and F are anathema to the concept of career changers; rather they lack a defining common set of characteristics that distinguishes the other portraits.

There were additional commonalities, as well, including candidates fresh from their undergraduate studies who had not any work experience. Additionally, there were many candidates already working as uncertified teachers in parochial or independent school or under an emergency certification in public schools. While these groups could certainly define a portrait, they lack a career, in the former case, and a change in the latter, and are, thus, outside the scope of this study.

As these portraits are composed of more diverse candidates, I am presenting the data for these groups differently. As with the others, I will provide an overview of these portraits and present core demographic data. However, as there are no clear knowledge, skills, and experience trends, I am omitting these sections. Although the patterns within these domains are intriguing, they do not lend themselves to much more than simple description. In their place, I will share two mini-cases in an attempt to better capture some of the diversity of the portraits.

Portrait E—Primary Caregivers

More than any other portrait, the caregivers are a diverse lot. In fact, the only two characteristics they seem to share is desire to become teachers after an extended period out of the full-time workforce to raise children, and, but for two, they are all women. The one additional variable that was mostly consistent for the group was date of birth. Although there was some discrepancy based on the age of a candidate's children when they chose to return to work, there were no primary caregivers under the age of 32. Simple math helps explain this finding, as a parent is less likely to have all children in school in her early thirties, permitting a return to work. Beyond that, Portrait E candidates come from elite universities and on-line colleges. Neither is the age at which they received their bachelor's degree consistent with any pattern, suggesting many traditional undergrads, but also a substantial minority of non-traditional students. They have held high-powered corporate jobs and they have never worked full-time. For example, there is a preponderance of candidates who have a bachelor's degree or a few graduate credits. However, there is also a stay at home parent who was formally a corporate lawyer and another with a doctorate in biology. They have been applied scientists and cell phone saleswomen. They have majored in nearly all academic fields,

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and applied fields ranging from art to marking to computer science. And their major provides only a glimpse into their disciplinary knowledge. Primary caregivers have the second highest rating for academic majors, balanced by low rates of job relevance – made even lower by their long absence from the workforce. For example, two caregivers mentioned that their degrees are outdated, acknowledging that the science they learned thirty years ago has evolved while they have failed to keep pace with contemporary trends.

Table 4.13

Age, race, and gender of Primary Caregiver candidates

Date of Birth (Year)	Native American (%)	African-American (%)	Asian/Pacific Islander (%)	Hispanic (%)	White–Non Hispanic (%)	Female (%)	Male (%)
1965	0	10	0	5	86	90	10

Table 4.14

Means of core variables for Primary Caregiver candidates

Academic Major	College Ranking	Job Relevance	Previous Salary (Mean/ Median)	Highest Degree Attained	Age at Bachelor's Degree (Mean/ Median)	High Needs Placement
1.43	3.05	1.00	*	2.81	26.60/22.50	3.00

Note: * I did not include salary information for primary caregivers as they have been out of the workforce for several years resulting in limited and inconsistent data.

They are nearly all white and have a wide breadth of household incomes and range in age from their early thirties to their fifties. They enter teaching to fulfill lifelong dreams to feel important and to pay for their children's college tuition. Despite these differences, they are also part of one of the most common patterns in teaching career

tracks over the last half century, re-entry into the classroom as children begin to age (Lortie, 1975).

I was able to assign a small number of candidates to the primary caregiver portrait from their interviews, but most were based on my interpretation of their survey responses. Therefore, the twenty-one candidates I named primary caregivers lacks precision. Even making allowances for the inexact results, there seems to be large numbers of primary caregivers at each site. However, they are most ineluctable at NPTT. At that site, primary caregivers comprise the single largest portrait. Primary caregivers are the second largest portrait at ARC, while comparatively smaller at CTP.

Jan Stillman

"When the economy tanked, people were laid off. I was low man on totem pole....I said, "To hell with it." My kids were 3, 3 1/2,...and I just stayed home with them at that point. We were fortunate we didn't need the money. My salary was going straight to the babysitter anyway, we weren't keeping it." (Personal Interview, 7 June 2007)

Jan is a fifty-one year old white woman from central Connecticut. For the past 15 years she has been largely a stay-at-home parent, returning to part-time work as a substitute teacher when her twin daughters entered middle school. Jan's undergraduate degree is in biomedical engineering from the University of Tennessee, "kind of an insane combination of premed and engineering courses" (Personal Interview, 7 June 2007). For several years she worked for an aeronautical engineering firm "doing heat transfer measurements in engine components which could be anything from embedding couplers to applying heat sensitive paint to doing thermography with infrared cameras. But it was

all somehow related to heat transfer problems" (Personal Interview, 7 June 2007). During this time she also earned a master's degree in engineering science.

Despite thriving in the environment, enjoying the various challenges in her projects, after twice being laid off due to economic downturns, Jan decided to stay home with her then 3 year old daughters. She describes her family's finances as secure enough to allow a single salary, even though in many ways she would have liked to continue with her work. "I really did enjoy it. I had a good group to work with. I had interesting things to do. The research was wonderful. It was everything I wanted in a job at that point" (Personal Interview, 7 June 2007).

Like many women in this portrait, as her children grew older she looked for more work outside the home, although work of limited hours and with limited off-the-clock commitment. She fell into substitute teaching at the suggestion of a neighbor who taught in a local high school. Although Jan joked that she expected "to be in jail the first week," she found substitute teaching surprisingly rewarding and enjoyed how highly sought-after she was for her expertise in math and science. With her daughters now graduated from high school and preparing to enter college, both the freedom of an empty nest and the constraints of college tuition drove her to return to full employment. Although interested in returning to her previous job in the aviation industry, her seniority and changes in the nature of the work conspired to make a return to her previous employer impractical; instead, she decided to teach full-time.

Her experience as a substitute, including several long-term positions, convinced her that she would be a capable teacher. Additionally, she found she thrived on her interactions with students. "I love the kids. The high school kids especially, I think are the neatest kids in the world. They drive me crazy, but they're just a ton of fun."

(Personal Interview, 7 June 2007). Like many other primary caregivers, Jan cited her experience as a parent as great preparation for the classroom. Raising two daughters taught her patience and introduced her to the world of teenagers. Unlike younger teachers in the school where she substituted, Jan felt that she had a perspective on emotions and motivations of teens that allowed her to understand how to effectively communicate her expectations while staying grounded in the academic material. These soft skills are very different than the sort of experience that comes from applying subject area knowledge to real world problems in an employment setting.

Still, although not fresh in her mind, Jan did bring knowledge from the job sector to her teaching. She obviously was attracted to her previous work and has an abundance of practical knowledge to impart to her students. However, due to large number of classes she would have to take to earn chemistry or physics certification, Jan is earning her certificate in math.

> I have long-termed in [math and science]. I'm able to do both. But looking at the amount of work to do the science program is unbelievably more. It's harder to evaluate. It's harder to present and keep their interest. It's just phenomenally out there for the same amount of pay....Plus I looked at the Physics Praxis and I didn't really like what I saw (laughs). It took me long enough to study for the math Praxis. (Personal Interview, 7 June 2007)

Although confident in her math ability, she will not be able to draw upon her previous work experience to the same degree as in teaching math. This is consistent with several classic career changers. Despite deep applied knowledge in a discipline, due to certification restrictions, they chose to earn their certification in a different, and not always related, discipline. This contradicts one of the main rationales for attracting

career changers; they will be able to draw on their employment experience to enrich lessons and vivify potentially abstruse curricular requirements (American Board for Certification of Teacher Excellence, 2005b; Ballou & Podgursky, 1998).

The ARC program was attractive to Jan as it provided easy entry into the classroom with minimal interference to family life. "It fit into my life at this point, because it is the summer my kids are heading out and should be ready to hit the road in September.... The year long in my life just wouldn't have worked" (Personal Interview, 7 June 2007). Additionally, she was wary of other longer programs that she felt placed minimal value on her degrees and her experience as a substitute teacher. She did not care to invest eighteen months in preparation to teach.

> I know the math that I'm going to teach....I wanted to hit the road running, especially since I had the 7 years of teaching experience [as a substitute]. It wasn't like I needed to do much as far as learning how to teach. I learned kind of through trial and error. Now it's nice to know what I should have been doing right the first time, but I kinda figured that part out through the battleground. (Personal Interview, 7 June 2007)

Jan's comments echo another common belief of both career changers and their supporters. The experience of raising children and application of subject area knowledge are largely sufficient preparation for the classroom. Jan suspects that the knowledge gleaned as a stay-at-home mom and a substitute are enough preparation to manage a classroom. Her academic knowledge is ample to design engaging lesson that meet the curricular requirements.

Tonya Richland

"I think that kids really put things into focus for you." (Personal Interview, 6 February 2008)

Tonya is a 35 year-old white mother of two living in the mountains of western Montana. Seemingly finding unoccupied time as anathema, she currently in her first year teaching seventh grade language arts. Tonya moved with her six- and eight-year old daughters from Bozeman to a small town some five hours to the north to take her teaching position, leaving her husband behind until he is able to able to find work in their new town. Before entering the NPTT program, Tonya had stayed at home with her children stringing together part-time work running an informal day care out of her home, providing medical and legal transcriptions in the evening, and fund-raising for a teen-center in her spare time. Even when her husband, an Army reservist, was stationed overseas for a full year in 2003-2004, Tonya remained seemingly unfazed by the burden.

Tonya began her undergraduate studies intending to teach, only to be frightened off by the wave of school shootings in the mid 1990s. "I thought, 'I'm not even sure I want to be a teacher and there's people dying for this job.' You know, you don't make enough money. So I graduated the fastest way I could, with just straight English literature" (Personal Interview, 6 February 2008). But her initial interest in teaching never vanished. Despite her English degree, Tonya spoke little about what drove her to the discipline, beyond an admitted like of reading. Despite taking time out of the mainstream workforce for children, Tonya was more driven by career aspirations than her subject area, never content with "the fact that my husband would have been bringing home the bacon by himself" (Personal Interview, 2 February 2008). English, then, was her subject of choice, but a career as a teacher was the stronger attraction.

A graduate of Montana State, Tonya also spent six years in the Montana National Guard, actually completing her basic training between her junior and senior years in high school. She served as a medic in the Guard. Although an apparently different track than English literature, Tonya explained that in high school, "I liked teaching, I liked reading and I liked medicine, all very fascinating to me. Thought the best way to do that is take a little bit of everything and see what I liked the best" (Personal Interview, 6 February 2008). And she persisted in enjoying all three. While preparing to teach while majoring in English, she continued her Guard work diagnosing injury and illness, "all the stuff that a nurse actually does now" (Personal Interview, 28 January 2008).

Before the birth of her girls, Tonya completed FHA inspections for an engineering firm and later worked as a paralegal at a law firm, and thought seriously about going to law school. It is worth reiterating the vast and diverse experience Tonya had before entering NPTT: work in the fields of law, medicine, and engineering, several years in the military, organizing a teen-center, and daycare, which also demanded the knowledge necessary to run her own business. These experiences certainly transformed her into a person with rich understanding of the working world; however, they provided minimal hard skills to prepare her to teach middle school language arts. I mention this not as a criticism of Tonya's readiness, but to complicate the weight common assumptions place on career changers disciplinary knowledge.

Certainly Tonya's years operating a daycare did teach her soft skills in advance of teaching. Beyond the patience demanded by the work, she explained how her work and parenting experience have inured her to the often brutal world of middle school.

> I've seen other new teachers come in to teaching and they're incredibly lost,
> probably even more lost than [NPTT candidates] are. I don't care if a 12 year

old tells me that they hate me because tomorrow they're not going to. And the 22 year old, when a 12 year tells, "I hate you." It's devastating for them. It's not saying that it doesn't affect you, because it does. It certainly hurts you feelings, but at the same time, my world does not revolve around this one person, yeah but when you're 22 boy that just really....There's a whole different connotation, a whole different meaning....Especially after you've had kids. If my kids tell me that they hate me then my world would be crushed. You know my own children. (Personal Interview, 6 February 2008)

And this is a sentiment continually repeated by career changers, in general, and primary caregivers in particular, highlighting a talent learned through parenting.

Tonya additionally learned a good deal about what she did not want to do from her years with young children. Although she valued the experience, especially being able to have her children at home with her so that if "they said a bad word, I knew where it came from" (Personal Interview, 6 February 2008), she also learned that when she entered teaching as a career she longed to work with more intellectually mature kids.

I really realized that little kids is not where I needed to be, because just the concepts they can't get you know. When you decided to talk about the string theory in quantum physics they're not getting it. It's really irritating (laughs). (Personal Interview, 6 February 2008)

Despite her intentional hyperbole, she did find herself growing frustrated with the continual challenge of explicating the most simplistic concepts—a talent she values in others, but does not find in herself.

As her children entered school full-time, Tonya took the opportunity to reflect on what she most enjoyed about her wide range of careers. She came to realize that

ultimately she relished "the light in someone's eyes when they actually get it " (Personal Interview 6 February 2008). She recalled experiences teaching lawyers in the firm in which she worked how to use a new piece of software, training a junior member of National Guard, or helping her daughters choose the right word as her most valuable professional and parenting experiences. "I've kind of realized in my own way I've always kind of been a teacher to some extent" (Personal Interview, 6 February 2008).

And NPTT provided an attractive path to the classroom. Tonya echoed the program's belief that bypassing the traditional preparation design rewarded the professional and life experiences of the candidates. Tonya admitted to entering the classroom a little cold on day one, but saw her NPTT peers as having "world experience under our belt" (Personal Interview, 6 February 2008) and the instincts to wield it wisely in the classroom. To Tonya, her fellow candidates are likely to become better teachers faster than her twenty-two year old peers just entering the adult world. In her mind, more than a decade of experiences have prepared her for this moment and none more beneficial than being a parent.

Across these cases, parents enter teaching with varied credentials. However, they are almost universally informed by their experience as parents. Their own children appear to have mellowed their personalities and thickened their skin. Additionally, primary caregivers regularly seem drawn to the profession over the subject area. Although there are exceptions to this, the nurturing aspects of the work resonated with the women more than a deep love of discipline. Teaching appears as almost an extension of parenting.

Portrait F—Job Seekers

Like the primary caregivers, job seekers are outliers from the original categories I defined. Although individually they may share some characteristics with the candidates in other portraits, they are distinguished from others by their motivations for seeking certification: they need work quickly. Beyond this unifying impulse, the candidates share few commonalities. They come from a wide range of majors—many from academic disciplines, but others had music and art degrees. They represent candidates earning their bachelor's degree in their forties and candidates with doctoral degrees. Some have limited professional work experience, while others have held leadership positions in large organization. Some have children, some don't. They are only portrait in which several have no substantial previous experience with children. They are married and single. For some, akin to the socially mobiles, teaching represents the culmination of several years of struggle to realize an ambition. For others the job market in their chosen careers has collapsed with teaching embodying the best immediate employment option. However, all of these candidates expressed the need for a good paying job now and believed they could find one in teaching.

As with the primary caregivers, the group's diversity renders a point-by-point consideration of characteristics redundant. While below I present the range of traits from the survey data, I will avoid a lengthy discussion on each variable; instead I will present two cases that demonstrate the diversity of backgrounds of these candidates. Additionally, this group is likely underrepresented in my sample. From the survey alone it was difficult to determine the significance of needing a job as a major motivating factor unless a candidate chose to make an explicit statement. However, that three out of twenty-two candidates I interviewed raised personal exigency as driving them to teaching suggest that several additional candidates are motivated by an immediate need for a job.

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Despite only seven candidates clearly placed in this portrait, the potential of many more -overlooked in this study -makes the phenomenon worth exploring. The data for the job seekers is clearly compromised by the sample size. It is impossible to extrapolate out to suggest that the trends present in Tables 4.15 and 4.16 would hold for a larger group of job seekers. Still, it is worth recognizing the diversity of the group.

Table 4.15

Age, race, and gender of Job Seeker candidates

Date of Birth (Year)	Native American (%)	African-American (%)	Asian/Pacific Islander (%)	Hispanic (%)	White— Non Hispanic (%)	Female (%)	Male (%)
1967	0	14	0	0	86	43	57

Table 4.16

Means of core variables for Job Seeker candidates

Academic Major	College Ranking	Job Relevance	Previous Salary (Mean/ Median)	Highest Degree Attained	Age at Bachelor's Degree (Mean/Median)	High Needs Placement
1.40	3.20	1.60	56,000/ 58,000	2.67	25.83/23.00	3.17

Liz Mancino

"If somebody's [sick] we're in trouble.... [J]ust to able to go to a doctor (laughs), people take it for granted." (Personal Interview, 7 June 2007)

Liz Mancino is a forty-four year old white woman from central Connecticut. Now a mother of three adolescents, Liz earned an Associate's degree before she had children, and worked as a subrogation secretary in the insurance industry. After the birth of her first child, Liz began working a series of part-time jobs, largely in retail and as a

waitress. More recently she has worked almost daily as a substitute teacher in her local

school district. Now, after completing her bachelor's degree in history in 2005, she is

seeking a teaching job. As her husband's employer has recently altered its health

insurance package, Liz's family now needs her additional salary and, specifically, the

benefits package that accompanies it literally to stay in their home.

"[M]y father never went to college. Neither did my mother. He always felt it was

something very, very important. So they told me, if you want to go back...we'll pay for it"

(Personal Interview, 7 June 2007). Once her youngest child began school full-time, Liz

added night classes at a regional campus in the Connecticut public university system to

her existing evening work in a local restaurant. Although graduating with a history

degree, at the time she did not take the additional classes necessary for certification,

leaving her with a degree, but limited prospects for a immediate employment.

Liz discussed her evolving relationship with history as a discipline, explaining

"[a]lthough I hated history when I was in school, as I grew and got older and stuff, I

found that's what I wanted to do" (Personal Interview, 7 June 2007). She had enjoyed a

long-term substitute position for an English teacher where she was able to bring her social

studies interests into the classroom during a Holocaust literature unit. As they picked

their books and designed accompanying research projects, "[i]t was like they were getting

history twice a day. They would leave my class and go to social studies" (Personal

Interview, 7 June 2007). In spite of a slow start in her disciplinary subject, she came to

find history a valuable way to interpret the world and enjoyed passing that on to her

students. Yet she remains anxious about the breadth of her knowledge.

Social studies is so broad. I could talk about so many events that will get them

prepared for adulthood. More so that social studies counts, but math teachers

might disagree with me, but I have yet to use algebra in my life. And geometry very rarely, but there's a need for social studies. So I'm worried that I might not bring it. (Personal Interview, 7 June 2007)

Her apprehension might be consistent with what any beginning teacher would feel. However, it also motivates her to ponder lessons design and student assessments needed "to be prepared for life."

While, Liz's desire to teach history was obvious, even more palpable was her desire to work with kids. Her career arc allowed her no real opportunity to applying historical examination in previous work. However, she cited parenting as generous experience for teaching.

[A]s a mom, I feel like I already am a teacher and it was just a natural extension of that....I can't imagine doing anything else.... I have a good connection with the kids I found out. I kind of started subbing to see "Well geez, maybe this isn't for me." I get along great with my own kids, but with someone else's kids maybe that isn't for me....[But] they responded to me. I have fun with them. I treat them as if they are my own. If they say something just total idiotic I can give them the Mommy look and they know. (Personal Interview, 7 June 2007)

And Liz does command "the Mommy look." It is easy to imagine her joking with and teasing her students balancing on a line between chaos and vibrancy, with her able to hold the class's focus by drawing from a deep well of parenting tricks.

Liz's sentiment echoes many comments made by primary caregivers. Commonly, these candidates, as well as others who are experienced parents, cite their child-rearing experience as helping them develop patience, determine priorities, and learn to talk with students. And in many other ways Liz fits the profile of a primary caregiver. Her career

and education were postponed so that she could be home when her children returned from school. Now that her children youngest child is in middle school, she is better able to reassume the duties of full-time employment out of the house. Yet, Liz's motivation to teach is more desperate than other primary caregivers returning to the workforce.

Liz was admitted to the ARC program on her third try. Despite a desire to teach, her family's finances did not permit her to enroll in other certification options that would have demanded more expense and a full-time commitment, while restricting her from working and contributing to the family income. Quite literally her family needs her to find a lucrative job with a good benefits package.

> [M]y husband and I do not have the resources to go back to a traditional
> [program]....As soon as I got my acceptance letter that I got in here I could start
> looking for a job. I desperately need a job. Or else we're selling the house and
> moving to this tiny one room condo. I need to help support my family. So, that's
> exactly what happened. I got the letter. I called all my teacher friends who
> helped me. "What do I do know? Where I go? How do I get all this stuff going?
> I need a job. I've got feelers out. They all know I'm looking. And I'm hoping by
> September I've got a full-time position with benefits. (Personal Interview, 7 June
> 2007)

Although Liz's husband's job does offer health insurance, the premium would demand such a large proportion of his salary that they would not be able to stay in their house. Her family has chosen to go without insurance for the time being, hoping that her ARC certification will lead to a job.

William Mueller

"I don't belong in the classroom yet. These are hard kids and experiences to deal with and I do not have the training to teach them. I am failing the students." (Personal Interview, 11 September 2007)

William is a forty-eighty year old white male, living in an inner ring suburb of Saint Louis. For twenty years William was a bassoonist performing with major symphony orchestra, which, until it folded five years ago due to financial problems, was considered one of the top orchestras in the country. The shuddering of the orchestra coincided with his wife's decision to return to school to study labor law. Although initially intending to attend law school in Florida, the new circumstances allowed her to broaden her search, eventually drawing the family to Saint Louis for her studies.

William has both a bachelor's and master's degree in applied music from the University of Miami. Before entering the Career Transitions Program, for years he supplemented his orchestra income by teaching individual bassoon lessons, as well as teaching music performance and music theory at the local public university. Therefore, he entered the classroom with extensive performance experience as well as familiarity with instruction, albeit, not in a K-12 school setting.

William describes the market for world-class bassoonists as limited to six jobs nationally in a good year, severely limiting his employment opportunities as a performer. With his family settled in Saint Louis and American orchestras in general ill health, William decided not to seek an orchestra job unless, perhaps, one would open in Saint Louis itself. In the years since the collapse of his previous orchestra, William has worked in the music industry in various capacities including teaching individual lessons, sessions at elite summer camps, and working with a music publisher.

Much of this work has demanded either he live away from his family or travel extensively. He had tired of being away from his family regularly and his wife's schooling and work required William's regular assistance at home. William struggled to find rewarding and profitable work. Recalling that he had enjoyed and felt successful in his previous teaching settings, William decided to apply to CTP

When I spoke with William, he was in the middle of his third week teaching elementary music in a PreK-8 public school in Saint Louis and it was not going well. He was overwhelmed by the demands of the job, trying to learn and teach 10 different curricula in a school he felt was rife with behavioral problems. Already in the first two weeks, two experienced teachers had quit out of frustration. William had seen chairs thrown in his class and sexually inappropriate behavior from older students. Additionally, despite his training in performance, he had no instruments that children could use, limited instead to teaching only theory and vocal performance. William described himself as a "rose-colored glasses guy. I'm very laid-back, but I am used to success. I am really trying, but already am thinking about leaving. It is spiritually draining to get up to do this everyday" (Personal Interview, 11 September 2007).

Paradoxically in William's attraction to CTP—the prospect of quick certification—were sowed the seeds of his growing frustration with the program. He felt his lack of training on how to teach the curriculum and how to teach in a high needs setting led him to fail to meet the students' needs. In particular, he felt ill prepared to bridge the cultural differences between the students his all African-American school and his own background. William felt the speed of the program allowed only shallow discussions of the interactions of race and class on classroom instruction and management, a disservice to him and his students.

According to the assumptions made by proponents of career changers, in most all ways William is an ideal candidate. He has excellent knowledge, skills, and experiences in his subject area. His previous work centered on application of his knowledge, but he also had regular opportunities to teach. Although his employment situation required him find work quickly, he entered teaching eagerly. Yet after only a couple weeks he was already seriously considering quitting. William presents a cautionary tale, then, in the assumptions about career changers. Despite the characteristics he brings—including an interest in teaching in a high needs school—he is floundering. In terms of preparation, he feels he failed to receive the knowledge necessary to be successful in this setting. In terms of placement, he believes that the district failed to make good use of his skills. His desire was teach middle school band where his knowledge of and experience with performance would be called upon. Yet his calls fell on deaf ears. In terms of management, the program and the schools have failed to provide William with sufficient mentoring and induction, largely leaving him to find his own supports. The result appears to be a teacher in great need of a job ready to quit and students potentially left without a knowledgeable music teacher.

As with primary caregivers, job seekers are a diverse lot defined not by a set of common characteristics, but a single common motivation that distinguishes them from other career changers. While job seekers enter teaching with various levels of commitment to teaching, to none is it odious or a last resort. Rather, teaching is attractive and is consistent with earlier career commitments. Now, under the stress of financial need, job seekers are their enjoyment in guiding others' learning is evolving from an avocation to a vocation.

Chapter 5

Investigation of Context

In the previous chapters I have examined programs and candidates more or less

in isolation. Now I turn to contextual factors. Place is always important in understanding

the implementation of policy. The history, culture, and economics of region can shape

both the focus of the written policy and which aspects of that policy are emphasized in

practice. In order to understand the unique aspects of the environments in which the

programs operate and candidates live, I will present broad data on the overall economy,

the teaching market, race, wealth, and poverty for each region. Where relevant I will

share political and cultural trends that shape the region and the schools.

Alternative Route to Certification

Although lacking the primacy in teacher education history typically associated

with Massachusetts due north, Connecticut shares in the New England's long experiment

dating to the normal schools movement. Prominent engineers of the movement honed

their craft in the state, including William H. Wells among those credited with

transforming the normal school into a four-year public college (Herbst, 1989). And that

tradition remains evident today.

To understand the context of teaching in Connecticut it essential to know both

that the state has the highest beginning and average teacher salaries in the country, at

$39,300 and $57,800 respectively (Gould et al., 2007), and that it has not always been

that way. Any consideration of the motivations for Connecticut career changers to enter

teaching must consider the relative wealth enjoyed by the state's faculty. Although in part

a product of a high cost of living, teachers enjoy recompense that allows them a solid

middle class lifestyle. At the same time, the salaries acknowledge the status in which the

state elevates public education assuaging the long endured stigma that teachers are those who "can't do." However, in the middle 1980s this was not the case.

In 1985 reformers worked across institutions to create incentives for a combination of higher pay, more stringent certification requirements, and higher student achievement. The integration of these policy goals led to salaries increasing by nearly two-thirds in just five years. In conjunction teachers were subject to more rigorous preparation and certification standards including a written test of teaching competencies, a three-step induction process accompanied by mandatory mentoring for new teachers. In the 1990s, the state added a new program of student assessment and a requirement for all colleges of education to be accredited by NCATE[9]. Together, these reforms reframed the reputation of public schools and schoolteachers in the state (for a more complete discussion of the Connecticut reforms, please see Youngs & Bell, 2008).

Directly influenced by advocates of a professionalization model such as Arthur Wise, Connecticut's revisions pushed preparation in the state toward demanding mastery of discrete knowledge unique to the profession over preferring content knowledge as the primary governor of quality teaching. The ARC program, then, with its preference for strong disciplinary knowledge and experience, is someone of a contemporary and historical anomaly. In fact, the program director acknowledged ARC's diminished status relative to more traditional preparation routes in the state, arguing the program as "somewhat of a black sheep of the CDHE (Connecticut Department of Higher Education)," viewed at once as less rigorous than other routes and as siphoning off

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[9] The state has even mandated that ARC be compatible with NCATE standards, making them, according to ARC's director, the only alternative certification program in the country to meet NCATE standards. However, they have not actually been accredited, as NCATE has not developed accreditation standards for alternative route programs.

potential candidates at other schools and their accompanying tuition (Personal Interview, 7 June 2007).

The strong educational history of the state, including the nation's second oldest college in Yale, Connecticut's educational attainment rates are comparatively high. Eighty-four percent of residents have at least a high school diploma, thirty-one percent have a bachelor's degree or higher, and thirteen percent have a graduate or professional degree. Compared the other states in this study, while rates of high school graduation are on par or even a bit lower, rates of higher education attendance are substantially greater, suggesting a large potential pool from which to draw professionals into the classroom.

Yet, acknowledging Connecticut as having the highest average teaching salaries in the country sketches an incomplete picture. Despite their wealth relative to the teaching force in the rest of the county, compared to their fellow workers in the state, teachers' real buying power has diminished over the past decade. Using constant dollars, average annual teacher salaries declined between 1995 and 2005 nearly $7,000, although average initial salaries increased by nearly $3,000. Over the same period average private sector salaries increased by nearly $9,000 (Gould et al., 2007). Today, Connecticut has the fourth highest Median Family Income of any state in the country (United States Census Bureau, 2008). These data suggest that teachers moving from other careers to teaching can expect a good initial salary when compared to national trends and good salaries over the course of their careers, if diminished compared to what teaching once paid compared to the private sector. It would seem that career changers entering teaching might be aware that teaching both pays well in Connecticut and demands a pay cut, in aggregate, when compared to their previous work. In other words, teaching may not pay as well as

the career they are leaving, but it allows for the maintenance of a comfortable standard of living.

As of December 2007, Connecticut had an unemployment rate of 5.0%, close to the national rate of 4.8% (Bureau of Labor Statistics, 2008d). Over the course of 2007 and into 2008, the unemployment rate slowly rose. For career changers, this might signal a risky economy in which to leave steady employment, with less assurance of returning to previous work if teaching proves unpalatable. Connecticut has an overall poverty rate of eight percent with ten percent of children under eighteen living below the poverty line. This translates to twenty-seven percent of enrolled students eligible for free and reduced lunch. Still, despite Connecticut reflecting the national trend of a slowing economy, it remains a very wealthy state. With Hartford the home of the insurance industry, the finance and insurance sector accounts for eighteen percent of the state GDP. While these numbers point to the relevance of this sector, on even a brief trip to Hartford one feels the influence of the insurance industry, from the names topping buildings and underwriting festivals to the prevalence of people working directly or otherwise in insurance. While less inseparable than a true company towns such as Gary and steel, spending time in Hartford—in effect an industry town—ignorant of the influence of insurance is akin to a visit to Detroit without seeing evidence of the auto industry. Additionally, real estate and manufacturing account for large segments of the economy (Bureau of Economic Analysis, 2008a).

The Median Family Income for the state sat at $60,500 in 2006 (Gould et al., 2007), as mentioned above, the fourth highest in the nation. Accompanying the high incomes is the high cost of living. The Consumer Price Index (CPI) in Connecticut is the highest in the nation registering 236 in May 2008, compared to the national average of

216 (Office of Prices and Living Conditions, 2008). To some extent, the generous

teaching salaries are cancelled out by high living costs in the state.

Table 5.1

Racial distribution of teachers, students, and overall population of Connecticut, in percent

Program	American Indian			African American			Asian/Pacific Islander			Hispanic			White		
	Total	Teacher	Student	Total	Teacher	Student	Total	Teacher	Student	Total	Teacher	Student	Total	Teacher	Student
Connecticut	*	#	*	10	#	14	3	#	4	9	#	15	78	#	64
ARC	!	0	!	!	5	!	!	0	!	!	8	!	!	86	!
US Average	*	*	1	12	6	17	5	1	5	15	5	20	74	90	57

Note: Totals may not add up to 100% due to rounding and selecting more than one race; * Less than 1%; ! Not Applicable; # Connecticut teacher data only specifies "minority" and does not disaggregate by race—7% of Connecticut teachers were classified as minorities and 93% as white; Connecticut total and student data from (United States Census Bureau, 2000b); Connecticut teacher data from (Connecticut State Department of Education, 2006); US total data from (United States Census Bureau, 2006); US teacher data from (National Education Association, 2003); US student data from (National Center for Education Statistics, 2008c)

More than any other state in which the programs in this study are based,

Connecticut has a more cosmopolitan ethnic mix, with African-Americans and Hispanics,

both comprising significant minorities, ten and nine percent, respectively. Still, the state

is predominately white, accounting for seventy-eight percent of the population, with an

Asian population of three percent (United States Census Bureau, 2000b). This compares

to a student distribution in the state's public schools where whites make up sixty-seven

percent of enrollment, Hispanics fifteen, African-Americans fourteen, and Asian students

four. Only the white population has lower proportional representation among youth

than the total state ratio, following a demographic trend common across the country.

And among ARC candidates, white teachers make up a strong majority of candidates, in

proportions greater than either the white student population or the overall white population. There were also substantial numbers of Hispanic teachers, close to the overall proportion in the state. Compared to the composition of the overall teaching population in Connecticut, ARC candidates were slightly more likely to come from minority ethnic groups. The Connecticut Department of Education only published teacher ethnicity according to white and minority. The rate of minority employment is about 7 % (Connecticut State Department of Education, 2006), compared to the ARC minority enrollment of 14 %.

Career Transitions Program

Historically, Missouri was considered a border state, and though the term is most applicable to an era 150 years in the past, in many ways it remains apposite. Today, it continues to straddle a cultural border. In the southern tier of the state, and especially along the Mississippi River, the land, the dominant religions, the pace of life, the crops, and accent would not be out of place a couple hundred miles further south. The northern border has lived a different history, marked more by corn than cotton and more by open plains than the deep woods of the Ozarks. Sitting in the middle, as it has for more than two centuries, is Saint Louis. With its brownstones, narrow downtown streets, and constrained city borders at first glance Saint Louis resembles other old river cities to the East, like Cincinnati or Pittsburgh. However, digging a bit deeper exposes a racial history accompanying its frontier status that is still recalled by older residents. A tour of the city might pass the first African-American high school west of the Mississippi. Most school districts, both in the city and the suburbs, were integrated with *Brown v. Board* and students still enter buildings that were legally segregated during the lifetimes of some of their teachers. In some ways Saint Louis has never reached a comfortable resolution.

Despite an influx of immigrants in the last decade from hotspots like Ethiopia and Bosnia, regional racial diversity remains largely limited to black and white and mutual trust remains limited.

Trust is limited, too between Saint Louis City and the surrounding suburbs of Saint Louis County. Although today the details can be recounted by few, in 1876 the regions divorced, with the city determining that it was being held back by the then rural and sparsely populated county. And for many decades the city was the more urbane belle-of-the-ball looking down its nose at the neighbor who surrounded it on three sides. Gradually with white flight and changing economics of the region, the county has enjoyed financial and cultural ascendancy, so that even if the city crawled back begging for forgiveness, the country would not be wont to reconnect. Today, to many residents of the suburbs the city is entered only for a ballgame or a visit to the Arch or zoo, and then only with caution. In the past sixty years the city's population has been in a steady decline, now with a population under 350,000 (United States Census Bureau, 2000e) in of a region with a population of 2,500,000 (United States Census Bureau, 2003). At the same time the student population in SLPS is declining at a rate of more than 1,000 students annually, with a 2007 student enrollment of 37,000 (Missouri Department of Elementary and Secondary Education, 2007a), although some estimates put the actual number closer to 28,000 , a thirty-six percent decline in just six years (Giergerich, 2008). Finally, the city has one of the nation's oldest housing stocks with half of the city's residences built prior to World War II.

It is within this memory that the Saint Louis Public Schools operate. Although the city remains largely evenly split between its black and white population—fifty-one and forty-three percent (United States Census Bureau, 2000e), respectively—the school

district does not reflect this diversity; instead, African-American students comprise nearly eighty-two percent of student enrollment, with white students limited to less than fourteen percent (Missouri Department of Elementary and Secondary Education, 2007a). (Saint Louis County, in contrast, is seventy-six percent white and nineteen percent African-American.) Not unlike other urban districts throughout the country, SLPS are charged with the responsibility to educate impoverished students coming from homes where their own parents' educational attainment was limited. In SLPS, eighty percent of students (Missouri Department of Elementary and Secondary Education, 2007a) are eligible for free and reduced lunch, compared to thirty-six percent in Saint Louis County public school districts (Missouri Department of Elementary and Secondary Education, 2007c). The current graduation rate for SLPS is fifty-six percent. Within the city seventy-one percent of adults over twenty-five have at least a high school diploma and nineteen percent have a bachelor's degree or higher. When compared to the entire region those rates grow to eighty-four percent with a minimum of a high school diploma and twenty-seven percent with a bachelor's degree or higher. When measured only against Saint Louis County, the closest and most populous suburbs, the diploma and bachelor's degree attainment numbers jump to eighty-eight and thirty-five percent, respectively. Therefore, the regional perception flourishes that Saint Louis Public Schools are little more than holding pens for unteachable students. Yet, this picture of intractable educational failure is too simple. Waves of migration, though admittedly small in numbers, have witnessed many students achieving at the highest levels. Added to this milieu is an extensive magnet program, including a gifted and talented magnet sequence that consistently ranks as among the highest achieving schools in the state.

A twenty-five year old court mandated busing program between the city and many county school districts, augments this perception. Through the program, students of African descent can voluntarily attend and be bused to a suburban district that has a student minority population of less than twenty-five percent. This has led to many students leaving SLPS for the wealthier surrounding districts. In return, and much less utilized, suburban students can choose to attend SLPS magnet schools.

Table 5.2

Racial distribution of teachers, students, and overall population of Saint Louis, in percent

Program	American Indian			African American			Asian/Pacific Islander			Hispanic			White		
	Total	Teacher	Student	Total	Teacher	Student	Total	Teacher	Student	Total	Teacher	Student	Total	Teacher	Student
Saint Louis City/Public	*	*	*	51	61	82	2	1	2	2	*	2	43	37	14
CTP	!	0	!	!	45	!	!	4	!	!	1	!	!	49	!
Saint Louis County	*	@	*	19	@	40	2	@	3	1	@	2	76	@	55
Missouri	*	*	*	11	6	18	1	*	2	2	*	3	84	93	76
US Average	*	*	1	12	6	17	5	1	5	15	5	20	74	90	57

Note: Totals may not add to 100% due to rounding and selecting more than one race; * less than 1 %; ! Not Applicable; @ Data not available; Saint Louis City total data from (United States Census Bureau, 2000e); Saint Louis City teacher data from (Missouri Department of Elementary and Secondary Education, 2008); Saint Louis City student data from (Missouri Department of Elementary and Secondary Education, 2007a); Saint Louis County total data from (United States Census Bureau, 2000g); Saint Louis County and Missouri student data from (Missouri Department of Elementary and Secondary Education, 2007c); Missouri total data from (United States Census Bureau, 2000c); Missouri teacher data from (Division of teacher quality and urban education, 2008); US total data from (United States Census Bureau, 2006); US teacher data from (National Education Association, 2003); US student data from (National Center for Education Statistics, 2008c)

For this discussion I will discount ethnicities other than African-American and White. The numbers of other ethnicities at all levels are simply insubstantial in

comparison. These data do show a pattern at the state, county, and city levels of high proportions of African-American students compared to their prevalence in the total population. Likewise, white students have low enrollment proportions compared to their prevalence in the total populations. Outside of simple changes in demographics patterns in the state, there are a couple of additional explanations for the apparent discrepancy. First, the data reported above includes only students in public schools. Catholicism is the prevailing religion in Saint Louis and the parochial school system from PreK-12 is extensive. Likewise, there is a large network of other religious-affiliated and independent schools. Although there are exceptions, these schools are overwhelmingly white. Additionally, the Saint Louis County enrollment data includes students from Saint Louis City who attend school in Saint Louis County through the Voluntary Desegregation Program. This would result —as designed—in higher proportions of students of African decent in the suburban schools.

Although not approaching the rates of African-American enrollment across the district, CTP did have high proportions of African-American candidates when compared to other programs. Compared to the existing teaching force, CTP candidates were slightly more likely to white and much more likely to be male (Missouri Department of Elementary and Secondary Education, 2008). However, data on the existing SLPS faculty were not disaggregated by grade level and included administrative personnel. Teacher race and ethnicity data was not available for the surrounding suburban schools.

Additionally, for the past several years SLPS district leadership has been in turmoil. Successive turnover on the school board has led to bitter disputes among board members and a revolving door in the superintendent's office. In 2006, the district lost accreditation and was taken over by the State of Missouri after being on probation for

unsatisfactory student performance for several years. The state appointed its own school board who hired yet another superintendent, all while the elected school board refused to resign, creating serious questions of where oversight responsibilities lay. And most recently, upon the urging of Secretary of Education Margaret Spellings, the Missouri legislature has passed and the governor has signed legislation permitting certification through the American Board for Certification of Teacher Excellence (ABCTE) to meet the reported 400 teacher shortage in SLPS (Logan, 2008). This complicated recent history also includes the added pressures of consistent struggles to achieve Adequate Yearly Progress under the No Child Left Behind Act, resulting in attempts to improve student performance, often varying from one school to the next.

Like much of the Midwest, Saint Louis's economy has struggled during the rust-belt decline. Once a heavy manufacturing center for cars, planes, and clothing, today much of the large industry has left. Strength in the financial services (seven percent of state GDP), healthcare (eight percent of state GDP) (Bureau of Economic Analysis, 2008b), and, of course, brewing sectors allows the region to maintain a steady, if not expanding, economy. State unemployment sat at 5.5% in December 2007 (Bureau of Labor Statistics, 2008d)with the Saint Louis region a tick lower at 5.4% (Bureau of Labor Statistics, 2008e); both are a bit higher than the national rate of 4.8% and rank in lower third of both states and regions. In comparing the county to the city, the picture changes slightly. The state's poverty rate stands at roughly twelve percent for all residents and fifteen percent for children under eighteen. Saint Louis County's poverty rate is seven percent for all residents and nine percent for youth. Saint Louis City's rates are twenty-five and thirty-six percent, respectively (United States Census Bureau, 2000c, 2000e, 2000g).

Missouri has an average beginning teacher salary around $29,000 and an overall average salary of $39,000 (Gould et al., 2007). Teachers in SLPS had a slightly higher average salary of nearly $40,500 (Missouri Department of Elementary and Secondary Education, 2007a). The state beginning teacher average salary is slightly lower than the national average that approaches $32,000. SLPS has a beginning teacher salary of $33,400 (Missouri Department of Elementary and Secondary Education, 2007a), or slightly larger than the state average and consistent with first year teachers nationwide. The overall average salary for both the state and SLPS teachers trails substantially behind the national average of $47,500, placing the state in the bottom ten nationally in teacher pay (Gould et al., 2007). Although there are no numbers aggregated at the regional level for beginning teacher pay, the overall average salary for Saint Louis County districts was more than $51,000 (Missouri Department of Elementary and Secondary Education, 2007b), more than $10,000 higher than either the state or SLPS average and higher, too, than the national average. In total, the data constructs a portrait where the teachers in SLPS get paid substantially less to work in what are often perceived to be more challenging schools than the colleagues just a few miles—and sometimes only a few hundred yards—away in Saint Louis County.

In 2006 dollars, Missouri has a Median Household Income of $44,500 (United States Census Bureau, 2008). Saint Louis County had an MHI of nearly $61,100. Saint Louis City had an MHI of $32,800 (United States Census Bureau, 2000c, 2000e, 2000g, 2008). The county rate is much larger than the national MHI of $48,023. The state MHI is slightly lower than the national average, while the MHI for the Saint Louis City is substantially lower than the surrounding region. Additionally, the cost of living in the Saint Louis region is lower than the national average. The CPI for the Saint Louis region

in May 2008 was 194, compared to the national index of 216 (Office of Prices and Living Conditions, 2008).

As with at the other sites, this data only offers a hint at the cost of living relative to the rest of the country. In general it suggests that costs are slightly lower than average, with a dollar going a bit further in the Saint Louis region than elsewhere. The sharpest distinction, however, comes from the discrepancies in the MHIs between the city of Saint Louis and the surrounding suburban communities. With half the income and more than twice the poverty rates, Saint Louis City knows an economic milieu different than most of its neighbors. As with many metropolitan areas, the densest pockets of multi-generational poverty are closest to the city center and profoundly effect the operations of the schools, from recruiting and retaining teachers to teaching students.

Northern Plains Transition to Teaching

The Great Plains and the front range of the Rockies retain a mythic status in the US. The eerie and rugged Badlands and Black Hills of South Dakota, Montana's "Big Sky Country," and the beauty and ecological diversity of Yellowstone are cast against the breadbasket image of combines harvesting wheat and cowboys driving their cattle. The continued legacy of American Indians remains as palpable the libertarian streak that paints the region. Today, as small farming communities slowly disappear from maps, Indian reservations remain populated, if economically impoverished, communities. States largely without highly competitive colleges and universities, education historically has been more appreciated for its pragmatic value than as an end in itself. Politically, this region has a long favored a libertarian spirit typically resulting in Republican strongholds in statewide and national elections. More recently, this has begun to change as both Montana and Wyoming now have Democratic governors, and three of the six US

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Senators and one of the three of the US Representatives are Democrats, reflecting maybe more than anything the proudly held independence of the region.

Wyoming, Montana, and South Dakota are among the most rural in the nation, ranking forty-ninth, forty-eighth, and forty-sixth respectively in population density (United States Census Bureau, 2000a). Sioux Falls is the largest metropolitan area, although ranking 203rd in metropolitan population in US, with a population of 187,000. And with limited candidate enrollment from South Dakota and Sioux Falls's location in the far southeastern corner of the state, it is exceedingly generous to suggest that the city is the cultural or commercial center of the region. More representative is the second largest metropolitan area in the region, Billings, with a national rank of 263 and a population of 139,000 (United States Census Bureau, 2003), sneaking in right ahead of Battle Creek, Michigan. By any measure, these states are extremely rural often with extensive distances between population centers. For residents in the most remote towns, it is not uncommon to travel an hour or more for groceries. Many NPTT candidates are originally from the region or have been living there for a decade or more, over the years growing accustomed to both long commutes and limited local amenities. Despite the rural character of the states, many of the most rural towns have gradually been emptying. Particularly in farming communities on the Great Plains, youth are not returning to farms upon high school graduation, moving, instead, to larger towns. Therefore, across the Plains there has been a steady drift, if not to true urbanization, away from the farm.

Throughout the region the population has long bemoaned the influx of new residents. California homesteaders—whether truly from California or not—are viewed with suspicion and are seldom welcomed into the fabric of the community for many

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years. In South Dakota[10], thirty percent of the population were born outside of the state

(United States Census Bureau, 2000c). In Montana, forty-one percent of the population

were born outside of the state (United States Census Bureau, 2000d) and in Wyoming,

fifty-five percent were born in another state (United States Census Bureau, 2000h).

Additional data suggest that people continue to move to the region, or at least to

Montana. Montana experienced a thirteen percent population growth between 1990 and

2000 with population projections suggesting growth slowing by 2030 to a population of

1,050,000, or a sixteen percent growth over the 2000 census (United States Census

Bureau, 1990a, 2000d, 2005c). Wyoming experienced a more modest growth rate of eight

percent between the last two decennial censuses with total population expected to reach

523,000 by 2030, only a six percent growth over the same thirty years (United States

Census Bureau, 1990c, 2000h, 2005b). Still, even in Wyoming, there have been areas of

enormous growth. Jackson had the fourth largest growth of any micropolitan area in the

country between 1990 and 2000 in terms of percentage increase, an expansion of two-

thirds (United States Census Bureau, 2003). Jackson, likewise, produced all but one of the

Wyoming candidates in the NPTT sample. South Dakota has seen growth similar to

Wyoming with the population expected to grow by six percent between 2000 and 2030 to

a total population close to 800,000 (United States Census Bureau, 1990b, 2000f, 2005a).

All candidates in the NPTT program were non-Hispanic whites. This somewhat

reflects the racial and ethnic composition of the NPTT region. Montana's population is

ninety percent non-Hispanic white, six percent American Indian, and two percent

Hispanic. Similarly, Wyoming's population is eighty-nine percent non-Hispanic white,

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[10] Although South Dakota is included as one of the three states in the NPTT service area, there were no candidates from the state in my sample. Therefore, this contextual discussion does not consider South Dakota as thoroughly as the other two states.

two percent American Indian, and six percent Hispanic. South Dakota's population is

eighty-eight percent non-Hispanic white with a nine percent American Indian

population. Although there was one candidate currently teaching on an Indian

reservation and a second considering moving to a reservation, there were no indigenous

candidates; neither were there any candidates of Hispanic origin despite a growing

population, particularly in Wyoming. Still, all three states remain largely white.

Table 5.3

Racial distribution of teachers, students, and overall population of NPTT states, in percent

Program	American Indian			African American			Asian/Pacific Islander			Hispanic			White		
	Total	Teacher	Student	Total	Teacher	Student	Total	Teacher	Student	Total	Teacher	Student	Total	Teacher	Student
MT	6	3	11	*	*	1	*	*	1	2	*	2	90	97	84
WY	2	@	4	*	@	2	*	@	1	6	@	9	89	@	85
SD	8	1	10	*	*	2	*	*	1	1	*	2	88	98	85
NPTT	!	0	!	!	0	!	!	0	!	!	0	!	!	100	!
US	*	*	1	12	6	17	5	1	5	15	5	20	74	90	57

Note: Totals may not add to 100% due to rounding and selecting more than one race; *
Less than 1 %; ! Not applicable; @ Data not available; Montana total data from (United
States Census Bureau, 2000d); Montana teacher data from (Montana Office of Public
Instruction, 2005); Montana student data from (National Center for Education Statistics,
2008b); Wyoming total data from (United States Census Bureau, 2000h); Wyoming and
South Dakota student data from (National Center for Education Statistics, 2008a); South
Dakota total data from (United States Census Bureau, 2000f); South Dakota teacher data
from (Office of Finance and Management, 2007); US total data from (United States
Census Bureau, 2006); US teacher data from (National Education Association, 2003); US
student data from (National Center for Education Statistics, 2008c)

Just as NPTT candidates are overwhelmingly white, so to is the existing teacher

population. In the 2005-2006 school year, ninety-seven percent of all classroom teachers

in Montana were non-Hispanic white, less than three percent were American Indian, and

no other race or ethnicity accounted for more than one half of one percent of the state's

teaching force (Montana Office of Public Instruction, 2005). The state's student

population, while largely white like that of teachers and the state, did exhibit greater

diversity than the overall population. The non-Hispanic white population is about

eighty-four percent and the American Indian population is eleven percent (National

Center for Education Statistics, 2008b). Hispanics comprise about two percent of the

total student enrollment, while Asian and African-American students are about one

percent each. Wyoming had similar percentages of white students to Montana with lower

rates of American Indian students and higher rates of Hispanic students (National Center

for Education Statistics, 2008a). No data was available on Wyoming teacher ethnicity.

The numbers of African-Americans, Asians, and, in most states, Hispanics are all

quite low with the percentage representation in teaching close to the representation at the

state level. Likewise, the small numbers of students from these categories are insufficient

to draw any conclusions. However, white teachers are consistently represented in higher

proportions than in the overall population. In addition, non-white students represent

higher proportions than non-white teachers suggesting that minority students appear to

have limited exposure to teachers from their own ethnicity in their classrooms.

NPTT seeks to attract candidates who have distinguished themselves in part

through their academic success, placing high value on undergraduate and graduate

credentials. As a region, the NPTT states have high school graduation and bachelor's

degree rates that are consistent with national averages. In Montana, eighty-seven percent

of the population twenty-five or older have a high school diploma or higher and twenty-

four percent have at least a bachelor's degree (United States Census Bureau, 2000d). In

Wyoming eighty-seven percent have at least a high school diploma and twenty-two

percent have a bachelor's degree (United States Census Bureau, 2000h). In South

Dakota, those numbers are eighty-five and twenty-two percent respectively (United States Census Bureau, 2000f). When compared to the national averages of eighty-four percent completing high school and twenty-six percent with at least a bachelor's degree (United States Census Bureau, 2002), these rates reflect a population that completes high school and college at rates largely commensurate with national averages. This might suggest that NPTT has an applicant pool with knowledge and skills neither greater nor lesser than most states, but representative of the nation as a whole.

In general, the West is enjoying the nation's strongest economy, with the three states comprising NPTT reflecting this trend. As unemployment rates crept higher throughout the country, Wyoming and South Dakota retained an annual rate of 3.0 percent in 2007, with Montana only slightly higher at 3.1 percent (Bureau of Labor Statistics, 2008c). When compared to a national average of 4.6 percent for the year, jobs are readily available, potentially suggesting that making the move to a new career is less stressful than in other regions of the country with the availability of jobs providing a fallback if the move is unsuccessful. Despite the strong economy, median family income is consistently below the national average in all three states, buffered somewhat by lower than average costs of living. Using 2005-2006 averages (in 2006 dollars), Montana has a median household income (MHI) just under $40,000. Wyoming's family income is closer to the national mean ($48,000) with a median of $46,500. South Dakota's is a bit lower at $45,000 (United States Census Bureau, 2008). While there is no CPI data collected at the state level in these states, the western US index for medium sized cities registers at 134, substantially lower than that of any other program and far below the national average of 216 (Office of Prices and Living Conditions, 2008).

Compared to the national average of $31,753, Montana and South Dakota have low initial teacher salaries while Wyoming's is nearly on equivalent to the national mean. According to the American Federation of Teachers annual salary survey for 2004-2005, Montana has a beginning teacher salary of $25,318, Wyoming has an initial salary of $31,481, and South Dakota teachers average $26,111 in their first year. Montana and South Dakota are among the lowest beginning salaries of any state in the country, ranking forty-eighth and forty-seventh, respectively; Wyoming ranks twenty-fourth (Gould et al., 2007). When considering average salary, South Dakota is last in the nation, with an average salary of $34,000. Montana is forty-third, with an average salary of $38,500. Wyoming is thirty-fifth with an average salary of $40,500. The national average is approximately $47,500 (Gould et al., 2007). The Plains high rates of employment and low costs of living combine to allow their dollar to buy much more than that same dollar in other regions of the country.

A broader picture of the region shows an economy with larger than average agricultural, tourism, and, particularly in Wyoming, mining segments. Wyoming's extensive gas and coal reserves have powered the economy and filled the state treasury in such a way that beginning teacher salaries are larger than in most surrounding states. With each state home to at least one large and popular national park, it is not surprising to see tourism play a large part in the economy. This was reflected in the prevalence of NPTT candidates' previous work in the service and tourism industries.

Montana has an overall poverty rate of 14.6% and a child poverty rate of 18.4% (United States Census Bureau, 2000d). Wyoming has an overall poverty rate of 11.4% and a child poverty rate of 13.8% (United States Census Bureau, 2000h). South Dakota has an overall poverty rate of 13.2% and a child poverty rate of 16.7% (United States

Census Bureau, 2000f), all mostly consistent with the national average of 12.4% for the full population (National Center for Education Statistics, 2000). Using free and reduced lunch (FRL) figures to represent school age poverty rates, in Montana thirty-five percent of students are eligible for FRL; in both Wyoming and South Dakota thirty-two percent are FRL eligible. All three states have FRL rates below the national average of forty percent (National Center for Education Statistics, 2008a, 2008b). Poverty remains pervasive on Montana and South Dakota's many American Indian reservations. Likewise, in the small farming communities on the plains, poverty grows, while services dwindle.

In conjunction these data present a picture of a region with low incomes relative to national averages, although buffered by low costs of living. Teachers' salaries, although lower than national averages, as a percentage of median family income, are relatively consistent with national rates. Poverty remain pervasive, but, not out of line with national averages. Low unemployment rates suggest growing economies and a market favorable to employees, mitigating the risk of changing careers. Aggregated at the state level, the numbers presented above do not account for large differences within states. Anecdotal stories suggest that individual districts have increased salaries precipitously in hopes of attracting superior teachers. In some cases this is due to a district's isolation, believing that greater salaries are needed to draw anyone to the school (Judy Randazzo, Personal Interview, 28 January 2008). In other cases communities have chosen to increase salaries in hopes of improving teacher quality in a market without labor shortages (Karen Davis, Personal Interview, 28 January 2008). In total, the rural nature of the region seems to provide ample need for new teachers, so long as they are

willing to move to accommodate job openings, a consideration explicitly stated in the

NPTT student handbook.

Chapter 6

Discussion Across Programs, Candidates, and Contexts

Thus far, I have presented data on programs, candidates, and context largely in isolation. I hope that the data are clear in suggesting that there are commonalities across these three domains, as well as that great diversity exists within each. As suggested by Humphreys, it is misleading to expect that describing a program's design be ample to make accurate assumptions about the candidates populating the program; instead, he emphasized looking across programs at candidates who share common characteristics as the appropriate unit of analysis. However, defining such a group has also proven more difficult than first blush might suggest. As assumed by both supporters and those skeptical, career changers do not appear to define a single distinct group. As with programs, career changers assume multiple profiles and while those profiles correlate to individual programs, they remain a partial description.

If career changers do not define Humphreys's "subgroup of individuals from different programs with similar backgrounds and experience who work in the same or similar school settings" (2007, p. 30), each of the portraits might. Yet, even candidates from each profile ultimately choose to teach in a variety of settings, both as determined by the design of their program and by, seemingly, personal preferences. Therefore, including local context in this equation might more fully account for the decisions made by programs and the candidates who populate them

As I begin to build a case for the interrelation of programs, candidates, and local context, I should reiterate that this is not an attempt to compare sites to each other, but to fully account for sites by what makes them unique. Local context serves as a sort of matchmaker, both shaping the candidates and the programs that develop in a particular

region and guiding them to each other. Certain candidates are then attracted to certain programs, as those programs reflect shared local values, opportunities, and perspectives, making a case for why certain candidate characteristics might cluster around certain sites. Let me look first at the Connecticut ARC program.

The ARC program is most distinguished by speed in which candidates earn full certification. In the program cluster analysis in Chapter 3, ARC was placed in Cluster 1, the cluster distinguished by the speed in which candidates enter the classroom as the teacher of record and the speed in which they earn certification. ARC candidates are eligible to earn full certification—upon the recommendation of their administering superintendent—potentially within six months of entering the program in early summer. ARC trumpets the academic achievement of its candidates and the candidates do, in fact, come readily from more selective institutions and leave more lucrative jobs for the classroom. Many of the stay-at-home parents who populate the program, themselves, left solid professional jobs, albeit often more than a decade ago. In total, the emerging picture of the ARC candidate is a highly educated, highly successful professional entering teaching motivated to find work that has greater social reward than that found in previous work. When compared to the context of the state this characterization of candidates is not surprising. The high standard of living is matched by a high regard for education. Teachers are the best compensated in the nation and, when compared to the states housing the other programs, Connecticut has high levels of educational attainment. In a state that values education, it is not surprising that a program like ARC is successful in attracting candidates from relatively high paying professional work to find good paying—even if an overall pay cut—teaching jobs that maintain, or even elevate, their status in the community. As such, this might help explain why the Connecticut ARC

program is populated with candidates who mostly closely resemble the assumptions of supporters of career changers. Likewise, high achieving suburban schools view new teachers from professional backgrounds as good desirable hires. These same trends might suggest why ARC enrolls a large number of stay-at-home-parents. Several of these parents describe leaving good paying jobs to raise their children. As their children are about to enter college—very much the expectation in the state—the parents are returning to work, now seeking teaching positions.

However, despite trends in the program, not all candidates fit the classic model of a career changer. In excess of fifteen percent of ARC candidates fell into the socially mobile and career seeker portraits or their corresponding groups from the cluster analysis. Despite an overall strong academic background and relevant experience, one in three ARC candidates still did not fit the assumed career changer profile. And, while, the cohort remains predominately white, it does have a higher minority composition than Connecticut teachers as a whole. Despite being in many ways a "suburban state," Connecticut is far from monolithic. While it has high rates of bachelor's and master's degree, it has slightly lower rates of high school graduation than the other states in the study, and despite high median family income, there are large pockets of poverty. In a state where education is highly prized and teachers well compensated, it is tenable that some candidates lacking the ascribed characteristics of career changers chose ARC as a quick path to middle class income and status. Whereas more prosperous districts may view classic career changers and capstoners as encompassing desirable traits in a teacher, in lower resource districts these—by some measures—less attractive candidates may be an alluring alternative to the permanent substitutes and emergency certificates with which they are used to filling their classrooms. Regardless of their motivations for entering the

program, the diversity of the candidates suggests while there may be strong trends in the program, the candidates reflect the diversity of the state, where many are wealthy and well educated, but an important subset may be neither.

Saint Louis's Career Transition Program provides a contrast. Candidates from the socially mobile and career seeker portraits—or the analogous Clusters 1 and 2—comprise nearly two-thirds of candidates placed by the cluster analysis in CTP. For many of these candidates—who grew up in working class households, did not matriculate through a traditional bachelor's program, worked many years in relatively low paying and low status jobs—teaching represents an initial entry into the middle class and its associated status and income. These candidates often lack the elite academic and experiential pedigree assumed of career changers. The confluence of the program, candidates, and local context indicates several factors that together begin to coalesce into a suggestive narrative. This can in part be explained by the CTP's sole placement in Saint Louis Public Schools (SLPS). To a large urban district with high numbers of failing schools, large percentages of students in poverty, systemic turmoil, low local status, and high numbers of teaching vacancies, CTP candidates—regardless of their background—are an upgrade over permanent substitutes and emergency certified teachers. While neighboring suburban districts with lower rates of teacher turnover and greater stability within their systems might look at the same candidate more skeptically, cautious of inconsistent employment records and the long-term commitment of older entrants, CTP and SLPS see candidates with a commitment to social justice, a minimum of five years in the district, continuing education to full certification and a master's degree, and candidates who understand the culture of the schools. In turn, SLPS appeals to socially mobile candidates despite, or maybe even because of, its regional

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marginalization. In addition to entry into middle class status, SLPS represents a comfortable environment for candidates who themselves often came from modest backgrounds.

Additionally, CTP has a comparatively large African-American population, mirroring the SLPS student body. Therefore, for CTP candidates, teaching in SLPS provides increased community status, relative financial security, and the potential to affect the lives of kids who share common life experiences while in a familiar cultural setting. Informally, several candidates confided that their own substandard public school education was a motivating factor to teach; they voiced the limited academic opportunities available to African-American students and viewed their entry into the profession as an attempt to make the impact in the lives of black students they lacked in their education.

And beyond race, one white candidate expressed his comfort in teaching in a predominately African-American high school that happened to abut the neighborhood in which he grew up and he has now returned. Familiarity with the immediate geography and culture surrounding the school superceded the potential barriers imposed by racial differences. For career seekers, CTP offered a limited investment that reaped the rewards of a real job paying a decent salary, a free master's degree, and, akin to the Teach for America sales pitch, at least a few years serving in a high needs school district.

The relative status of the University of Missouri Saint Louis is also worth briefly considering. UM—Saint Louis is a commuter university dedicated to serving non-traditional students. That the candidates who populate CTP were in large part non-traditional undergraduates is consistent with the student body as a whole. Regardless of the quality of the preparation, in some sectors of the Saint Louis region the very mission

of UM-Saint Louis leads to a perception of inferiority, regardless of whether the reputation is deserved. For a socially mobile candidate this may not pose challenge. However, one could speculate that for a candidate with a more distinguished academic or employment history, attending a program housed at UM-Saint Louis might demand additional consideration. If a more universally esteemed institution in the region housed an identical program, it would be easy to imagine a different composition of candidates.

Still, CTP is not composed solely of these ostensibly "less attractive" candidates. While socially mobile candidates are in part motivated by the social justice commitment of working in urban schools, so too are many of the classic career changers enrolled in the program, even if only for a limited number of years. In fact, all of CTP's promotional material states the program prefers candidates dedicated to serving the urban poor, a theme that is continually raised in the application and interview process. As students move through the program, coursework focuses to race, class, and privilege, with Freire, Ladson-Billings, Delpit, and Kozol punctuating syllabi. Additionally, and unique to CTP from my research, there are several candidates with academic and career backgrounds in the visual and performing arts. For these candidates filling a shortage in these fields in the Saint Louis schools creates a more secure income stream while allowing them to remain in their chosen discipline and benefit from a schedule permitting them to continue to pursue their own studio and performance projects. These additional motivators suggest that, while the educational, economic, and cultural context in which CTP lives attracts many candidates for whom the program represents a path to middle class success, the program must also accommodate candidates with myriad characteristics and motivations.

Montana State's NPTT program convenes a new set of factors—rural geography, on-line format, and stay-at-home parents returning to the workforce. Here, though, the

pathway of the interaction seems to be slightly different. In both ARC and CTP, there are direct links between the decision to teach and regional economic and cultural factors. In Connecticut, the esteem in which education is held and its accompanying compensation help draw classic career changers into a fast-track preparation program. In Saint Louis, a school labor market favorable to employees, the opportunity to engage in social justice work, and a free master's degree unite to present a singular opportunity for class ascension. In both Connecticut and Missouri, however, one could imagine alternate successful program designs, and, in fact, other options do exist. Out west, in contrast, the rural context demands the on-line program design. The three states comprising the NPTT service area covers in excess of 300,000 square miles while populated by just over 2,000,000 people. The distances between towns makes commuting to the limited number of campuses a challenge that creates potentially fertile ground for on-line learning. (By comparison, Connecticut has about 3,500,000 people in an area of 5,500 square miles.) Further, rural districts struggle to attract teachers.

For stay-at-home parents (moms, really), the on-line format proves ideal. Although few had previous experience as teachers, the combination of ease of entry and their experience as parents makes teaching an attractive second career. Yet, until informed of the program, many primary caregiver candidates had not seriously considered a teaching career. Judy Randazzo provides a perfect example. Although now teaching English in a rural Wyoming high school, her real passion was to be a librarian. However, a clear and mostly painless path to teaching presented itself, while there was no equivalent for the library sciences. The on-line option resonated with candidates already engaged in the caring work of parenting. Even if previously considering teaching, being gone for several hours at a time—between classes and the commute—in an on-site

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program was not practical for many. On-line, candidates could complete coursework in the twenty minutes blocks that present themselves throughout the day or after children are in bed.

Again, as with the other target program, the largest portrait is not the only one. In particular, NPTT has a large proportion of candidates in their late 20s and early 30s who have yet to settle on a career. In part they have been drawn west by the tourism industry, often working at the ski resorts, hiking and rafting companies, or the associated service industries. Now seeking steadier work, teaching provides the combination of professional status, community service, and a schedule that will continue to accommodate recreational pursuits, such as raised by Nick Evans. And for these career seeking candidates, too, the on-line format is attractive. Generally employed in jobs not accustomed to standard or consistent hours and occasionally in work, such as leading backpacking expeditions, that demands engagement for days at a time, a conventional course structure is often prohibitive. Nick, in fact, expressed the need to be able to continue with his full-time, if eclectic, work schedule while seeking certification.

Humphrey and Wechsler propose looking across sites at candidates of similar backgrounds as the appropriate unit of analysis. What seems obvious from my study is that career changers do not comprise a single subgroup, but many. Moreover, although there are similarities between candidates of a particular portrait across programs, local contextual factors also lead to important nuances within each portrait. For example, while younger candidates first entering teaching—the career seeker portrait—exist in similar proportions at all three sites, within ARC there are several candidates who have recently completed masters and even terminal degrees only to decide that the path they have pursued is not ultimately rewarding. Teaching then, presents a new career option to

explore—and at little risk due to the limited nature of ARC preparation. In contrast, the same young candidates in CTP are more motivated by the social justice work of teaching in under-resourced urban schools. With candidates coming from the AmeriCorps program and other service experience, CTP is akin to a Teach for America opportunity. Finally, many young candidates in NPTT find teaching attractive, in part, because they can continue to pursue other interests over their vacations. While young candidates at all three sites share many characteristics and are truly attracted by to the work in classrooms, even within a group sharing similar career trajectories and academic backgrounds there are distinctions that reflect particularities of the local context.

Differences also appear within the primary caregiver portrait. Those in ARC program appear more likely to be entering the classroom after longer periods out of the workforce, motivated in part by a child heading to college and the need for additional income. They have enjoyed financial stability on a single income. In contrast, several stay-at-home parents in the NPPT program, as typified by Tonya Richland, are dependent on a dual income household and choose to return to full-time work once their youngest child enters school full-time. Additionally, many NPTT primary caregivers have pieced together limited employment while staying at home, including working a few hours weekly in church office, taking in additional children for daycare, or completing transcription out of the house.

And with the socially mobile portrait, race and gender appear to distinguish candidates between ARC and CTP. (There were no candidates in the NPTT placed in this portrait). Of the seven socially mobiles in the ARC program, three were women and six were white. In contrast, of the nineteen candidates from CTP, twelve were women and twelve were African-American. The same pattern held true for the cluster analysis,

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with two female and eight white candidates of ARC's nine Cluster 1 candidates, and six

female and five African-American candidates of CTP's ten Cluster 1 candidates (See

Table 6.1).

Table 6.1

Race and gender of Socially Mobile candidates and Cluster 1 candidates by site

		Socially Mobile		Cluster 1		
Program	Total	Female	African-American	Total	Female	African-American
ARC	7	3	1	9	2	1
CTP	19	12	12	10	6	5

This is partially a factor of the higher frequency of women and African-American

candidates enrolled in CTP, but these differences also emphasize the context of schools in

which candidates from each program are placed. CTP candidates, regardless of portrait,

are assured of being placed in a high poverty school, likely with high percentages of

minority students. In contrast, ARC candidates are only limited by the districts that will

hire them. Although I did not consider variables for race and gender in creating the

portraits, the diversity by program within portraits seems to reflect the local contextual

factors of school culture, economy, and labor markets. While the patterns of within

portrait diversity are less profound in the other three portraits, some differences persist.

In total, the portrait diversity suggests that while Humphrey and Wechsler's

caution in viewing programs as composed of uniform populations is well heeded, similarly

situated candidates across programs also lack true homogeneity, whether I define a

subgroup as all career changers or even by the identified portraits. Instead,

understanding local contextual factors is essential to knowing the needs and

characteristics that describe candidates.

There is a final complication raised by the interplay of candidate characteristics

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and local context that needs to be briefly explored. As has been the trend in public schools, candidates in each program largely resemble the students they will eventually be teaching (D. J. Boyd, Lankford, Loeb, & Wycoff, 2005). NPTT is all white, much like the rural population of the northern plains. ARC is predominately white. Only eight percent of candidates stated a strong preference for teaching in a "majority minority" school and eleven percent stated a strong preference for teaching in a high needs school. Candidates expressing a strong preference included all four African-American candidates enrolled in ARC. In contrast, all of the much more racially diverse CTP candidates would be placed in high needs schools and, likely, all in majority minority buildings. Additionally, as chronicled in Chapter 5, the Saint Louis Public Schools were plagued by low student achievement and institutional turmoil.

That CTP candidates are more likely to lack the desired characteristics forwarded by supporters of career changers, might raise concerns of social replication of educational inadequacies for the students most in need of quality teachers. Students struggling in SLPS end up with the teachers least qualified to provide a quality education. Meanwhile, the wealthy suburban students in Connecticut will benefit from the plurality of classic career changers prepared through ARC. However, the cases of two CTP candidates caution against simplistic assumptions.

Profiled in Chapter 4, Amana Collins was in the socially mobile portrait, a non-traditional undergraduate student who bounced between jobs, making enough to sustain a household, but never fully engaged in a clear career path until teaching presented itself. However, upon entering the classroom as a special education teacher, Amana discovered her combination of work in the courts, the city's foster care division, raising her own two children, and attending schools similar to the one in which she is teaching has prepared

her well for her new vocation. After her first few weeks teaching, she detailed a nearly seamless transition.

While William Mueller was placed in the job seekers profile, in many ways he closely fit the classic career changer profile. A former concert bassoonist, both his academic and professional experience mirrored the assumed characteristics of career changers. However, after only a few weeks, William was seriously considering leaving his job, frustrated with student behavior and his own effectiveness. William specifically voiced his concern that CTP failed to sufficiently prepare candidates for the cultural norms of both the students and the school.

First, let me be forthcoming and acknowledge that teacher effectiveness was beyond the scope of this research. As such, these observations are anecdotal based on two conversations. However, these cases suggest that a candidate's knowledge, skills, and professional experience may be an incomplete metric for potential classroom success. Understanding the cultural norms of the school and the students are also an important consideration. It is further possible to suggest that all else being the same, if William and Amana were candidates in either NPTT or ARC, they may have experienced quite different levels of success. William's skill set and cultural knowledge of a suburban school may have translated into classroom effectiveness while Amana may have lacked the necessary mastery of cultural mores of the school, the students, their parents causing her to question the appropriateness of her fit in that setting.

These two cases suggest that programs may also have learned—either consciously through the application and selection process or more intuitively—how to select candidates who are good matches for the context in which they are likely to teach. This would add an additional dimension to understanding the factors that deliver candidates to

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programs. CTP's "less qualified" candidate pool may translate into a teachers who better understand the challenges and realities of urban education, while ARC and NPTT may be better situated to teach in their respective suburban and rural settings.

In summary, there are four main findings that flow from the questions that initially motivated this study.

- There is great diversity with the career changer population.

The appellation career changer does not describe a subgroup of candidates populating alternative certification or general certification programs, but several subgroups. The knowledge, skills, experiences, and motivations of candidates in my study are extremely varied and more accurately described by several distinct portraits.

- The context, placement, and candidates shape the program, and programs attract certain types of candidates over others.

The confluence of local economic, historic, cultural, and labor market factors, along side program design and school placement tend to steer particular portraits toward particular programs. Connecticut's strong history of valuing education and more recent history of compensating teachers well correlates with a large percentage of candidates who reflect the broad associations of career changers. CTP partnership between a large commuter university and the high needs schools of the city of Saint Louis and the complicated racial past and present of the city presents an opportunity for candidates from modest means to enter middle class status. The long distances and limited higher education options out west makes the on-line structure an attractive alternative to stay-at-home parents looking to return to workforce. Additionally, data from both the directors survey and the three target sites identify candidates with higher levels of educational attainment seeking programs that delivered them to the classroom more quickly. Finally, programs enrolling

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candidates from more selective undergraduate institutions were less successful in placing these candidates in high needs schools and districts.

- Certain programs are likely to attract certain portraits of candidates, but candidates are not a homogeneous set within a single program.

Despite tendencies towards certain portraits within a program, nearly all portraits are represented at each site. The local context predisposes a program to attracting particular groups, but it is far from deterministic. The program, then, serves as an inaccurate level of analysis to understand who is entering teaching. Moreover, within portraits there can be a considerable range of candidate motivations and backgrounds, making the portrait itself only a tendency and not ironclad. Rather, true understanding comes from close examination of the local context.

- Certain candidates are better suited to certain programs and programs need to understand their context in order to select candidates with the best chance for success, remaining cognizant of how race, class, and gender are understood and enacted by both candidates and the students they will eventually teach.

Particular findings called easy assumptions about candidate characteristics and potential classroom effectiveness into question. Although teacher effectiveness and student achievement were outside the parameters of this study, the assumed definitions of what makes a good candidate may lack the complexity of classroom reality. While it is facile to argue that abundance of qualified candidates in the ARC program and comparatively weak backgrounds of CTP candidates replicates the inconsistent instructional quality in the most needy schools, the success some candidates displayed in their first weeks in these challenging schools stood in stark contrast to the despair expressed by others in similar placements. That the success was voiced by a supposedly lesser prepared teacher and

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frustration by the more attractive candidate, at least on paper, demands a deeper

discussion on what constitutes quality.

Chapter 7

Conclusions, Limitations, and Policy Recommendations

I began this discussion framing my questions as elucidating the potential policy implications for developing programs aimed at recruiting career changers to the classroom. As I proposed in Chapter 1, there were four policy aims met by attempts to broaden pathways to teaching for career changers—quality, equity, exigency, and fit. Let me now return to complicate the contentions assumed by the policies.

I did not endeavor to discredit the policy assumptions, but rather to stoke a richer discussion with regard to the central arguments. For each contention there is more than a kernel of reality. Career changers arguably improve the quality and equity of the teaching force and the programs are responding to demands of exigency and fit. Yet the reality is more nuanced and contextualized. Although my findings are inconclusive, this study presents a richer portrait of candidates and programs than the rhetoric surrounding career changers would suggest. In light of these findings, I offer some policy suggestions underscoring the finer distinctions of the implications of recruiting career changers to the classroom.

These policy aims can be seen as in some tension with one another, as Green's discussion of policy questions has suggested (1994). He proposed that a policy question may be defined as "a request for a fairly stable, but modifiable, line of action aimed at securing an optimal adjustment of the conflict between different goods, all of which must be pursued, but which, taken together, cannot all be maximized" (p. 2). Notable is his claim that any well formulated policy must identify the full set of values that are implicated in order to understand the inevitable tradeoffs among them. For policy initiatives aimed at attracting career changers the goals of teacher education, emphasizing

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proper training, development, and professional socialization operate in tension with the goal of reaching equilibrium in local teacher labor markets. One goal calls for relatively extended preparation, while the other for efficient delivery of new teachers to fill classrooms in hard to staff positions, schools, and districts. And further, within the call for this efficient delivery there appear to multiple policy aims of quality, equity, exigency, and fit that also demand tradeoffs.

An emphasis on candidate quality might limit the efficacy of career changers as a policy tool to meet staffing equity. Attempts to address equity might constrain the effectiveness of classroom fit. Quality might be sacrificed if there is a need to get a physics teacher to fill out a roster, and so on. This is not, however, as simple as a series of zero sum games. Quality and equity are not necessarily in direct conflict. Programs do attempt and succeed at addressing both simultaneously. This is, in part, a reflection of the diversity of candidates within an individual program who negate any easy conclusions about what is lost and gained by highlighting one policy objective over another. Also, tight local labor markets can make teaching a more or less appealing option. In a local market suffering high numbers of white-collar lay-offs, teaching, even in a high needs school, might prove an attractive option. Still, programs cannot meet all policy aims simultaneously. Rather, the classroom needs, the potential candidate pool, and local economic and cultural conditions prioritize certain aims over others. The solution, then, to the issue of training versus staffing will likely be construed and constructed according to the particular needs of a locale.

Quality

Boosters of career changers' potential teaching prowess assume quality to be a combination of knowledge, skills, and experience. Accepting that definition, my study

does not offer a simple answer as to whether career changers are quality candidates (by design my data did not attempt to answer this question). There are many candidates in my study with central casting credentials. Within both the classic career changer and capstoner portraits, candidates come to teaching with solid academic and practical experience in their disciplinary field. They are motivated to teach in order to spend their days engaged in personally rewarding work. Many candidates, particularly capstoners, are renewed by the chance to reacquaint with a long loved subject area from which they have been estranged by job and life demands. However, programs are not solely or even predominately populated by these candidates. Rather, while many candidates have sterling knowledge, skills, and experience, many others followed less direct routes through college and employment, often in fields that were only tangentially associated with school subjects. Even some of the best-prepared candidates chose certification in fields outside of their expertise for expediency. And the diversity of candidates' experiences is explained substantially—though far from fully—by the program and context in which they were prepared.

The metric for quality based upon knowledge, skills, and experience creates a hierarchy of quality among my target programs, with ARC at the top followed by NPTT and CTP. ARC candidates, on the whole, attended more selective colleges, had greater subject area knowledge, and enjoyed employment experiences that demanded application of their academic knowledge. ARC saw the highest proportion of classic career changers and capstoners—portraits that approximated the conjectured definition of quality. Yet not all programs accepted the same definition of quality. While ARC, benefiting form Connecticut's well-compensated teachers and highly skilled workforce, saw quality on these terms, CTP, facing the challenges of attracting candidates to high needs schools in a

district in turmoil, included social justice and personal resilience prominently in their designation of an attractive candidate. Finally, while NPTT defined quality in similar terms to ARC, the program also valued attracting "citizens" who conceived of teaching as in part a political act. Largely these are matters of degree. CTP, too, desired candidates with strong academic records and ARC sought "citizens" for the classroom. Still, traits received varying emphasis according to the setting.

While the candidates within the programs are far from monolithic, program tendencies seem to be a partial factor in alternative definitions of quality. Even as programs contrasted in their meaning of quality, the candidates within programs only reflected these definitions inconsistently. While the program did prove an approximation of a candidate's talents, candidates still fell into multiple portraits suggesting that the program alone is an insufficient predictor of the candidates who populate it.

The decision to emphasize some attributes over others is ultimately a policy choice as Green indicates. My data suggest that the choice to emphasize quality as a policy aim is related to program design and local context. Quality, as defined by proponents of career changers, seems to be most prominently achieved in programs where candidates are free to seek a teaching placement in any school setting and in regions where the economic conditions allow highly employed professionals to leave their previous careers for the classroom. Programs that consider social justice or a candidate's resilience more conspicuously seem to be linked to placement in high needs schools, and come at some expense of quality as a defined by academic knowledge, skills, and experience. Understanding the context in which candidates will be teaching appears obligatory for understanding the general quality of the candidates a program will attract and criteria for quality delineated by a program.

Equity

The equity logic argues that career changers will alter the distribution of access to good teaching. In schools that are patently inequitable, career changers are one policy response to improving teacher quality in high needs schools. My study again provides conflicting insights. First, as with all teaching candidates, career changers have inconsistent dedication to working in hard to staff schools. While some actively seek the most needy students, others feel leaving the comforts of their previous jobs for the classroom is both a sufficient sacrifice and a sufficient challenge. While there are candidates in all programs who chose to teach in high needs schools, those programs that are not designed around placement in high needs settings tend to have candidates who seek assignments in less challenging settings.

Second, to an extent the program itself matters. Clearly in a program such as CTP, candidates will be teaching in hard-to-serve urban schools. However, as examined above, when measured by quality as defined by academic knowledge, skills, and experience, CTP candidates on the whole appear less qualified than their ARC and NPTT peers. This discrepancy seems to perpetuate inequitable distribution of quality teachers—again, based on one conception of quality. In making some concessions on quality (or, alternately, by redefining quality to reflect the needs of the schools), CTP is able to attract candidates who still make access to good teachers more equitable, but may lack the desirability hoped for by many proponents of career changers. However, when measured against the teachers CTP candidates are replacing in their schools rather than comparing them to candidates in other programs, the equation might be quite different. Compared to long-term substitutes, teachers teaching out of their certification area, and teachers working under emergency licenses, the CTP candidates are likely a substantial

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upgrade. Compared to filling the classrooms with more temporary faculty, CTP candidates eventually receive a full teacher preparation regimen of course work and make a long-term commitment to the district.[11]

Finally, as with patterns of initial placement for all candidates (D. J. Boyd et al., 2005; Cannata, 2007), my sample suggests that career changers trend toward schools that reflect their personal experience and match their cultural capital supplies in relation to particular schools. Candidates from middle or upper middle class backgrounds or with strong academic and professional experience sought work in similar districts and teachers from working class backgrounds were more likely to find work in schools full of working class students. And this trend was prevalent along racial lines with white candidates typically seeking rural and suburban placements and African-American candidates from all programs much more likely to teach in urban schools with high percentages of African-American students. The low number of Hispanic or Asian candidates obscure trends within these populations. It seems to be the rare candidate willing to cross racial and class lines in order to teach. Among those who do, whether in an urban school or, in two occasions, on an American Indian reservation, such a decision was often consistent with a longstanding personal dedication to social justice.

As a policy mechanism, then, the active recruitment of career changers appears to have the potential to address the challenges of equity. However, the design of the program will influence the efficacy of a policy by partially determining the candidates who enroll and where they eventually seek appointments. Programs where candidates are linked to placements in high needs schools at the outset are most effective in meeting

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[11] CTP candidates must teach for five years in Saint Louis Public Schools to receive the full tuition reimbursement. However, I have no data on attrition rates for the candidates in my study.

equity demands, while programs where candidates are free to seek placements in any district tend to draw fewer candidates willing to teach in high needs schools. If equity is a primary policy goal, it needs to be considered in the design of the program. Data from this study tend to refute the assumption that career changers will, *per se*, ameliorate the inequitable distribution of competent teachers. Career changers are a diverse lot. Many are driven to help assuage the greatest inequities in schooling. Others are content to be good teachers in a familiar environment.

Fit

Related to equity is the question of fit, or attracting candidates to schools where their skills match the needs and their expectations match the realities of their placement. Also associated with fit, is the desire to better reflect the student composition by attracting males and minorities to the classroom. The development of programs that prepare career changers is considered a policy mechanism to try to draw candidates into schools for which they are a good fit. As mention in Chapter 2, there are several dimensions to the concept of fit. Race and gender are a factor. So too, though, is an understanding of the institution and an ability to translate common experiences and preferences into fertile relationships with students, families, and teaching peers.

Policy levers engaging career changers to address equity concerns are, in Green's (1983) terms, concerned with righting discrepancies in achievement based on "educationally irrelevant" variables like race, gender, and class. While attentive to these same variables, fit considers them more in relation to what these variables suggest about a candidate's comfort and effectiveness in a school than actively trying to right wrongs. Career changer policies appear to be an effective option for increasing rates of male teachers, accounting for forty-three percent of all candidates in my study—though nearly

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all at middle and high school. Career changer programs as a whole appear less effective in drawing minority candidates into the classroom. Only nineteen percent of all candidates were African-American, and outside of CTP only four of ninety-one candidates identified as African-American. In the three programs combined, only seven candidates identified as Hispanic, six of them in Connecticut.

While the racial construction of the candidate pool may not be as diverse as imagined by the policy, this is not the same as suggesting that candidates are a poor fit for their eventual teaching environment. The predominantly white candidates of ARC indicated their intention to teach in lower need suburban schools, likely similar to the ones they once attended. NPTT candidates were prone to teach in rural schools. CTP candidates were distinct in that the district in which they would be placed had already been determined upon acceptance. The most diverse group in terms of racial composition, CTP candidates were the only ones intending to teach in urban high need schools in large numbers. And here there was evidence that candidates with more cultural familiarity with Saint Louis Public Schools enjoyed more initial success than candidates struggling to fit into the habits of their setting. It would likewise be unsurprising if candidates less familiar with the mores of rural schools struggled in their NPTT placements or those to whom suburban life was foreign struggled in such a placement after completing the ARC program.

Together, these data suggest that candidates self-select into programs that will guide them to teaching settings that most resemble their personal experiences and backgrounds. So it has always been in American education. While this results in a good fit between candidates' skills and experiences and schools' needs and realities, it appears to be at some expense to equity. In general, career changer programs do not appear to

be particularly successful in drawing minority candidates into majority minority schools. Programs overtly concerned with addressing social justice issues seem to be the exception. If the policy goal is to attract candidates who are a good fit for high needs schools while simultaneously promoting equity, it seems that placement in such schools needs to be requisite from the outset. If given a choice of placements, candidates appear to migrate to cultural settings that most closely reflect their personal experience (Cannata, 2007), and programs that provide such a choice are less effective at attracting minority candidates. Programs largely attract candidates who understand the culture of the schools in which they will eventually teach, whether the program itself determines those placements or candidates apply to positions they find appealing.

Exigency

Addressing regional, localized, and subject area staffing shortfalls is the final major policy motivation for attracting career changers into teaching. As with other rationales, this study provides mixed reviews to the success of career changers as a policy lever to meet such needs. Filling vacancies in low income urban and rural schools is a primary staffing need nationwide. As has already been suggested in the above discussion on fit and equity, programs not targeted at particular districts are likely to have limited effectiveness in combating staffing shortfalls in high needs schools. While a program such as CTP directly targeted at high needs schools appears to be initially successful in attracting more candidates to urban classrooms, programs content with drawing career changers to the school system writ large appear best at replicating local employment trends. In Connecticut this meant generating a greater pool of applicants for districts that were already in comparatively high demand. NPTT produced several rural candidates who sought employment in higher need rural districts that mirrored their personal

backgrounds. Individual career changer programs, then, can serve as a successful policy strategy for addressing the teaching market misalignment between urban, rural, and suburban schools, while other appear to exacerbate the surplus of applicants in lower need schools.

Although my data are less rigorous in considering regional labor markets where the shortfalls are not limited to high needs schools, my broader survey of programs suggests that programs are larger, more numerous, and deliver candidates to the classroom at a greater speed in areas experiencing high population growth. The Carolinas and Virginia, Texas, the desert southwest, and California all have multiple options available to career changers looking to enter the classroom. In several large districts, including Los Angeles Unified and Clark County (Las Vegas), the district itself operates its own programs to meet the continual needs and fills these programs despite competition from other institutions in the region. As I did not investigate any of these programs in great detail, this data is only suggestive. However, the mere presence of options implies that institutions recognize attracting career changers as a legitimate investment to meet demand.

Many needs are specific to subject areas and largely distinct from other market forces—most commonly math, science, English as a Second Language, and Special Education. Programs attract and prepare substantial numbers of candidates in many of these subjects, as well as in disciplines in less demand. However, there are differences between programs. Candidates leaving jobs in engineering, accounting, medicine, and multiple fields of scientific research provide a brisker stream of knowledgeable potential teachers in ARC than other disciplines. Special education majors, while a need in all areas, were most strongly represented in CTP. While there were candidates with math

and science in NPTT, they were not as prevalent as in other programs. Candidates preparing for ESL instruction were rare in all of my target sites. And these trends should not be surprising. The more professionally inclined ARC candidates had greater instances of previous work in science and math. The local need for teachers in these positions seemed a motivation to many candidates to make the jump to teaching. In contrast, the need for special education teachers in Saint Louis Public drew candidates making a lateral or upward career move in terms of salary and status. There were large numbers of candidates in CTP with backgrounds in social work and related fields who found positions in special education. The rural nature of employment in the northern plains seemed to play a more significant role in placements than larger subject area trends. Unlike more populated regions, there was not a superfluity of candidates in the more common humanities subjects. When a rural district lost an English teacher, there were not a dozen candidates waiting to apply. If a candidate like Judy Randazzo was willing to move to an isolated community, teaching jobs were available in all subjects.

Finally, needs in specific subject areas in a local district seemed to attract a niche of applicants. A surplus of teaching positions in music and fine arts in the Saint Louis Public Schools led to a large representation of artists and musicians in the CTP cohorts. While not typically high demand markets, the local conditions created a need that was answered by practitioners. While these candidates had degrees—and occasionally advanced degrees—in the arts, teaching presented a steadier income stream than that to which they had grown accustomed, while still allowing time to practice their art.

Therefore, it again appears that the local context focuses the candidate pool according to what the market will support. Candidates from different programs respond to local, regional, and subject area demands in different ways. The diversity of local

needs is in part responsible for the diversity of the compositions of candidates in individual programs. As a policy mechanism, then, attracting career changers to teaching appears to hinge on the needs of a specific market, with subject area pressures more consistently relieved across programs than exigencies emanating from schools with high needs and low resources which are better served by targeted programs. This trend suggests that programs be designed and implemented in light of the staffing needs in local labor markets, while working consciously to balance the four competing policy goals.

Policymakers have options to use either targeted or wide-angle programs. As with fit and efficacy, it seems that programs targeting high needs districts where placement is determined upon entry is a better option in addressing misalignments between high and low needs schools in localized teaching labor markets. Broader-based programs appear to have more success in addressing subject-specific needs though not necessarily in higher needs districts. Again, focusing on exigency demands trade-offs. An argument could be made that a statewide program such as ARC be targeted only to high-needs districts. However, my data suggest that this would alter the quality of candidates enrolling in the hypothetical program. NPTT previously offered tuition reimbursement if a candidate chose to teach in a US Department of Education designated high need LEA. However, the additional challenge associated with a high need placement coupled with reasonable tuition drew few career changers to these districts. This suggests that either offering incentives, but not requiring them, is insufficient to alleviate local misalignments or, alternately, that the incentives themselves were not large enough to influence candidate behavior.

Limitations

Before a more detailed enumeration of my study's limitations, let me first reiterate what my study is and is not. By design, I was attempting to explore trends in career changers entering teaching, not reach definitive conclusions about them. To date there is no rigorous research of which I am aware that explicitly investigates the phenomenon of career changers. As such, this study serves as a map of the terrain drawn from several miles above. The ensuing sketch is accurate for what it is, but lacks the definition that would be gained for more nuanced inspection. While I find that classic career changers account for twenty-seven percent of all candidates in my sample—a plurality—I could in no way suggest that such a percentage would hold in a larger scale examination. However, I would expect a larger study to maintain classic career changers as a plurality of candidates, with fluctuations dependent upon the program. Likewise, while I would expect a more thorough study to maintain that capstoners represent a comparatively small percentage of all career changers, whether they account for three, five (as in this study), or eight percent would be speculation.

Neither did this study try to make any comment on the effectiveness of career changers. Effectiveness—whether measured in student outcomes, administrative assessments, longevity, or any number of other conceivable metrics—is ultimately a different question than this effort to describe and categorize candidates and programs. However, without first understanding the diversity of the supposed subgroup called career changers, investigations of effectiveness likely would over-simplify matters. Additionally, since programs have been woefully inattentive in tracking their candidates for more than a year or two out of preparation, a study of effectiveness would demand a longitudinal design impractical for a dissertation. Through this study I have described a cadre of candidates at the outset of their teaching careers. These candidates—now teachers—do

present an opportunity to track their development over time looking at multiple measures of effectiveness.

With these qualifications in mind, an ideal study would have several factors that were not considered or proved insurmountable in my attempt to better understand the characteristics of candidates, programs, and local contexts.

- My initial design intended to include two additional programs for study. One program decided not to participate after first suggesting that it would. Like CTP, this program was a partnership between a university and a high needs urban school district. In my study I claimed that candidates in programs concerned with social justice and the dearth of applicants from nearly all preparation tracks to low income schools tend to have higher minority enrollment and more candidates for whom teaching represents an advancement in social status. Data from a second similarly situated program would have helped to strengthen or complicate claims of the distinct nature of candidates entering high needs schools.

- A second program included in the initial design was housed in the same institution as CTP. This program, however, was a post-baccalaureate program not partnered with Saint Louis Public Schools, and free to seek employment in any district that would hire the candidates. Although the program director agreed to participate, an insufficient number of candidates—only four or five—responded to my survey despite repeated urging from faculty. Data from this program would have allowed me to compare candidates prepared in the same institution, by, occasionally, the same faculty, and in the same local context. This would have elucidated the role placement in an urban high needs district played in determining the candidates' traits. Additionally, it would have allowed me to

examine whether the status of the host institution assumed a consistent role across programs.

- The loss of these two programs is symptomatic of a larger limitation of the study. Having a match for each program—sites with similar design but located in a different region—would have highlighted or diminished my claims of the vitality of local context. A future study might focus exclusively on, say, on-line preparation programs to help understand what was unique to the design of NPTT and the context of the rural northern plains and what is common to all on-line preparation programs aimed at attracting career changers.

- I have a hunch, shared by others who have researched alternative certification programs, that a large number of career changing candidates are hiding in traditional university-based preparation programs. A handful of career changers in each traditional program could quickly aggregate to a substantial proportion of all candidates prepared. However, tracking these candidates raises several knotty issues. Looking at a single program would only surface a handful of candidates, and could not be easily extrapolated to all traditional preparation programs. Additionally, identifying these candidates would be a particular challenge. Date of birth would be one potential proxy, but may still provide only a partial sample of the enrolled career changers. A systematic review of career changers in standard university-based programs—beyond the scope of this study—would present a more comprehensive accounting of all career changers, whether confirming or refuting my suspicions.

- Related to the previous limitation is an inability to include a more traditional preparation program of any sort as one of my target sites. I did not attempt to

steer clear of the heated debate between traditional preparation and alternative certification. Nor could I, had I so desired. And, increasingly, the distinction between traditional and alternative is murky. Still, this study was not meant to be an investigation of alternative certification and I attempted to include a more traditional program that makes serious attempts to attract career changers—the post-baccalaureate program in Saint Louis—to avoid the appearance of restricting my search to the alternative certification world. This limitation obliged me to protect against the assumption that any criticism or adulation was intended to be indictment or praise of the very concept of alternative certification, rather than a finding aimed at a unique program. The inclusion of a more traditional program would have provided additional protection.

- There were a handful of questions that hindsight would have demanded I pursue further. I was startled to find several candidates who were seeking certification in subjects outside of their academic and professional experience, and further surprised that many of these were classic career changers. In many ways this undermines the logic of recruiting career changers to the classroom. These candidates were motivated by both the ease with which they felt they could pass the PRAXIS-II subject area exam and the regional job market. Although my survey inquired into their intended subject area, I did not ask follow up questions in my survey and only began pursuing the question more thoroughly later in my interview process as I saw the trend begin to repeat itself.

- Additionally, I failed to initially understand the significance of the status of teaching as representative of social and class advancement for candidates. Although this became a theme in interviews and I could infer its importance by

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perusing employment histories, I did not systematically collect data on candidates' impressions of teaching's social status. This data would have help corroborate claims of both social mobility and the relative esteem in which communities' hold education.

Policy Recommendations

Many pages ago, I began this investigation by justifying my focus on career changers with Humphrey and Wechsler's (2007) assertion that subgroups of candidates across programs, rather than programs themselves, are a more appropriate unit of analysis for understanding who seeks entry to the classroom. While I found that programs are suggestive of the candidates who populated them, they are only suggestive. Candidates' motivations are multifaceted and diverse. As such, candidates from vastly different backgrounds are likely to find themselves sitting abreast from each other in a preparation program. More surprising was the diversity that career changers themselves embodied. The breadth of backgrounds and motivations quickly exposed career changers as a subgroup that described nothing more than a chestnut that candidates once had a career and were now changing; instead, several subgroups arose, and though still imperfect descriptions of a subgroup, each allowed for a closer accounting of the full range of characteristics displayed by candidates. Additionally, although there were important patterns that held across programs, the portraits I developed seemed more uniform within a program, suggesting that the program itself retains some ability to structure candidates' perspectives.

I began, too, trying to move beyond simplistic and opportunistic representations of career changers, hoping to describe the rise of career changers more accurately than the images that currently inform our deliberation. So I conclude hoping to avoid a facile

observation that context matters. Yet, context did matter. It arose as an ineluctable influence on programs and the candidates who fill their ranks. The status of the institution, the local economy and labor market, historical and cultural trends, local attitudes toward education, and eventual classroom placements appear to influence which portraits are most represented in an individual preparation program. Programs adopt multiple designs, not only in response to local conditions, but also out of philosophical conviction, intellectual innovation, legislative mandate, and simple habit. Programs are distinguished by their candidates, the students their candidates will teach, the speed, order, and location of preparation, the number of students, and cost, among others. While many of these factors are influenced by place, programs and candidates are not strictly subjects of contextual determinism. They also shape the context in which they operate.

By emphasizing the interaction between program, place, and candidate, this study has implications for policy and program designs. While place plays a role as it always does in policy and program implementation, design features might be developed with an eye to the particulars of context. Combining the design and contextual features from above provides several concrete policy suggestions.

1. Consider the relative importance of quality, fit, equity, and exigency at the outset of designing a program. Identifying balance and priority among these goals is essential in designing a program that approximates desired outcomes.

   - If quality—as career changer proponents define it by knowledge, skills, and experience—is essential to a program, a design intended to meet only high needs districts may be less practical than in a program where candidates are free to seek employment in a wide range of districts.

- If equity is a primary goal, preparation programs should consider recruiting their candidates expressly for the high needs schools in question. Similarly, if the staffing goal is to reduce the disequilibrium of local labor market pressures between higher and lower need schools, a career changer program, alone, is insufficient. A program not targeted at the specific schools where need exists is unlikely to attract large numbers of candidates willing to teach in more challenging settings. The net result may be to actually exacerbate the trend by preparing even more candidates for positions that are already in high demand.

- Meeting subject area needs, especially in math and science, appears to be dependent, at least in part, upon both a highly educated work force and teacher salaries nearly commensurate with other professional work. Successful professionals seem less likely to move to the classroom when their income and perceived status are more severely diminished.

- Candidates consider fit in less enlightened terms than policymakers might hope. Career changers seem to look much like other teaching candidates in preferring to teach in settings that are culturally familiar. While this limits the effectiveness of career changing programs as a mechanism to create a more diverse teaching force, it suggests that candidates are choosing placements where conditions are predictable and expectations are realistic, leading, perhaps, to the potential for longer tenures.

2. The institutional experience and mission of a program's host agency will influence the focus of the program and the candidates who apply.

Institutions have differing expertise in addressing quality, exigency, fit, and equity goals along with differing prominence lent to each. Understanding both the institutional

history and mission can predict which goals are most emphasized by a program. ARC has long had to defend itself against changes of low rigor by other colleges in the state. In contrast, UM-Saint Louis has developed expertise in issues in urban education and preparation for teachers in high needs schools. Montana State, the land grant university for a state with a substantial agricultural sector, administers NPTT. That ARC candidates score high on the quality aim, CTP candidates meet equity and local exigency goals, and NPTT candidates supply cultural fit with rural settings should not be a surprise. As a program determines the importance it lends to the various policy objectives it should also reckon what educational issues have concerned the host organization in the past as those experiences seem to seep into the focus of the career changer programs.

3. The local economy suggests design features for a program cognizant of place.

- Teacher salaries will influence which policy aims are prioritized. Programs where high teacher salaries predominate seem to favor an emphasis on quality as a policy aim, while regions with lower salaries emphasize equity. If the stated main policy goal is to improve the quality of the candidate pool, this is best addressed in a local context marked by high teacher salaries. In these markets, candidates with strong academic and professional credentials can enter teaching without absorbing as substantial a financial toll. Additionally, while certainly influenced by local costs of living, high teacher salaries also indicate high status for education that may be an additional attractor to candidates from more prominent jobs. In contrast, meeting policy goals of equity are more effective in programs attracting candidates to markets or districts with lower salaries. In these contexts, the comparatively low salaries may not

be a significant deterrent to candidates dedicated to teaching as social

justice work, and may serve as an incentive to candidates from lower

paying jobs for whom teaching represents an enhancement in earnings

and standing.

- There is evidence that for some career changers teaching can serve as

    quick employment, especially for professionals who have lost their jobs.

    Although an implication that demands more research, this suggests that in

    a weak economy punctuated with white-collar lay-offs, teaching might be a

    stopgap measure to earn a respectable, if lesser, income, and programs

    may see a spike in enrollment. This would also likely be associated with an

    increase in applicant quality. The converse suggests that during a strong

    economy, a higher proportion of candidates would come from less

    prestigious academic and employment backgrounds. The resulting

    exigency from such an economy might allow greater opportunity for

    candidates from socially mobile or career seeking backgrounds to seek

    entrance to the classroom, leading, potentially, to fulfillment of equity

    aims.

4. Race, gender, and class matter and should be taken seriously by programs.

I did not set out to conduct a study about race, gender, and class. However, this

study has taught me that policy must not overlook these factors. Policies need to account

for the opportunities and limitations afforded by cultural factors. White, male, and

upper-middle class teachers appear less willing to take positions in more challenging

schools than African-American, female, or working class peers. While this suggests social

reproduction in the schools with the most affluent candidates gravitating to the most

affluent schools, anecdotal evidence hints that these more privileged colleagues may be less effective in high needs schools than their less privileged candidates. This question is tricky, to be sure, and the evidence of cultural matching does not convincingly support a judgment of greater effectiveness. One recent study, however, finds that African-American teachers are more effective with African-American students (Dee, 2004), suggesting that "fitness," as variously defined, may matter. For policy, this trend suggests that quality—again borrowing the definition used by proponents of career changers—is not synonymous with effectiveness. A candidate's hard skills are an important consideration. So, too, are softer skills that, while less indicative of disciplinary mastery, point to a candidate's ability to relate to students, parents, and other teachers. At the least, it is incumbent upon programs to prepare their candidates for the mores of the context in which they will be teaching, whether that is in a rural, suburban, or urban setting. Programs should not expect that all candidates to possess the instincts or cultural knowledge to thrive in a foreign environment, and may require direct instruction for candidates to acquire the level of comfort necessary to develop a rapport with students unlike themselves.

5. Diversity of candidates is inevitable.

The above policy suggestions have taken programs as largely monolithic. As I have argued throughout this study, this is a misrepresentation. Programs dedicated to high needs schools will attract some high quality candidates regardless of how quality is defined. Wide-angled programs will attract candidates dedicated to teaching in low-income schools. There will be upper middle class professionals who will thrive in urban settings and working-class candidates who will prosper in tony suburbs. Yet, programs do witness trends in candidate characteristics, even if those trends can occasionally appear

counter-intuitive. Policies can make assumptions about the characteristics of candidates in specific programs. And while those assumptions will often prove accurate, policymakers need to expect that the diversity of the candidates will lead to many unintended consequences.

6. Preparation programs can act as incentives or disincentives for entry into teaching.

The speed at which candidates were able to enter the classroom was constantly raised as an incentive for entering the program. This seems to be particularly relevant for career changers. While a traditional preparation program might be more effective in preparing candidates for day one in the classroom, many career changers are also primary wage earners and feel that a more thorough preparation program is a luxury they cannot afford. Digging a bit deeper, data presented in Chapter 3 points to candidates with higher levels of educational attainment seeking programs that place them in classrooms as the teacher of record more quickly. Whether these candidates are attracted to faster-track programs because they feel less able to absorb the financial costs of a longer preparation program or because they believe their higher attainment further negates the value of tradition preparation or because of myriad other reasons cannot be conclusively answered by this study. However, many candidates did raise speed of certification as an essential consideration and the programs in this study responded by marketing speed as an incentive, arguably at the cost of classroom effectiveness.

Future Considerations and Final Thoughts

I have intentionally avoided employing a single theoretical framework to explain the multiple trends I have observed in this study. It is precisely because of the multiplicity of these trends that a universal framework would fail to capture the richness of the data.

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Similarly, adopting several frameworks to consider the data from various points of view would be limiting, as there is no core set of data to consider. Rather the multiple strands each require their own framework to explain what might be happening. In this final section I will briefly comment on these strands that need explaining and sketch a skeletal prospectus for each of what a more measured explanation might entail.

- What motivates career changers to enter teaching?

Over the course of the last 200 pages I have observed how candidates in my study reflected and differed from the portrait assumed by advocates. Just as there are multiple portraits that have emerged, there are multiple motivations, both confirming and defying traditional patterns of teacher entry. Lortie (1975), most prominently, but also Herbst (1989), Ravitch (2000), Rury (1989; 2002), and many others, traced teaching's historical route of upward mobility from working class to a toehold in middle class professionalism. And this trend was evident in this study, most lucidly with the socially mobile portrait. However, built into the assumptions of the advocates and corroborated by many candidates, there was a strong and persistent contrary trend. For many candidates—most notably the classic career changer portrait, and less consistently primary caregivers and career seekers—teaching represented a downward mobility, if not in status, at least in terms of income. While the former trend can be explain in historical context, the latter requires a new lens to try to understand why candidates would eschew income and status for the classroom. And the characteristics of candidates who compose the respective groups also demand consideration.

One path to begin to explain this can be found in Richard Sennett's book *The Corrosion of Character* (1998). Subtitled *The Personal Consequences of Work in the New Capitalism*, Sennett describes the alienating nature of contemporary work. From the corporate titans

to shop floor technicians, work increasing lacks craft and community. Therefore, the traits that make the new economy flexible also make all workers expendable, ultimately providing no real reason for workers at any level to care about anything but themselves. This isolation, Sennett predicts, will eventually lead to individual workers "speaking out of inner need, rather than through mass uprisings" (p. 148). This inner need is a demand to replace isolation with dependency and risk with continuity. He predicts that workers will increasingly leave their jobs in the new economy in favor of work that feels more important.

And these sentiments are rank among the career changing candidates I interviewed. They were motivated to leave jobs that paid more, often considerably more, for teaching precisely because of the alienation and expendability they experienced in their previous jobs. As stated by Jonathan Waxman in the ARC program,

> if I didn't do my job, someone else would have done it. If someone else didn't do it, someone else would have done it and if someone else didn't do it and it didn't get done, the company wouldn't have lost a single cent on the bottom line. Everything would have kept going as if nothing was ever wrong with it. (Interview transcript, 7 June 2007)

He sought teaching, then, to return to both a subject about which he was passionate and to attempt to instill that passion in the students he would eventually teach. Passion for work is far afield from Sennett's representation of the new economy. Likewise, other candidates named a desire to be better spouses and parents as motivating their departure from lucrative employment that kept them away from home more than 80 hours a week. Their desire to make connections to family and their students can be understood as blowback from the flexibility and anonymity of the structure of contemporary work.

It is interesting, then, to think of teaching as simultaneously a refuge for mobility, both up and down. To some, those from modest or meager means, teaching signals, as it always has, arrival in the middle class and the accompanying prosperity and status. For others, teaching is a safe haven from (upper) middle class isolation and insecurity. That for both groups the classroom serves as the realization of such disparate goals situates teaching as a unique profession in the world of new capitalism.

- How do programs look different in design and goals in various settings?

And essentialist perspective would suggest that teachers, regardless of their backgrounds, environment, and intended location of practice demand identical preparation and outcome in their teacher education program. However, this study has described vastly different program designs contextualized by the local institutions, candidates, and needs. Whether this variety is ideal or the essentialist view should flourish is beyond the scope of this question. Rather, I would propose attempting to explain my observations. To do so I would employ Carol Weiss's 4 I's framework (1995).

In her examination of school reform initiatives, Weiss enumerates a framework allowing her to consider the different actors present in shared decision-making schemes at several high schools across the country. The typology of interests, ideology, information, and institution—the "4-I's"—allow her to understand how different threads affect the interpretation and implementation of policy initiatives in these schools. As she explains her analysis, interests, ideology, and information present competing metrics for understanding and reacting to policy changes, while the institution structures how actors understand the first three strands. I have reproduced Weiss's representation of their interplay in Figure 1 below.

Figure 7.1

Interaction of Ideology, Interests, Information, and Institution (1995, p. 575)
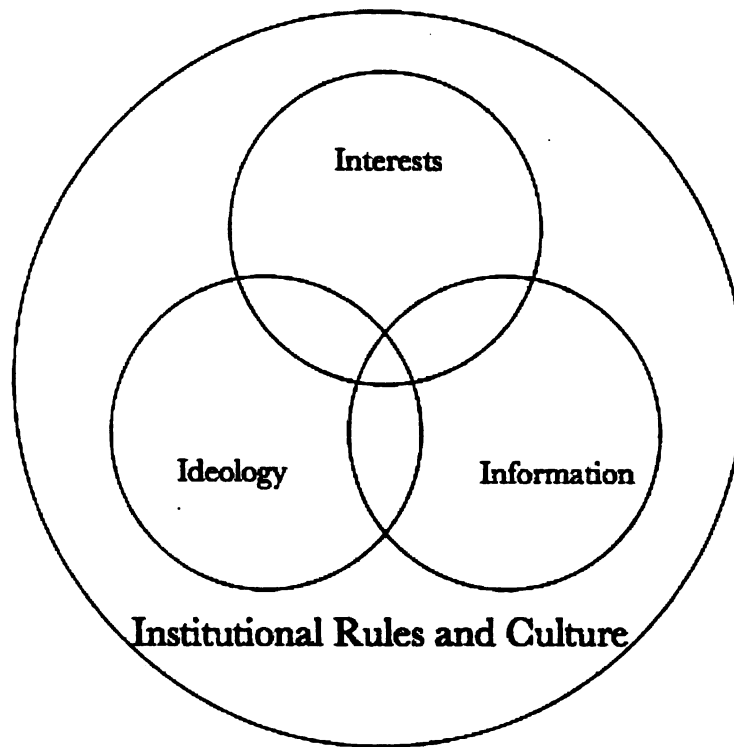
The four domains of Weiss's analysis each present a different explanatory model

for making sense of shared decision-making. Alone, each colors a portion of the complete

picture from a distinct perspective. Collectively the multiple points of view enhance the

depth and richness of the analysis. And building a model consciously curious for how the

domains interact permits more subtle explorations of the relationships of the strands than

the summations of five blind men exploring an elephant. Certainly the selected domains

are not exhaustive and choice of what to include and exclude prejudice the final portrait.

Still, painting with multiple brushes allows for nuances and interactions that would not

have been present if relying on only a single strand.

Although the details of her framework are new, Weiss is not creating a new tradition in education, public policy, or organizational studies by examining a problem from multiple angles. Tyack (1976), and likely others before him, applied multiple frames of analysis to educational problems more than thirty years ago. And Tyack, too, borrowed from this approach that, though ascendant at the time, can arguably be traced back to the Christian gospels—foundational and Gnostic—if not before.

While developed to analyze shared decision making in high schools, Weiss's framework provides a coherent way to investigate the way that a policy is interpreted and adapted by overlapping domains. However, her framework is limited to a single institution, even if schools are large and amorphous and she considers schools writ large, akin to Tyack and Cuban's "grammar of schooling" (1995). When multiple institutions interact the model continues to provide an elucidatory analytical path, although the complexity accompanying new institutions demands a model modified to reflect these intricacies. I suggest such an adaptation with an emphasis on the particular demands this adaptation places on the domain of information.

I imagine a new model reworked to reflect (at least) three institutions, or spheres: the career changing candidates entering preparation programs, the places in which they will eventually be working, and the programs themselves. While I am focusing on the spheres of programs, candidates, and place, there are additional institutions at work, as well, including the colleges of education, charitable foundations, and local, state, and federal government. Allow a quick definition of each sphere.

Candidates

An individual candidate does not alone define an institution. However, as a candidate enters a preparation program she brings with her the assumptions and mores of

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the institution from which she came. Her previous experience has colored the way in which she understands how organizations operate. Additionally, if certain candidates within a program share similar institutional experiences, certain sets of assumptions might be more closely associated with particular programs. Candidates also have distinct sets of ideological beliefs. Although they may not be clearly articulated or even deeply examined by the candidates themselves, each candidate has an orientation towards education and beliefs about what makes a good teacher that played a part in their decision to become a teacher. Likewise, candidates self-interests, be it needing a job, desiring summers off, or returning to engage in a subject area they love, shape their decisions to teach. Finally, candidates use multiple sources of information to reach settle on teaching. They consider salary, working conditions, subject area, the broader job market, and satisfaction at work to name but a few.

Place

I am using place as a less structured sphere. Primarily I am referring to candidates' eventual teaching placements, but also to the context that shapes the communities in which the schools operate. In this way I include the historical, economic, and cultural factors that structure the communities in which the schools operate. Therefore, I consider the institution of the school in much the same manner as Weiss. Schools are shaped by the general assumptions of the broad educational system—"school board/district office/schools, the division of high school into administration and departments with department heads, academic/vocational/special education areas, teachers and counselors, etc" (Weiss, 1995p. 585). I also extend this consideration of the school to include the local conditions that shape the school, such as teacher and broader labor markets, educational attainment, race, and class. As with candidates, placements

express a multiplicity of ideologies. And, like candidates, they do not always explicitly state their commitments and may not even be aware of all of the beliefs that motivate their actions. Unlike candidates, schools to have to make public pronouncements—at least in the form of mission statements—of their philosophical underpinnings. The extent to which those ideologies drive actual practice is less clear. Additionally, schools have long enjoyed success with self-preservation, remaining aware of their self-interests. Not that protectionism is the sole motivator of schools, but as one competing domain schools are adept at deflecting policy and community challenges to their organizational operations (Meyer & Rowan, 1991; Tyack & Cuban, 1995). Finally, information about the community context is an essential domain for a school's response to all challenges, not the least of which is crafting a faculty well positioned to prepare successful students. Understanding the needs of the students demands a knowledge of the context from which they come. This deep information about the community is requisite in fielding a faculty prepared to understand the perspectives with which students arrive in the classroom.

Programs

The institution of the program includes the preparation program itself and the agency in which it is housed. In my study different preparation programs live distinct in locations varying from colleges of education to state governmental departments, to amalgams of colleges, government, local school districts, and charitable foundations. Additional programs outside of this study might also be lodged in private—both for and not for profit—institutions, individual school districts, the military, or several others. The context in which each program operates determines the immediate inherent mores and assumptions. As each program has a unique blend of institutional homes, each is colored by the distinct practices of those institutions. Programs ideologies are, likely, the most

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explicit of any of the three spheres. Their public affirmation of the career changers model demands that they explain their motivating rationale. Again, these ideological commitments are unique to the circumstances of the program. Self-interests also motivate programs. They need to ensure they have a design keeping them in business, while limiting the unknown aspects of their work to allow for predictability (Thompson, 1967). Finally, programs need to gather deep information about candidates and their potential placements.

Weiss considers information as "the range of knowledge and ideas that help people make sense of the current state of affairs, why things happen as they do, and which new initiatives will help or hinder" (1995, p. 575). It is in fashioning the way that programs gather and make sense of information that drives my revision of Weiss. While institutions, ideologies, and interests each illuminate specific domains motivating a program's decision making, each program sits at the intersection of candidates and the place—both schools and communities—in which candidates will eventually be working. In trying to understand the interaction of the various spheres, it seems that candidates and place have more potential to influence programs than programs do to shape the other institutions. As such, successful programs tend to react to the institutional choices of both candidates and placements. Therefore it is incumbent upon programs to gather deep information on both the candidates and their potential placements to create a design that reflects the desires of both institutions. It may helpful to think of this intersection as an ecosystem. Unlike assumptions of a natural equilibrium inherent in laissez-faire market theory, ecosystems require greater stewardship. Programs, then, need to amass information on the candidates and place to protect their own ideologies, interests and, perhaps, their very institutional survival. Additionally, the information that programs

gather on other spheres can help them understand what constrains those organizations allowing programs a narrow window to influence other institutions.

Briefly pondering the interaction of influences in the local ecosystem surfaces countless considerations. An accounting of employment rates and salaries in various sectors of the economy creates an initial sketch of the market. A bit more thorough consideration forces programs to determine the potential placement market for their candidates. Will candidates be free to find positions in any school in the state? limited to a single district? able to seek jobs in a multi-state region? The answers to these questions raise more questions than they answer, forcing a program to consider the relative rural or urban nature of their placement sphere, the racial construction of the placement districts, the relative reputations of these districts and the historical and cultural forces shaping the districts.

While the placement environment structures preparation programs, so, too, might the candidates. Programs' nimble responses to the local context must also render them attractive to career changers. The employment rate in one sector might translate into relative interest in candidates seeking entry into schools. So too might the length of the preparation program, a focus—or lack of focus—on high-need districts, availability of candidates to meet the employment demands, teacher salary in the state, and the reputation of the district. An enumeration of the potential influences is not essential; they will arise during the examination of the local contexts and the candidates seeking certification in them. Let it suffice that they are potentially vast and may be specific to very localized conditions.

In reacting to local markets, programs potentially have the power to shape them by emphasizing certain facets of a program depending on the context at a particular point

in time. For instance, during an economic downturn, teaching might represent relatively stable employment. Or a program could promote itself to the candidate who is able to enter teaching because, in the words of one New York City Teaching Fellow, "[t]he stock market is doing well, my wife is a lawyer, I've been practicing law for twenty-five years. So at this point, I can afford to take what is in essence a volunteer job" (quoted in Goodnough, 2000b). The intersection of candidates and placements may force the programs to have a deep knowledge of this ecosystem and react to maintain its health.

I have borrowed the framework outlined by Weiss to make sense of preparation programs as an institution. My alteration and application of Weiss is within, to borrow from Kuhn, "normal science" (1996) and does not constitute a paradigm shift, but an expansion of an existing framework. My adaptation suggests that Weiss's formulation, limiting herself to a single institution in her analysis, can be stretched to provide a framework for understanding multiple actors in multiple institutions. Although simplified for sure, I have tried to reflect the relationship of the three spheres in Figure 2, below. A more complete picture would have multiple placements and candidates, along with additional institutions not represented in favor of practicality and coherence. As with Weiss, within the domain of institution lay interests, ideology, and information. Although important in understanding the action of a program, I have set aside interests and ideology in favor of a deeper investigation of information. The domain of information now demands profound knowledge of the other institutions in order to both react to these conditions and shape the ecosystem toward the desires of the program. This model, then, attempts to understand how individual programs respond to the unique local historical, economic, and cultural contexts and candidate characteristics to design and perpetuate a curriculum that reflects the ideologies, interests, and institutional rules and culture

exclusive to each program. In particular this model allows me to explain, at least in part, the diversity of designs found in various locations across the country and how the candidates who populate each program and the context of the place shape the design of the programs. In presenting my data, then, I will examine both the local environment and the candidates as a precursor to understanding how the program design reflects the 4-I's in their unique amalgam of institutional influences, a design not necessarily transferable to other ecosystems.

Finally, I present an adaptation of Weiss to the realities of my study.

Figure 7.2

The centrality of information in programs preparing career changers
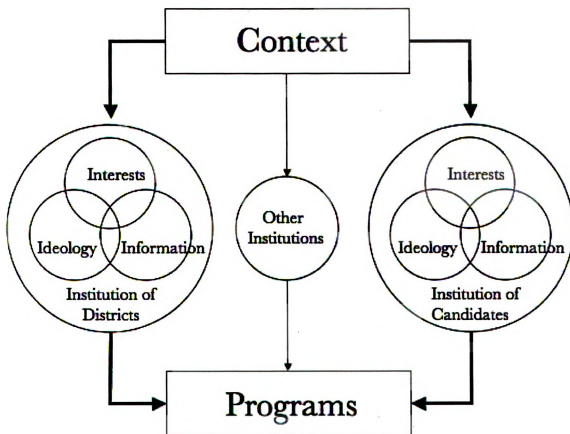
- How do career changers differ from traditionally prepared candidates?

Implicit in the call for attracting career changers is an expectation that they will be better than the teachers we have. But how do we define the teachers we have? By one construction this could mean more effective than the emergency certified and out of subject area teachers and long-term substitutes that inordinately fill classes in high needs schools. Alternately, career changers could be measured against teachers who take more traditional routes to classrooms. What defines career changers—their previous career—should inform their teaching in a demonstrable manner if they are to be sought as a population.

This study has exposed some potentially concerning trends linking the characteristics and ultimate placements of career changers. Namely, quality—as defined by advocates—is largely linked to placement. Career changers teaching in high needs schools tend to come more readily from the Socially Mobile portrait and have weaker academic achievement and professional experiences in their disciplinary fields. By comparison, candidates intending to teach in higher resourced schools more readily attended more selective universities, had academic degrees, and relevant job experience. That candidates sought to teach in settings similar to those they attended raises the specter of social reproduction. Bourdieu (1973) traces social reproduction of cultural capital as central to maintenance of the class structure. Students holding capital of lower exchange value fail to be provided with the tools of linguistic and cultural competence necessary for upward mobility while students already with capital of higher exchange value both receive and are better situated to expand their linguistic and cultural competence.

Applied to this study, it appears that candidates holding higher cultural capital opt to teach students from a similar stratum, while candidates holding lower valued capital

teach in settings replete with students holding low capital. Therefore, the students most in need of gaining access to the tools of capital are less likely to be provided with a path to cultural literacy, as their teachers are not as likely to have that literacy themselves. If career changers are demonstrably more effective teachers than either those they are replacing or traditional candidates, the cultural capital gap should be closed. However, placement trends appear to replicate those of traditional preparation, where candidates choose to teach in schools that reflect they ones they attended themselves, in turn maintaining the gap.

And a closer look suggests that the placement preferences might even exacerbate the gap. In the highest need schools are being filled with candidates who, based on advocates definitions of quality, are superior to the current teachers, but likely have had access to lower levels of cultural capital than traditional candidates. In turn, candidates in the highest resource schools are most likely to arrive with the highest levels of cultural capital—obtained as military officers, corporate managers, lawyers, academics, and physicians—and at levels greater than the typically traditionally prepared teacher.

Finally, even if candidates with high levels of cultural capital could be redirected to the highest need schools—no easy feat—there is no promise that they would prove successful in transferring their cultural competence to the students (Achinstein & Ogawa, 2006; Achinstein, Ogawa, & Speiglman, 2004). The difference in what cultural knowledge is valued in different social strata may lead these potentially attractive candidates to struggle to be accepted in their schools and classrooms. In these cases where they prove unsuccessful there are at least two potential outcomes immediately apparent. First, candidates will leave for schools that better reflect their experience, again, further replicating the existing structure. Or second, these candidates could learn

to adopt lower expectations for their students, simultaneously trapping students in levels of capital with low exchange value while not providing the students access to the capital owned by the teacher.

- What knowledge and experience translates into good teaching?

Let me briefly sketch a final paper—one that would require a longitudinal study of candidates I interviewed before they entered the classroom. This strictly qualitative study could begin by explicitly stating candidates' beliefs as to why they would be a good teacher before they entered the classroom. Using the specific knowledge and experiences they enumerated during their preparation, I could track candidates' changing understandings of what knowledge proved useful to the classroom and what they needed to better understand to be effective teachers.

I will use case to suggest further clarify. Simon Westbrook, the Navy pilot, describes the critique following a training mission as "sublime," while drawing on his experiences leading these debriefings as an important motivation for entering teaching. He hoped to echo the practice in which he engaged as a pilot to both improve his students' performance and his teaching practice. This level of critique is largely foreign to teaching as a profession. Following Simon could help describe whether he was able to adapt the practice from his previous career to the classroom and whether it proved an effective experience in education.

In a similar manner, following multiple candidates could help to piece together a more complete picture of what knowledge, skills, and experiences from their previous career were most useful in their practice and what was missing. Such a study could help to better evaluate which career changers are more likely to become effective teachers and

help programs target their preparation toward what career changers themselves cited as the knowledge they most commonly lacked.

It is essential to recognize that design of a program and the context in which it operates will, intentionally or not, prioritize the demands of quality, fit, equity, and exigency. Thoroughly weighing definitions of quality candidates against the needs of the target districts, equity goals, and attracting candidates with realistic expectations of the classroom will defend against policymakers' panacean expectations. Together, the diversity of candidates, programs, placement, and context combine to describe the rise of career changers more accurately than the images that currently inform our deliberation. But the diversity of candidates, contexts, programs, and policy goals also present opportunities. Appreciation of the multiple factors at play will allow policymakers to target programs to specific educational and policy aims. In doing so, the diversity of career changers as reflected in this study becomes, more than an interesting observation, but a policy tool wielded to supply qualified teachers to all schools.

APPENDIX A

Program Cluster Analysis

I first conducted an analysis that divided the programs into two groups based on their commonalities. Subsequently I conducted a three and four group analysis. In total, 23 programs were placed in a group. Six programs were excluded due to missing data in at least one core variable. The two-group analysis broke the sample into clusters of six and seventeen programs. The three-group analysis further divided the cluster of seventeen into two clusters of four and thirteen. The four-group analysis further divided the cluster of thirteen into two clusters of nine and four. The data from each of these analyses are presented in Tables A.1-A.3 below.

Table A.1

Two-group cluster analysis of program traits

Cluster	N	Number of candidates	Time to Teacher of Record	Time to Certification	Certification level upon entry	Online options	Stipend	Selectivity	Highest Degree Attained	Placement High Need Schools
1	6	170	2.5	3.5	1.5	1	3.3	2	2.7	1.7
2	17	67	2.9	4.5	1.5	2.1	4.3	3.2	2.5	3
Tot.	*23*	*94*	*2.8*	*4.2*	*1.5*	*1.8*	*4*	*2.9*	*2.6*	*2.7*

The first analysis seemed to focus its discrimination of programs by number of candidates enrolled and the speed at which they both become the teacher of record and earn full certification. Those programs in which candidates are prepared more quickly also appear to be more likely to provide their candidates with opportunities for stipends, come from

less selective schools, and are more likely to eventually teach in high need schools comprise Cluster 1. The level of certification upon entry into the classroom and educational attainment were nearly identical for both clusters.

Table A.2

Three-group cluster analysis of program traits

Cluster	N	Number of candidates	Time to Teacher of Record	Time to Certification	Certification level upon entry	Online options	Stipend	Selectivity	Highest Degree Attained	Placement High Need Schools
1	6	170	2.5	3.5	1.5	1	3.3	2	2.7	1.7
2	4	114	2	4.5	1	3	3.3	2.8	3.5	2.8
3	13	52	3.2	4.5	1.6	1.8	4.6	3.3	2.2	3.1
Tot.	*23*	*94*	*2.8*	*4.2*	*1.5*	*1.8*	*4*	*2.9*	*2.6*	*2.7*

The three-group cluster analysis effectively sliced Cluster 2 from Table A.1 into separate groups, while Cluster 1 remains fully intact. While small in terms of number of programs, the programs that do compose this new Cluster 2 are larger than those in Cluster 3 and have programs that get candidates into the classroom as the teacher of record more quickly, with more provisional certification and more on-line options than candidates in either Cluster 1 or 3. However, despite the speed at which they gain entry, candidates in these programs take that same amount of time to earn full certification as those in Cluster 3, and a longer time than those in Cluster 1. Compared to Cluster 3, Cluster 2 programs have candidates more likely to receive a stipend, come from less selective undergraduate institutions and are slightly more likely to be placed in high needs schools. Of all groups, Cluster 2 programs have candidates with the highest educational

attainment. On the whole, Cluster 2 looks like a rough average of means of Clusters 1 and 3, though not consistently across all variables. Programs in Cluster 3, in turn, appear to have more coursework upfront, resulting in greater amount of time before candidate become the teacher of record. Additionally, Cluster 3 programs are least likely to receive a stipend and originate from the most selective undergraduate institutions of all clusters.

Table A.3

Four-group cluster analysis of program traits

Cluster	N	Number of candidates	Time to Teacher of Record	Time to Certification	Certification level upon entry	Online options	Stipend	Selectivity	Highest Degree Attained	Placement High Need Schools
1	6	170	2.5	3.5	1.5	1	3.3	2	2.7	1.7
2	4	114	2	4.5	1	3	3.3	2.8	3.5	2.8
3	9	64	3.3	4.6	1.4	1.8	4.8	2.8	2.2	3.4
4	4	26	3	4.2	2	2	4.2	4	2.2	2.2
Tot.	*23*	*94*	*2.8*	*4.2*	*1.5*	*1.8*	*4*	*2.9*	*2.6*	*2.7*

As with the three-group cluster analysis, the four-group analysis simply cleaved the previous Cluster 3 into two distinct clusters, fully maintaining Clusters 1 and 2 from Table A.2 above. Despite creating these two new clusters, Clusters 3 and 4 continue to resemble each other in large part, with the most substantial difference found in the selectivity of undergraduate institutions and the size of the programs. Cluster 3 is composed of larger programs, though still smaller than those in Clusters 1 and 2. There

are small differences in the amount of time it takes candidates in programs from Clusters

3 and 4 to enter the classroom and gain full certification. Candidates from Cluster 3

programs are more likely to enter the classroom on a provisional certificate and are the

least likely of all clusters to seek jobs in a high needs school. Candidates from Cluster 4

programs attended the most selective undergraduate institutions of any cluster.

Table A.4

Cluster assignment of administrative oversight categories

Cluster Analysis	Cluster	Private (1)	Private University (2)	Public University (3)	Local School District (4)	Regional School District (5)	State (6)
Two-	1	1	-	1	1	2	1
group	2	-	3	11	1	1	1
Three-	1	1	-	1	1	2	1
Group	2	-	-	3	1	-	-
	3	-	3	8	-	1	1
Four-	1	1	-	1	1	2	1
Group	2	-	-	3	1	-	-
	3	-	3	4	-	1	1
	4	-	-	4	-	-	-

In Table A.4 I compare the cluster assignments from each of the three analyses

with the administrative categories presented in Table 1. Most notable in the two-group

cluster analysis is the large concentration of university-based—public and

private—programs group together in Cluster 2 and the comparative concentration of

extra-university programs in Cluster 1. The three-group cluster analysis largely removes

a group of university-based programs, placing them in Cluster 2. (The Cluster 2 program

identified as administered by a local school district is more accurately described as a

university/district partnership where the university and district jointly admit candidates

and design the curriculum.) Similarly, in moving to the four-group analysis, another group of university-based programs is cleaved to create Cluster 4. It is worth noting that all of the programs comprising Cluster 4 are from public institutions.

Looking across Tables A.1 and A.4 suggests that, on the whole, university-based programs tend to be smaller and candidates enrolled in them take longer to become the teacher of record and gain full certification. The university programs of Cluster 2 have more on-line options, fewer opportunities for stipends and candidates have bachelor's degrees from more selective undergraduate institutions and are less likely to eventually seek jobs in high need schools.

Combining the data of Tables A.2 and A.3 with that of Table A.4 highlights the diversity of university-based programs. For variables measuring the amount of time it takes a candidate to become the teacher of record and the level of certification at which candidates enter there are wide differences among programs. Likewise, variables measuring programs' on-line and stipend availability, candidates' educational attainment, selectivity of their undergraduate college, and placement in high need schools show that university-based programs are far from monolithic.

There are two trends of particular note I would like to briefly highlight. First, programs whose candidates had higher levels of attainment also entered the classroom the more quickly and candidates with lower levels of attainment entered the classroom more slowly. This was a consistent trend in each analysis. Second, with the exception of the four programs comprising Cluster 4 in the four-group analysis, higher levels of selectivity correspond with lower levels of placement in high needs schools. Conversely, lower levels of selectivity correspond with higher rates of placement in high needs schools.

APPENDIX B

Distribution and Frequency of Majors and Job Relevance by Site

Table B.1

Distribution and frequency of ARC majors

Ranking	2 (*N*=46)	1 (*N*=23)	0 (*N*=5)
Most Frequent Majors	English (10) Biology (8) History (4)	Engineering (5) Communications (4) Computer Science (3)	Theater Arts (2) Marketing Health Administration

Note: Total *N*=74

Table B.2

Distribution and frequency of CTP majors

Ranking	2 (*N*=21)	1 (*N*=7)	0 (*N*=29)
Most Frequent Majors	Psychology (5) Biology (4) Math (3)	Architecture Journalism Engineering	Art (5) Social Work (5) Human Services (4)

Note: *N*=57

Table B.3

Distribution and frequency of NPTT majors

Ranking	2 (*N*=12)	1 (*N*=2)	0 (*N*=3)
Most Frequent Majors	English (5) Biology (2) Spanish	Mechanical Engineering (2)	Development Visual Art Music

Note: *N*=17

Table B.4

Distribution and frequency of ARC Job Relevance

Ranking	2 (*N*=24)	1 (*N*=36)	0 (*N*=13)
Examples of Previous Employment	Pharmaceutical Researcher Environmental Scientist Aerospace Engineer	Accountant School Paraprofessional Computer Specialist	Waitress Customer Service Representative Photographer

Note: Total *N*=74

Table B.5

Distribution and frequency of CTP Job Relevance

Ranking	2 (*N*=0)	1 (*N*=31)	0 (*N*=17)
Examples of Previous Employment		Lawyer Disability Case Manager Foster Care Development	Court Recorder Wal-Mart Floor Manager Sales Consultant

Note: Total *N*=48

Table B.6

Distribution and frequency of NPTT Job Relevance

Ranking	2 (*N*=4)	1 (*N*=9)	0 (*N*=3)
Examples of Previous Employment	Engineer Actuary Graduate Research Assistant	Church Music Director Childcare Director Substitute Teacher	Postmaster Sales Representative Construction

Note: *N*=16

APPENDIX C

Portrait Development

After candidates had completed the survey at each of my three sites, I scanned their responses to demographic and educational items to inform my selection of candidates to invite for a follow-up interview. In my initial glance at the data I classified my sample according to age, gender, ethnicity, salary, and academic major. This was not a formal analysis, but an attempt to quickly gauge the demographic diversity of the candidates in a particular site. Beginning with the Connecticut ARC program, I created a table displaying the attributes of the candidates at the site. Having previously determined to interview about ten percent of respondents, I divided each cell by ten to approximate the number of candidates I needed to interview with each characteristic. I then returned to the surveys searching for candidates who fulfilled multiple attributes. For example, out the total of four women I needed invite to be interviewed, I knew that three should be white, two between the ages of 36 and 45, two with a previous annual income under $30,000, and two with an academic undergraduate major. Selecting a one white woman aged 42 with a previous income of $15,000 and academic major allowed me to fill several attributes simultaneously. Figure C.1 is a partial charting of this work included for clarification.

As I listened to and read through the interviews, I began to see four portraits emerge. I will briefly highlight each.

- Socially Mobile—For these candidates, teaching represented initial entry into the professional middle class. Often coming from more meager backgrounds, completing undergraduate degrees in a non-traditional manner, and having non-

professional work experience, for this portrait, teaching represented both

increased social status and salary.

Figure C.1

Sample for determining candidates for interview based on survey results

Attribute	Total Female	Total Male		Needed Female	Needed Male
Gender	37	35		4	4
White/Non-Hispanic	34	29		3	3
African-American	1	3		0	1
Hispanic	1	4		0	1
Age 26-30	4	6			1
Age 31-35	4	8		1	1
Age 36-45	15	9		2	1
Age 46-55	...	...		...	...
Age ...					

- Capstoners—The smallest of the four main categories, these candidates were

  entering teaching after retiring from long careers in various other fields.

  Generally, this portrait was punctuated by candidates with strong academic

  credentials and profitable careers. They planned on teaching for only a handful

  of years and were only tangentially motivated by salary and benefits.

- Classic Career Changers—These candidates tended to reflect the assumptions of

  proponent of career changers and were distinguished by their subject area

  knowledge and academic achievement. They were often drawn to teaching after

  finding their previous work financially, but not personally, rewarding. In many

  ways they reflected the capstoners, but tended to be a decade or more younger.

- Career Seekers—This portrait was primarily comprised of candidates under the

  age of 30 who either had yet to settle on a career of had quickly determined that

  their chosen career path was unrewarding. In general, this group had limited

applicable work experience, but relatively strong academic achievement and undergraduate degrees in a disciplinary subject.

Upon observing the portraits, I briefly reexamined all of the surveys and placed most candidates in one of the four groups based on a non-rigorous analysis of their responses to key items. This allowed me to see if the candidates on the whole shared background characteristics consistent with those interviewed. Several candidates were not classified, as they did not seem to fit clearly into a particular portrait.

I then used the surveys employing the more rigorous and objective two-step cluster analysis to create groups based on key item responses assessing knowledge, skills, and experiences. These variables and how they were scored are presented below.

- Knowledge—I selected two key proxy variables to measure the subject area knowledge of a candidate: undergraduate major and educational attainment.

  o Major—This variable attempted to measure the nature of undergraduate majors. I rescaled majors on a 0-2 scale. Disciplinary majors that had a direct classroom match such as history, math, biology, or foreign language received a 2. Applied majors such as accounting or engineering received a 1. Non-disciplinary majors including social work, fine arts, and marketing received a 0[12].

  o Highest Degree Attained—This variable attempted to measure the depth of knowledge candidates gained in their fields. The variable was scored on

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[12] This process is fraught with potential bias—for instance, how do you classify an education degree (I chose to give it a 1)? When conflicted I returned to the prevailing assumptions guiding supporters of career changers who tend to favor academic subject area knowledge over pedagogical or pedagogical content knowledge.

a 1-7 scale with 1 representing a bachelor's degree and 7 a terminal degree.

- Skills—Initially I intended to assess candidates' skills through three proxy variables: selectivity, grade point average, and standardized test scores. However, I was limited to self-report data for GPA, leading me to question their reliability. Additionally, potential differences in grades across schools and potential grade inflation across time The combination of inconsistent and inaccurate reporting of SAT and ACT scores led to similar concerns for test score reliability. As I had no confidence in their accuracy, I chose to

  o Selectivity—I measured the selectivity of a candidates' undergraduate institution as measured by the Barron's College Admissions Selector (College Division of Barron's Educational Series, 2006). This is a 1-6 scale with 1 representing the most selective institutions and 6 representing the least selective.

- Experience—I assessed candidate experience through previous job relevance and the salary earned in that work.

  o Job Relevance—This variable attempted to assess the applicability of a candidate's responsibilities in their previous work to the subject area they would be teaching. The variable was reclassified on a 0-2 scale. Admittedly subjective, jobs that built on subject area knowledge such as a research scientist scored higher than jobs that had no direct correlation to academic disciplines, such as childcare or waiting tables.

  o Salary—This variable intended to measure whether entering teaching was a lateral financial move or resulted in a pay cut or raise. Previous job

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salary was placed on 0-2 scale with previous salary above $50,000 earning

a 2 and salary under $30,000 earning a 0. This was based on a rationale

that for candidates rating a 2, teaching would represent a salary reduction.

For candidates rating a 0, teaching would signal a salary increase.

Only candidates for whom I have data on all the variables of interest can be

placed in a cluster. In total, 84 out of 149 candidates were placed by the cluster analysis.

Those who were not placed fell into a handful of categories. A few did not respond to

several items on the survey, making their placement impossible. Many of these chose not

to provide previous employment or salary. In several cases candidates explained that

they had been out of the workforce for many years, typically in these cases as the primary

caregiver for their children. A handful of other candidates were freshly out of college and

did not have any career experience. I also chose not to include an additional set of

candidates who were already practicing educators. Some of these practitioners were

working in independent or religious school without a license. Others were teaching under

an emergency certification. For them the programs presented an opportunity to gain

quick certification, and, even if they were changing jobs, they were not changing careers.

My initial cluster analysis divided the candidates into 2 distinct groups, instead of

the four I had I witnessed in my interviews. An examination of these groups revealed that

of the 84 candidates placed by the cluster analysis, 95% of candidates (39/41) I had

placed in the career seeker or socially mobile category on my cursory examination of the

data were in Cluster1 and 93% (40/43) I had placed in the capstoner or classic changer

categories were placed in Cluster 2. It appears the cluster analysis found salary and work

experience particularly robust in forming groups. Socially mobiles and career seekers

share limited relevant work experience and salary, while capstoners and classic career changers both typically have substantial experience and higher salaries.

Table C.1

Means of proxy variables for two-group cluster analysis

Cluster	N	Academic Major	College Ranking	Job Relevance	Previous Salary	Highest Degree Attained
1	41	1.14	3.42	0.59	0.74	2.10
2	43	1.38	2.74	1.24	1.67	3.48

Note. Four candidates had a ranking of 7, or other (included college of chiropractic and international universities). Those four rankings were not included in the means.
For Highest Degree Attained, 1=Bachelor's degree; 2=Bachelor's + some Master's credits; 3=Master's; 4=Master's + fewer than 15 additional credits; 5=Master's +15-35 credits; 6=Master's + more than 35 credits; 7=Ph.D, Ed.D, M.D., J.D

Two potentially significant distinctions within each group revolved around their age. Based on my interview analysis and cursory look at the surveys, it appeared that the socially mobile portrait reflected a high preponderance of non-traditional undergraduate experiences. One proxy for measuring this would be the age at which they received their bachelor's degree. And, despite many common characteristics, an important distinction between capstoners and classic changers was age. As recent retirees, capstoners should be older than the classic career changers. With that in mind I included date of birth and candidates age upon completion of a bachelor's degree[13] in a second cluster analysis. The most non-traditional candidates—those who received their bachelor's after the age of thirty—received a 2. Additionally, in keeping with accepted cluster analysis protocol, I

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[13] This, too, was a transformed metric on a 0-2 scale. Candidates receiving their bachelor's degree at age 24 or earlier—approximating standard matriculation through undergraduate programs—were assigned a 0. Candidates receiving their bachelor's degree between the ages of 25-29 received a 1. The most non-traditional students, those receiving bachelor's degrees at age 30 or older, received a 2. Date of birth was read as a continuous variable.

specified the analysis into four distinct groups to see how they would reflect my initial

assigned portraits. The resulting clusters were close approximations of my initial portrait

placement (Pearson Correlation=.717, significant at 0.01 level) suggesting that both the

clusters are reflected in the characteristics of the candidates and that my initial skimming

of survey responses were accurate. Cluster 1 proved to be a close approximation to the

socially mobile portrait. Cluster 2 reflected the career seeker portrait. Cluster 3 was the

least defined. Although the majority of the cases included in the cluster were classic

career changers, seven of the eight capstoners in my total sample were also placed in this

cluster. Cluster 4 was composed strictly of classic career changers. Table C.2 displays the

clusters with their analogous portrait.

Table C.2

Four-group cluster analysis and analogous portraits

Cluster	Analogous Portrait
1	Socially Mobile
2	Career Seekers
3	Capstoners & Classic Career Changers
4	Classic Career Changers

Table C.3 displays the means of the variables assessing knowledge, skills, and

experience for the four groups defined in the cluster analysis. For most all variables,

measures approach those assumed by proponents of career changers moving from Cluster

1 to Cluster 4. Cluster 1 is characterized by academic majors that moderately reflect

school subjects, registering the second highest measure of disciplinary match, again, a key

assumption of supporters of career changers. However, for all other measures, Cluster 1

looks the least like the assumed picture. They attended the least competitive colleges, had

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jobs demanding the least discrete subject area knowledge, had low—although not quite the lowest—previous salaries, had the lowest levels of educational attainment, and earned bachelor's degrees at the oldest age. In terms of age upon entering teaching they do not differ markedly from the full sample.

Cluster 2, analogous to the career seekers, is composed largely of comparatively younger entrants into teaching. As a group they have the weakest academic majors of all candidates. The selectivity of their undergraduate institutions is in the middle of the full sample and similar to those in Cluster 3. Their relevance of their previous job to teaching is, again, in the middle. This might be expected as the career seekers in my interview sample have often bounced around between seasonal work and jobs that require limited experience. Their previous salary is comparatively low, although this could well be a combination of age and the types of jobs in which they have been employed. As a group, they have relatively low educational attainment, again, potentially linked to age. Cluster 2 candidates appear to have overwhelmingly followed traditional undergraduate paths, with the vast majority completing their bachelor's degree by the age of 24.

Cluster 3 candidates begin to more closely approximate the characteristics assumed by career change proponents. In most all measures they have higher academic achievement and job experience than Clusters 1 and 2. The most distinguishing characteristic of these candidates is their age and income. This is consistent with the large percent of capstoners who were placed in this cluster. Additionally, their age suggests that Cluster 3 candidates have been in the workforce for longer, rising to more responsible and higher paying jobs. There were more candidates placed in this cluster than any other.

In terms of measured characteristics, Cluster 4 candidates truly appear to reflect

the assumed portrait of career changers. They attended the most competitive colleges,

majoring in academic disciplines. Their previous jobs seem to have demanded the

discrete subject area expertise desired from career changers. They have the highest

proportion of advanced degrees and were all traditional undergraduate students. While

their pay lags behind that of Cluster 3 candidates, this might be explained by the

difference in age between the two groups. Finally, it is essential to notice that although

this group looks the most like the assumed career changer, they represent the smallest of

the four clusters. Although these candidates do exist in practice, they appear not to be as

prevalent as some might hope them to be.

Table C.3

Means of proxy variables for four-group cluster analysis

Cluster	N	Academic Major	College Ranking	Job Relevance	Previous Salary	Highest Degree Attained	Age at Bachelor's Degree	Date of Birth
1	19	1.37	3.65	0.37	0.79	1.95	1.53	1970
2	24	0.96	2.92	0.79	0.71	2.17	0.08	1976
3	27	1.15	2.96	1.19	1.81	3.07	0.37	1962
4	14	1.93	1.79	1.36	1.43	4.43	0.00	1977

Note. Four candidates had a ranking of 7, or other (included college of chiropractic and international universities). Those four rankings were not included in the means.
For Highest Degree Attained, 1=Bachelor's degree; 2=Bachelor's + some Master's credits; 3=Master's; 4=Master's + fewer than 15 additional credits; 5=Master's +15-35 credits; 6=Master's + more than 35 credits; 7=Ph.D, Ed.D, M.D., J.D

An essential element of this study is to understand how candidates differ according

to program. As I discussed in Chapter 1, there has been little investigation into how

candidate backgrounds might differ from one program to the next. By disaggregating the

clusters by site, this begins to show that each of my three target programs tends to attract

a distinct blend of cluster types. However, it is also important to recognize that despite

trends in each program, with one exception, all programs attract some candidates from

each cluster and from each portrait. That exception exists in the smaller NPTT program

where there were no candidates placed in Cluster 1 or the corresponding socially mobile

portrait.[14].

Table C.4

Two-group cluster analysis and portrait aggregation by program

Program	Cluster 1	%	Socially Mobile & Career Seeker	%	Cluster 2	%	Capstoner & Classic Career Changer	%
ARC	15	36	16	34	27	64	31	66
CTP	23	66	31	70	12	34	13	30
NPTT	4	57	4	50	3	43	4	50
Total	43	52	51	52	41	49	48	48

Table C.4 shows the clusters from the initial cluster analysis that created two

clusters. For this analysis, Cluster 1 is analogous to the aggregation of the socially mobile

and career seeker portrait—largely a combination of Clusters 1 and 2 from my second,

four-group cluster analysis. Cluster 2 is analogous to the combination of the capstoner

and classic career changer portraits—Clusters 3 and 4 for the four-group cluster analysis.

As I mentioned above, Clusters 1 and 2 and Clusters 3 and 4 share many of the same

characteristics outside of date of birth and age at which they completed their bachelor's

study. As the data in this table suggest, the three programs are distinct in their

composition. Connecticut's ARC program strongly favors Cluster 2 candidates, those

with characteristics more consistent with the assumptions that surround career changers.

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[14] The NPTT program had only seventeen respondents (out of twenty-one enrolled) from the cohort. However, a large percentage of the candidates (seven) had been stay-at-home parents for several years and were just now reentering the workforce. Because they could provide no salary or employment data they were not included in the analysis. This will, however, be examined in greater depth later in the chapter.

In contrast, CTP has many more candidates entering the classroom with fewer of the characteristics typically attributed to career changers. NPTT seems to have an equitable mix of candidates, although represented by a very small sample size. Still, despite these trends, each program has candidates from each cluster and portrait.

Table C.5 displays four group cluster placements and portrait assignments by program. As with the data displayed in Table C.5, these data further suggest that there are important distinctions between the characteristics of the candidates disaggregated by program. In the ARC program, Cluster 3 is by far the single largest group. In terms of both numbers and percentage there are more Cluster 3 and Cluster 4 and capstoner and classic career changer candidates in the ARC program than either CTP or NPTT. In contrast, although present, ARC has fewer candidates defined by Clusters 1 and 2 and the socially mobile and career seeker portraits. Across ARC, there is very close correspondence between the cluster assignments and my earlier portrait placements.

CTP is noteworthy for its higher representation of candidates from Clusters 1 and 2 and the corresponding socially mobile and career seeker portraits, and lower representation of candidates from Clusters 3 and 4 and, in particular, classic career changer portrait. Again, there is relatively good correspondence between the cluster and portrait assignments. The one notable exception seems to be the discrepancy between candidates assigned to Cluster 1 and the number I placed in the socially mobile portrait, with nine more candidates placed in my initial assignment. A closer look at my data helps to explain a large part of this apparent inconsistency. There are seven more candidates assigned to portraits than to clusters from CTP. Due to instances of missing data, they were not included in the less forgiving cluster analysis, while I chose to approximate their portrait based on the available data. Of this difference, six of the seven

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candidates were ones that I had placed in the social mobile portrait. Again, despite the preponderance of candidates from Clusters 1 and 2, there are still several candidates who share characteristics that are more consistent with the classic career changers and capstoners.

NPTT is less relevant to this discussion. Although there is a distribution of candidates across the portraits and clusters with the one exception noted above, the sample of assigned candidates is too small to be very suggestive. Still, the comparatively large number of career seekers and Cluster 2 candidates were consistent with two NPTT candidates I interviewed who mentioned their attraction to the Mountain West after finishing their undergraduate education and their oscillation between jobs according to the seasons.

Initially I sketched these portraits based on my interviews with candidates across my sites. I then conducted a cluster analysis of the survey data to further refine the categories and support the initial profiles. The cluster analysis placed most of the candidates into groups, but left many unconsidered. As I mentioned above there are many reasons for their omission, ranging from missing data to candidates I withheld from consideration who were too young to have had a previous career to candidates already working in classrooms as the teacher of record. After analyzing the clusters, I looked more closely at the outliers, examining both interview transcripts and survey responses. There was one substantial pattern that emerged and a second that the data suggested.

First, many of the outliers had interrupted their careers to be primary caregivers to their children—stay-at home parents—maybe working occasional part-time jobs. In interviews, candidates at all sites fit this profile. Although there was no single question on the survey asking if a candidate had been a stay-at-home parent, combining items

inquiring about employment history, parenting, and the occasional additional comments affixed to the survey hinted that many candidates reflected this portrait. A second set of the outliers gathered around candidates who for family or personal reasons needed a job immediately and chose teaching out of sincere interest in the profession, yes, but also due to a belief that teaching provided quick entry to good work in a generally attractively setting. Although these sentiments were raised with regularity in interviews, they were difficult to determine with certainty by sieving the survey data alone. Therefore, this profile appears likely to be underrepresented in my analysis.

Table C.5

Four-group cluster analysis and portrait assignment by program

Cluster	ARC	CTP	NPTT	Total
Cluster 1	9	10	0	19
%	21	29	0	23
Socially Mobile	7	19	0	26
%	15	43	0	26
Cluster 2	7	13	4	24
%	17	37	57	29
Career Seeker	8	12	4	24
%	17	27	50	24
Cluster 3	17	8	2	27
%	40	23	29	32
Capstoner	4	3	1	8
%	9	7	13	8
Cluster 4	9	4	1	14
%	21	11	14	17
Classic Career Changer	27	10	3	40
%	57	23	38	40

Note. The N=84 for candidates placed in clusters; N=99 for candidates initially assigned to a portrait. Some candidates were not included in the cluster analysis due to missing data but assigned to a portrait in my more subjective assessment.
Cluster 3 is a mix of classic career changers and capstoners. % represents percentage of candidates placed by the cluster analysis or my portrait assignment from each program, not the total number of candidates from each program.

Table C.6 shows the distribution of primary caregivers and job seekers by site. For a small number of the candidates, I assigned them to a portrait based on their interviews, but most were based on my reading of their survey responses. Therefore, these are suggestive numbers lacking precision. Even making allowances for the fuzzy results, there seems to be a substantial number of primary caregivers at each site. However, this is most obvious in the NPTT program. At that site, primary caregivers comprise the single largest portrait. Primary caregivers are the second largest portrait at the ARC program and are comparatively smaller at CTP. The job seeker portrait is small at the ARC and CTP sites and apparently nonexistent among candidates at the NPTT program. However, let me caution again that this portrait is particularly challenging to ascertain from survey data alone. Unless candidates explicitly stated their immediate need of a job in an interview or as an additional comment on the survey, I was unable to place them in this portrait.

What is particularly notable about these two portraits is that outside of the common experience of raising children among primary caregivers and being motivated by a pressing need for employment among the job seekers, the candidates within each group have diverse characteristics.

Table C.6

Primary caregiver and Job Seeker assignment by program

Program	Total Unplaced Candidates	Unplaced Candidates as % of total candidates	Primary Caregiver	%	Job Seeker	%	Other	%
ARC	27	36	11	41	4	15	12	44
CTP	13	22	3	23	3	23	8	62
NPTT	9	53	7	78	0	0	2	22
Total	49	33	21	43	7	14	22	45

Note. % represent the percent of candidates not placed in the initial portrait assignment.

Table C.7

Distribution of proxy variables for job seeker assignment

N=7	Academic Major			College Ranking			Job Relevance			Salary			Highest Degree Attained			Age at Bachelor's Degree			Date of Birth		
	0	1	2	0	1	2	0	1	2	0	1	2	0	1	2	0	1	2	0	1	2
Job Seekers	2	1	3	2	3	1	1	2	3	1	1	2	3	2	2	5	1	1	4	1	1
					0.83									0.71						0.5	
Means		1.17			(3.5)			1.3			1.25			(3.14)			0.42			(1967)	

Although there are trends for each variable, the portrait is far from uniform. For example, there is a preponderance of candidates who have a bachelor's degree or a few graduate credits. However, there is also a stay at home parent who was formally a corporate lawyer and another with a doctorate in biology. Likewise, although nearly half of the candidates attended a college with selectivity rating of 4 or higher, there were also a handful of caregivers who attended the most selective colleges. The one additional variable that was mostly consistent for the group was date of birth. Although there was some discrepancy based on the age of a candidate's children when they chose to return to work, there were no primary caregivers under the age of 32. Simple math helps explain this finding, as a parent is less likely to have all children in school in her (and the portrait was female, but with two exceptions) early thirties, permitting a return to work. When compared to the variable means from the cluster analysis presented in Table C.3, the primary caregivers do not follow predictable patterns. Primary caregivers have the second highest rating for academic majors, yet the second lowest ratings for college selectivity. While their college ranking was close to that for Clusters 1, 2, and 3, the age at which they received their bachelor's degree is not consistent with any pattern. And the

range for this variable shows many traditional undergrads, but also a substantial minority of non-traditional students.

The data for the job seekers is clearly compromised by the sample size. It is impossible to extrapolate out to suggest that the trends present in Table C.7 would hold for a larger group of job seekers. Considering that, it is still worth considering that there are no strong trends for any of the variables of interest. Academic majors are quickly balanced by non-disciplinary majors, candidates with only a bachelor's degree are countered by one with a doctorate in biochemisty, and while there candidates who previously had jobs with high salaries, there are also many with comparatively low salaries and three who have been out a job for so long that they did not list any salary data. It does appear most job seekers were traditional undergraduate students. As with the primary caregivers, when compared to the clusters in Table C.3, they defy confident predictability.

Aggregated Core Variables by Program

Table D.1

Means of proxy variables by portrait

	N	Academic Major	College Ranking	Job Relevance	Previous Salary (Median)	Degree Attained	Bachelor's Degree (mean/ median)	High Needs Placement
Socially Mobile	28	1.14	4.00	0.63	30,000	2.07	28.86/ 27.00	1.93
Career Seekers	24	1.00	3.08	0.74	25,500	2.38	23.21/ 22.50	2.25
Capstoners	8	1.50	2.75	1.38	46,250	3.38	22.88/ 22.00	2.63
Classic Career Changers	40	1.35	2.68	1.15	43,000	3.35	24.97/ 22.00	2.53
Primary Caregivers	21	1.43	3.05	1.00	*	2.81	26.60/ 22.50	3.00
Job Seekers	7	1.40	3.20	1.60	58,000	2.67	25.83/ 23.00	3.17

Note: I have presented means and medians for the Age at Bachelor's degree variable as there was a large discrepancy between the two measures. I also used the median value for the previous salary variable, as outliers skewed the results.
*Primary Caregivers have been out of the workforce for several years.

Table D.2

Distribution of candidates according to age, race, and gender, by percent

	Date of Birth	Native American n	African-America n	Asian/Pacific Islander	Hispanic	White—Non Hispanic	Male	Female
Socially Mobile	1969	0	50	0	11	39	46	54
Career Seekers	1978	0	4	4	0	92	25	75
Capstoners	1955	0	13	0	0	88	88	13
Classic Career Changers	1969	0	18	0	5	78	68	33
Primary Caregivers	1965	0	10	0	5	86	10	90
Job Seekers	1967	0	14	0	0	86	57	43

Table D.3

Experience with children according to portrait, by percent

	Parent	Direct work with children	No significant experience with children
Socially Mobiles	29	64	11
Career Seekers	21	83	0
Capstoners	38	63	0
Classic Career Changers	53	50	0
Primary Caregivers	100	57	0
Job Seekers	57	28	43

Table D.4

Distribution of portraits by program

	ARC	CPT	NPTT
Socially Mobiles	8	20	0
Career Seekers	8	12	4
Capstoners	4	3	1
Classic Career Changers	27	10	3
Primary Caregivers	11	3	7
Job Seekers	4	3	0

Additional Candidate Mini-Cases

Portrait A—Socially Mobiles

Devin Stuart

Devin is 36-year old African-American male living in western Connecticut. For the past nine years, Devin has been working at Norwich Free Academy (NFA), a large semi-public high school, in several capacities, ranging from academic support counselor to in-school suspension supervisor to multi-cultural coordinator, as well as assuming several athletic coaching positions. Devin is also a graduate of the school. When I spoke with Devin, he had recently been hired to teach history at NFA beginning in the fall of 2007.

Unlike many socially mobile candidates, Devin went straight to college out of high school, receiving a full-ride scholarship to play football at the University of Connecticut, taking advantage of this opportunity to receive a double major in political science and sociology.

It seems that I've always been around and always have had a positive experience with education. As a student and as a student-athlete, education has some significance in having me go to college in the first place, because I had a scholarship to go to the University of Connecticut. And I just really enjoyed the relationships I've been able to develop through those experiences. (Personal Interview, 7 June 2007)

Despite his scholarship, he encountered financial hardships and did not complete his degree until he was twenty-nine. Soon after earning his undergraduate degree, Devin

began a graduate degree in education at the University of New Haven, although with his eye on becoming a football coach, seeking one-on-one relationships with student-athletes. He eventually worked for a couple of years as an assistant coach back at the University of Connecticut, before becoming disillusioned with the instability of college coaching.

Despite his degree, without a teaching credential Devin settled for paraprofessional status for the better part of a decade, enduring lower status than full faculty and lacking job security. He supplemented his income by serving as an assistant football coach at NFA.

> [T]hree years ago I applied for the head coaching position at the school and really felt, cause I had been there for such amount of time, I was basically the defensive coordinator and the offensive coordinator, I was second behind the head coach. And the head coach had indicated that I was going to get the job. And I did not get the job. They ended up giving it to somebody that did not have the experience, but was a teacher. And that kind of really showed me something...about paraprofessionals, They're not viewed, I don't believe, on the same status as teachers. And I just started taking classes. (Personal Interview, 7 June 2007)

Both for his own personal desire to grow professionally and to earn the security and compensation that accompanies full faculty status, Devin decided enrolled in the ARC program.

In some ways Devin's story differs from the typical socially mobile portrait. He has taken a different educational track, earning a bachelors degree from a flagship public institution majoring in traditional academic disciplines. He continued his studies, beginning graduate study. However, in many other ways he fits the model quite neatly.

As he is quick to share, his scholarship made undergraduate study feasible. Since his graduation, Devin has had no clear career track. Although he has worked continually in education, his work has been comparatively low status and low pay. Teaching will represent Devin's greatest annual salary. Additionally, his previous work has not made direct use of his major. Likewise, he will have limited practical experience in his disciplinary field to inform his classroom practice.

As with Amana, Devin associates teaching more with job security and middle class status than service. However, he does value education, viewing his role as a teacher as a opportunity "to persuade students to have an appreciation for education and also being and African-American, also giving a perception of what an African-American teacher can be like" (Personal Interview, 7 June 2007). This is a more targeted mission than simply "doing good." Devin views the educational opportunities he has enjoyed as integral to achieving middle class status. He now hopes to spread his belief that education yields security.

<center>Portrait B—Career Seekers</center>

Melissa Thompson

Melissa is a twenty-seven year old white woman, living in central Connecticut. Melissa typifies the Portrait B candidate in as many ways as she contradicts it. Although she has worked steadily in a professional setting as an accountant for five years, she has never been dedicated to the work, nor has she much enjoyed it. While more lucrative, to Melissa accounting has held little more significance than the short-term service work that is common to other candidates in this portrait. ARC, then, presented her with an opportunity to assess her previous career decisions and take time to examine what she deems essential to a career and what is expendable. She has come to realize that she

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ended up in accounting through a sort of academic passivity, finding herself on a track that did not reflect what she considers personally important.

As an undergraduate at small Catholic college in Connecticut, Melissa entered her college with no clear career interests.

> I just started college and orientation....[My academic advisor] didn't really ask me what I wanted to do. He kind of just said, "What kind of classes do you want to take?" "Well, I took accounting in high school." "Let's start you off with an accounting class." And I never really thought about what I wanted to do with my life and it was just kind of convenient and I fell into it. Never thought about being an accountant. And I after I graduated, figured, "Well let me follow this." The ball just kept rolling and I graduated, got a job and then after five years of doing accounting I thought, "Darn it, if only I had gone back and thought about and said in you know 10 years you're going to be worried about what you're doing."
>
> (Personal Interview, 7 June 2007)

In high school she had enjoyed accounting classes, but less than the math than the formal elements of the discipline. The tidiness that accompanied organizing and presenting information on ledgers appealed to her sense of order, more than the analysis of the data. And this continued in her work as an accountant. "I don't care why revenue went up....I don't mind doing the plug and chug, putting in the numbers in the Excel spreadsheet, but when it comes to actually thinking about it, I don't have any interest in it at all" (Personal Interview, 7 June 2007). Still, her career inertia eventually resulted in an MBA.

Her failure to consider the implications of her career track led to a miserable existence. Despite a very good salary and generous benefits, work as an accountant was a

miserable life for Melissa. She lamented the isolation of the work—she described it as a "cubicle sea"—and her work's impotence to directly impact anyone.

> I just want to work with people and just in 20 years I can look back and say, "I really liked what I was doing and fell like I mad difference." It's very depressing after a while when you're just like, "Well, what's the point? What's the point of getting up and going to work? I could easily call up sick and do the work tomorrow, easily, and nothing bad would happen." (Personal Interview, 7 June 2007)

In contrast, to Melissa, teaching held the promise of making a perceptible influence on students.

> Reflecting on what she truly enjoyed about high school math, she recalls an algebra teacher who had a talent for explaining the work. Melissa respected how he clarified difficult concepts, now understanding that more than the discipline itself, she was attracted to how to translate the material to allow others access to it. This is different orientation to the discipline than seen in many other career changers. Similar to Nick, but unlike many candidates from other portraits, Melissa was not motivated to by a desire to reengage in her subject area. In fact, she was not particularly interested in math. Rather she was attracted to the interaction with students. Math was simply the discipline in which she had sufficient credits to earn her certification.

> Melissa, her husband already a teacher, was also motivated by the potential the academic calendar lent to a better family life.

> [I]n the summertime I'm at work completely miserable and he's home and I'm just crying that, "I want to be home with you and I'm here and it sucks and I'm miserable and I don't want to sit here...."It was more that if I was at a job and I

was happy it would be okay, but there was a complete imbalance in that I was just

unhappy and that was it. (Personal Interview, 7 June 2007)

The combination of leaving her previous work, beginning to teach, and the

accompanying lifestyle changes were worth a nearly $15,000 pay cut to Melissa. Still,

these factors alone may have been an insufficient trigger for her to leave her previous

work.

Melissa had been enrolled in teacher preparation classes for nearly four years,

taking a class or two every other semester. Still despite twenty-six credits toward her

certification, she figured that it would have likely taken her another four years to

complete her program. In addition she would have had to quit her previous job to

complete her student teaching, an additional cost. Therefore, the ARC program allowed

her to accelerate her career and lifestyle change.

As I mentioned at the outset of this case, Melissa is not completely representative

of career seekers. She had a professional job, an MBA, and a stable career track had she

chosen to stay on it. Additionally, she took a pay cut to become a teacher and moved to a

less formal working environment. All of these factors are peculiar to Melissa within

Group B. Still, when focusing on her rationale for entering accounting and her

dedication to her previous work, she echoes her career seeking peers. After college she

simply applied for a job and received one. She readily admits that she lent her work the

minimum expected level of effort and demonstrated little dedication to her employers.

She neither viewed her accounting work as a career nor as contributing to the success of

the company stating, "I don't feel like I made a difference at all. I just felt like I was

waking up everyday to go in to get a paycheck to go home" (Personal Interview, 7 June

2007). Additionally, she maintains an exploring orientation to teaching. Although she is

committed to teaching and currently plans to stay in the classroom for many years, she

was motivated to enter teaching in large part by external factors such as the academic

calendar and the quick transition it provided from her accounting position. Finally, she

expressed a great deal of apprehension in leading a class, openly wondering if teaching is

the right choice.

> I really am anxious with student teaching, cause that's when it's going to be like
>
> either I can't do this or I can. Then I'll have to make a decision, but I really want
>
> to do it am I'm going to work hard at it. (Personal Interview, 7 June 2007)

Melissa has no back-up plan if she finds teaching frustrating, neither has she embarked on

a path to teaching that demands an investment of time or money from which she could

not recover. If teaching does not work for her, it is likely that she can create new options.

Portrait D—Classic Career Changers

Jonathan Waxman

"Although on one side of the coin, I'm not looking to change the world, on the other side

of the coin I don't want to be worth totally nothing." (Personal Interview, 7 June 2007)

Jonathan is a 33 year-old white male living in central Connecticut. Like many in

the ARC program, for the past 7 years he has worked for a large insurance corporation,

first as an analyst and later as a project manager specializing in information technology

projects. A graduate of Washington University in Saint Louis, he earned his bachelor's

degree in Earth Science and later a Master's degree in Information Technology Systems

from George Washington University. Like Tommy, Jonathan decision to enter teaching

was influenced by a similar confluence of factors: decreased enjoyment in his old job,

increased family commitments, and desire to do work that felt important. Also like

Tommy, there was an additional trigger—in Jonathan's case his wife's income—that made his yearning to change careers attainable.

Jonathan closely matches the characteristics of career changers assumed by their proponents. He has an academic degree from a highly selective university. He experienced success in his previous work, even though his job did not direct draw on his academic credentials. And he is entering teaching so he feels his paycheck comes from doing important work.

Jonathan enjoyed many aspects of his previous job, finding his projects drew on a large set of skills and each project was a unique challenge. Despite enjoying the problem solving demanded by individual projects, the longer he stayed at his previous work the more he felt there was nothing

> more unfulfilling than working as a project manager in a huge insurance
> company....[I]f I didn't do my job, someone else would have done it. If someone
> else didn't do it, someone else would have done it and if someone else didn't do it
> and it didn't get done, the company wouldn't have lost a single cent on the bottom
> line. Everything would have kept going as if nothing was ever wrong with it.
> (Personal Interview, 7 June 2007)

Teaching provided him with the opportunity to engage in work he felt was important while also allowing him to engage in a subject area—Earth Science—for which he had a passion. In part it is his interest in environmental studies that informs his belief in the redeeming value of teaching. He relishes the chance to engage students in the principal contemporary science topics, hoping to help them develop as scientific thinkers. Although he had experienced success in his previous work, he longed to return to his disciplinary subject. His work in the insurance industry may have both drawn on and

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honed the analytical skills Jonathan developed earning his bachelor's degree, but they did not tap into his zeal for Earth sciences—an enthusiasm that dominated his pleasure reading and even influenced family vacation destinations.

Additionally, Jonathan's first child was born just as he left his previous job last February, serving as a

> kind of a kick in the pants....Your whole life is going to be tossed upside down when you have the baby. Everything is going to change. It would be easier to just stay at my job. But if everything is going to get tossed upside down anyway and I'm going to start new, let's really start new....Get up. Get going. You've talked about making this change for two years, do it. Now is the time. Your life's getting tossed upside down anyways, so what does it matter. (Personal Interview, 7 June 2007)

He was also attracted to teaching's schedule allowing him to often get home earlier in the day, saving money on childcare, yes, but more importantly "being able to spend more time with her in the summer" (Personal Interview, 7 June 2007) and after school.

Although his work experience was not directly transferable to the classroom and his experience working with children was limited to his newborn daughter, he also stressed the important role his disabled sister played in teaching him understand how to help others learn.

> In one sense she's a perpetual youth. So in one sense I've worked with youth my whole life. She's different than a 7th grader in my class, but the patience, the trying something that didn't work. "Okay let me try it this way. It didn't work. Let me try it this way it didn't work. Try it this way. Oh it worked it clicked."

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Trying something until it clicks, it makes an impact. In that way I think I'm a little prepared. (Personal Interview, 7 June 2007)

As with so many other candidates who gained soft skills for the classroom through training new recruits, working in a day care, coaching, or being a parent, Jonathan emphasizes the significance of these experiences in preparing him for the classroom. He feels that he has learned both to be a better teacher and a more complete person through caring for his sister.

Jonathan was generally positive about the ARC program, citing the ease with which could earn his certification. He had briefly investigated other programs, finding they required a much greater time commitment that translated into greater costs both in terms of tuition and income lost while enrolled in the program. Although the additional expense and time commitment did not completely rule out other programs, when compared to ARC, he did not see a greater value in longer preparation.

Like Tommy, the pushes of unrewarding work along with the pulls of potential social impact in the classroom and growing family demands primed him for a change. Still, he admits that his wife's income was the ultimate factor allowing him to pursue the change.

Frankly, she earns a lot of money, so I can afford to take a little time off and then make less without it really hurting our lifestyle. So that's actually an important part of it. If she were making a lot less money, I don't know that I would even consider this. (Personal Interview, 7 June 2007)

For Jonathan, the desire and opportunity to make a change alone were insufficient. The security provided by his wife's income served as the trigger.

Portrait E—Primary Caregivers

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Karen Davis is a forty-seven year old white woman living in central Montana. The mother of two teenage boys, Karen has spent the past eighteen years largely out of the regular workforce, but deeply engaged in community activism, including political organizing and youth advocacy. Most recently she ended her nine-year term on the local school board—the last five as president. And she speaks with the confidence and authority of person accustomed to the public eye. She describes her desire to engage in community work as a lifestyle choice, not an economic one.

> If anything, I would say my version of my career track is being a mother and doing a lot of community service. And that's not to say that I'm in a situation economically that allowed me...it's a choice that my husband and I made. Not a choice based on our economic situation as much as what we feel strongly about. And so we've made a lot of choices about living more modestly and doing things...We have a lot of faith in the democratic process. We have a lot of belief in grassroots work. We have a lot core values about what it means to maintain a democracy. (Personal Interview, 28 January 2008)

As a stay-at-home parent, she was able to engage in this work her family deemed as essential, while still being to chaperone her children's fieldtrips.

The design of NPTT expects candidates to find a full-time placement as the teacher of record after completing the initial nine-credit sequence. Karen, however, sought and received special dispensation to work as a student teacher this year instead of as the teacher of record. She managed to create a student teaching experience allowing placements in multiple classrooms over the course of the school year. Holding a bachelor's degree in history with a minor in French, she will student teach in a high

school French class for a full semester, and for a approximately a quarter each in a middle school social studies and a middle school gifted and talented classroom. Like many career changers, and especially common among primary caregivers, Karen is somewhat a "prisoner of geography." However, as the student handbook explains, "[i]t is not unlikely for participants to move to a new town to accept their first teaching position"(Montana State University, 2006). Returning to work after living in the community for nearly two decades, she lacks the mobility of a typical starting teacher. Her husband's job is well established, as are her children's schooling and friends. She is not able to pack up the family to follow available jobs. That she lives in Montana exacerbates her limitations. Here, the next district is not five miles down the road, but thirty, and that road traverses a mountain. Therefore, despite her dedication to teaching, she has resigned herself to waiting until a job opens in her hometown. In the meantime, she is hedging her bets by seeking certification—or in the case of gifted education where there is no Montana certification—and experience in as many fields as possible, therefore making her eligible for multiple openings.

This does not mean that she lacks a dedication to her subject area. In fact Karen's work and life experiences suggest a deep and continuing dedication to her disciplines. Upon graduation from Stanford University, she converted a specific interest in Asian history, and a dabbling in Japanese language, into work in Japan. Early in her work career she served as a legislative aide on Capitol Hill. She has likewise sought to ways to engage in French culture in language, including "running the business end of a French pastry shop for a while" (Personal Interview, 28 January 2008). Consistent with the stay-at-home parents and echoing many proponents of career changers, Karen cites

the relevance of her experience as a mother in preparing her for the classroom. However, her relevant employment experience occurred many years ago.

Karen's most immediately applicable experience is her years on the local school board. Her service the board is unique among the career changers in my study and demonstrates similar levels of systemic and policy knowledge, as well as dedication to public education. In our conversation she spoke smartly about contracts—sitting through the last five negotiation sessions—qualities of good administrators, and the role of the state legislature, suggesting a broader perspective than typical of student teachers. However, in Karen's school board tenure also lays the genesis of her decision to enter the classroom.

The more engaged she became in her work with the board, the further she drifted from the realities of practice.

> [A]lthough the work is very valuable especially on the policy end of things, the longer you're there the farther away from the kids you get. Just because there are so many obligations that you have in your duties as school board member you can't get down to the place where you're really connected with students again. I mean you're going an testifying at the legislature about funding and you're trying to set the budget and you're talking about policies and try to figure out how all those things relate to the kids, but you don't get to see the kids as much as I'd like to see the kids. (Personal Interview, 28 January 2008)

As her term came to an end, NPTT provided a path to engage in the daily work of teaching. It was also fortuitous that her boys' "schedules are such now in high school that I can go back and do something like this and it doesn't impact them the same way it would have. But I really wouldn't have done it sooner" (Personal Interview, 28 January

2008). This confluence of events—the end of her school board term, her children entering high school, and the chance NPTT provided—made this the opportune time to enter teaching.

Like so many candidates, Karen cited NPTT's design as integral to both her choice of program and her final decision to teach. Karen investigated a local college's preparation program only to find the length and cost untenable. She explains that with NPTT, "you're able to do the certification coursework and not start over with freshmen math which they were going have me take, and a public speaking class after I'd been the president of the school board for five years" (Personal Interview, 28 January 2008). In contrast, through NPTT her undergraduate studies provided sufficient coursework to earn certification in both French and history. Additionally, the asynchronous on-line design was family-friendly, allowing her to complete her coursework according to her availability—at 8:30 am some days and 10:00 pm on others. Additionally, she felt that the on-line structure provided a good scaffold for the realities of classrooms. Like Karen, her classmates had capricious schedules creating conversations that were iterative. Karen would return multiple times to the same discussion thread as additional classmates responded, each time refocusing her thinking and leading to more considered responses. As she entered the classroom, she found a similar strategy useful in responding to student work.

> Already in the classroom I can see that when I'm going through the papers in
>
> French or I'm grading the kids work, I need to loop back on some stuff that they
>
> didn't get. And if I never look back at the stuff, if I'm just correcting for, "Did
>
> they complete everything." That's not going tell me what they didn't get the first

time that needs another go through and I just think the coursework has made that part of the practice (Personal Interview, 28 January 2008).

Whether this was intended by the design, she is not sure. She has, however, internalized the practice.

Judy Randazzo

Judy is a fifty-two year old white woman teaching high school English in rural northern Wyoming. Over the course of her adult life Judy has worked in several fields from sales to banking to not-for-profit management—jobs that she claims are more similar than at first blush; "you're begging people for money" (Personal Interview, 28 January 2008). With the birth of her daughter eighteen years ago, Judy chose to stay home. Quickly she found that she "need[ed] to get out of the house" and began her undergraduate studies, which she completed seven years later with a bachelor's in English. During those years, and for several years after she completed her degree, Judy was out of the workforce and only returned after she and her husband divorced. For the past five years she has been working steadily first selling cell phones and later "selling more loans and more credit cards to people...[who] don't really need these things" (Personal Interview, 28 January 2008). Frustrated with her jobs she began to look for something where she could be of help to people, eventually landing in her high school English classroom.

Judy's passion for English is immediately evident. Although teaching was not her expected career path—her love of literature harbored a dream to be a librarian—she expressed the fortune she felt to be able to turn a hobby into a career. More evidence of her dedication to her discipline was clear from her frustration of being in a tiny town in the mountains with a poor high school library and that, "every single book on my want

read list I have to interlibrary loan. It's a pretty sad little place" (Personal Interview, 28 January 2008). In fact she consistently distinguished herself from the residents of Wyoming who she felt showed no appreciation for education. Finding her way to the classroom through NPTT she felt was clearly some sort of sign. "I have stupid degree in English. There's nobody in Wyoming that gives a rip if you have a degree in English. They don't care if you can read and write and spell" (Personal Interview, 28 January 2008). The opportunity to instill youth with a subject she loved was a very attractive.

Despite her love for education in general and literature more specifically, she was not a traditional undergraduate student. She did not begin college until she was in her mid-30s and then attended a commuter college and was limited to enrolling in largely night classes after her husband returned home from work. While in contrast to many primary caregivers, it is far from a unique path among the parents in the study. It is worth highlighting that, although the birth of her child pulled her from the workforce for many years, it is also that birth that presented her with the opportunity to go back to school, eventually presenting her with broader and more lucrative employment choices.

Like many primary caregivers, Judy cites both her age and her experience as a parent as central to her initial success in the classroom.

> Not with me, but last year there was a brand new teacher just fresh out of college, a young man, and they made his life really miserable last year. But I'm older, and you know what, I don't really care. There's not a lot they can do to me. (Personal Interview, 28 January 2008)

She continues by explaining that although it has been tough to adjust to and be accepted in a small, "insular" town—she has to drive an hour to do her grocery shopping—she has

little concern for making friends. Besides, the demands of her coursework in conjunction with the stress of being a first year teacher provide little chance to socialize.

Judy is quick to note that her previous work experience has little direct link to teaching outside that she has always enjoyed working with people. Frustrations in her previous job led her to seek a new career. She tired of selling of credit to people who "don't really need these things. They need to quit borrowing money, not borrow more money" (Personal Interview, 28 January 2008). She quite soberly shared that her frustration led her literally to pray—including at least once an Indian sweat lodge—to God to find work where she would feel of service to others. A little while later, she came across a newspaper advertisement promoting the NPTT program. She quickly applied, and when she was accepted she took it as a sign from God that she was doing the right thing. Teaching provided her a way to center her life around English and be of help, "because who needs more help than teenagers" (Personal Interview, 28 January 2008). Still, despite teaching's attractions, Judy was hesitant. Finding a job in Wyoming provided a salary that she estimates is double that of starting teachers just across the boarder into Montana. Therefore, teaching provided essentially a lateral move in terms of income. She feared her ability to live off $25,000 salary she foresaw to the north.

Although Judy voices some minor concerns with NPTT, mostly around inconsistent grading, she adamantly credits the program with getting her into teaching. Unlike many career changers, and unlike the prevailing assumptions, Judy had not longed for the classroom for years. In fact, she first considered teaching that day she came across the advertisement in the newspaper. Not only did NPTT sow the idea of teaching in her head, but the even then the classroom could not have been realized without the fast-tracked path provided by the program. "I never would have even

considered it, well, because there would have been no way for me to do it without going totally back to school and starting all over and, nah, I wouldn't have done that" (Personal Interview, 28 January 2008). Years earlier, she had considered returning to graduate school for a degree in library sciences. However, her marriage ended, rendering her a single parent without the financial flexibility to return to school. Likewise, taking on two years of full-time coursework and associated student loans, while having to leave a full-time job would have been similarly unfeasible. Through NPTT, the on-line courses provided the flexibility to continue her job until her school year started, and the relatively low tuition ($5,000) was within her means.

Portrait F—Job Seekers

Jean Ludlow

Jean is a forty-three year old white woman living in Connecticut. A former research scientist, Jean holds both a bachelor's degree and a doctorate in biochemistry. After working as a research associate and managing laboratories in a university for several years, she spent five years working for a pharmaceutical start-up before the research unit was eventually dismantled. Although she flourished in the work and it was very lucrative, Jean's experience in industry left her dubious of what she perceived as a vicious desire to make money. When I spoke with her in the summer of 2007 she had been unemployed for more than a year, only recently seriously considering the benefits teaching provided as a career option.

Jean has deep knowledge of biochemistry. Both her degrees and practice demanded theoretical and applied knowledge of her discipline. For several years her main job responsibility was to produce and analyze peptides for use in drug research. This, coupled with her years running a large university research facility, developed her

extensive skill in the laboratory, likely skills in high demand in a high school science class.

Yet, despite her experience she expressed discomfort with the appropriateness of her

subject area knowledge.

> I took AP biology in high school in the early 80s and that was the last general
> biology course I had in my life. And so I started studying for this state Praxis
> exam and I was like…no way even in college would I have seen that much in a
> general bio as on the Praxis exam and certainly in AP bio it's never going to get
> that level of coverage. I was a chem. major as an undergrad, almost to the bitter
> end. I changed to biochem really late, so I don't have a lot of biology. (Personal
> Interview, 8 June 2007)

Still her reticence masked her deep understanding of how knowledge is created in biology

and her insights on how to make biology relevant to the experience of students.

> I'm a biology thinker. I used my biochem to solve biology projects. I didn't use
> my biochem to solve chemistry projects. When I think about teaching biology, I
> think of things about biology, or I think about cool things I'd love the kids to think
> about. When I think about chemistry it's very static. There's a big gaping hole
> there. It's easier to see biology in our lives. If nothing else we're biological
> entities. So if you're trying to make that connection that this is important because
> you actually live this, it's so much easier in biology. (Personal Interview, 8 June
> 2007)

Jean's comments reveal a depth of disciplinary knowledge that was only rarely expressed

by her peers, reflecting her deep engagement with the discipline in her previous work.

Although not facing the same dire financial decisions as other job seekers, Jean's

severance and unemployment benefits expired leaving her and her husband to "liv[e] on

my husband's paycheck, which is doable, but...a really frugal existence" (Personal Interview, 8 June 2007). Still, Jean consistently voiced ambivalence toward returning to industry. She enjoyed the work a great deal, finding the challenges rewarding. However, she was disaffected by the relentless drive for profits and the implications that drive raised for job security. She described the industry as continually searching for a "home run" drug that will reap great financial gain, with health and wellness a secondary concern, at best. This led to constant job turnover where a three-year stint in a single company is considered very stable. Yet, only two-weeks before beginning her ARC preparation, Jean submitted to an interview with another drug company.

Teaching's job security, then, became the single greatest draw for Jean, who "wanted life to be simpler." While offering job-security, teaching brought a pay cut in excess of fifty percent, a trade-off she was very willing to accept to keep from worrying whether "when I'm 52 will I get laid-off?" (Personal Interview, 8 June 2007). And Jean was not optimistic about her other employment options her doctorate opened. She had not published, limiting university opportunities and was not willing to work as an adjunct.

> The whole point is I don't want to be hunting for a job every semester. I want to
> have something consistent. So were getting down to teaching. Unless I want to
> take my whole career and go, "Whoop! We're going to go over here." (Personal
> Interview, 8 June 2008)

With industry's luster worn, high school teaching seemed the best remaining alternative. The relative speed and limited cost of ARC, then, allowed Jean to pursue teaching her family's budget restrictions

Teaching does not instill the same passion in Jean as it does for some candidates who have long aspired to the classroom. But Jean expressed confidence in her decision,

nonetheless, describing herself as "not one of those people that gets my self-value out of my work" (Personal Interview, 8 June 2007).

This is not the same as saying that teaching is unattractive work or Jean does not think she can be a good teacher. She has had experience teaching as a graduate student and found the work to be hard, but she enjoyed the challenge.

I think a lot of grad students, it's like, "How can I make this the most trivial thing in my life?" And I always took I very seriously. I always felt like I owed those students really the top percent of me. This was something I was doing and it was important and if you have lab notebooks you'd better get them done and ready for the next lab. At cost to my own research. (Personal Interview, 8 June 2007)

Jean describes the accomplishment that her lab work and other teaching situations supplied.

[I]n a lot of my jobs I've had to train people, which is teaching in the end. And I think I've always felt a certain level of satisfaction getting people so they're comfortable with something....It's almost a bigger check mark on my day to do that than to produce peptides. (Personal Interview, 8 June 2007)

Jean is honest that teaching, although not a last resort, neither is it first. In contrast to many career changers who are attracted to teaching by its promise of community impact, Jean assumes a more pragmatic stance toward the classroom: a job she believes she can abide and do well. In part this reflects her experience teaching at the university. Her experience tells her that teaching can be physically and emotionally enervating. It also tells her that most of the time the rewards—for Jean, helping students learning, engaging in her discipline, and having job security—compensate for the more distasteful elements of the work.

APPENDIX F

INSTRUMENTS

Program Directors/Coordinators Survey

1. Name _____

2. Institution _____

3. Position _____

4. Years associated with the program _____

Program Design

5. How many students earn certification through your program annually?

_____

6. Approximately how long does it take for a typical candidate to move from the start of your program to becoming in charge of a class as the teacher of record?
   - O   Less than 6 weeks
   - O   6 weeks to 6 months
   - O   More than 6 months to 1 year
   - O   More than 1 year to 2 years
   - O   More than 2 years

7. Approximately how long does it take a typical candidate to earn certification through your program?
   - O   Less than 6 weeks
   - O   6 weeks to 6 months
   - O   More than 6 months to 1 year
   - O   More than 1 year to 2 years
   - O   More than 2 years

8. What is the minimum degree necessary for entry into your program?
   - O   Some undergraduate credits
   - O   Associate's Degree
   - O   Bachelor's Degree
   - O   Bachelor's Degree, plus some credits toward a Master's degree
   - O   Master's Degree

9. Does your program offer required courses on-line?
   - O   There are no on-line course options
   - O   Some classes are offered on-line
   - O   Most courses are offered on-line
   - O   All courses are offered on-line

10. Is there a stipend available for students to help defray the costs of your program?
   - O All students receive a stipend
   - O Students are eligible for a stipend based on merit
   - O Students are eligible for a stipend based on need
   - O Students are eligible for a stipend based on location of their initial teaching placement
   - O There are no stipends available for students

11. At what level of certification do candidates enter the classroom?
   - O Teacher of record on a temporary/provisional certificate
   - O Teacher of record on a full certificate
   - O Other_____

12. According to your best estimate, in which subject areas does your program prepare the most candidates (select **no more** than three)?
   - O General Elementary
   - O Specific Elementary subject
   - O Middle/Secondary Math
   - O Middle/Secondary Science
   - O Middle/Secondary Social Studies
   - O Middle/Secondary English Language Arts/Reading
   - O Special Education
   - O English as a Second Language
   - O Foreign Language
   - O Physical Education
   - O Art/ Music
   - O Industrial Arts
   - O Technology
   - O Other _____
   - O Other _____

History

13. Other than this program, what other options does your college/organization offer to candidates entering teaching from other careers (select all that apply)?
   - O This program is the only option.
   - O Undergraduate teacher education
   - O Post-Baccalaureate program
   - O Master's degree
   - O "Fast-track" certification program
   - O Other _____

14. Which of the following were significant motivations for the development of your program (select all that apply)?

   - O Legislative mandate
   - O Student demand

O   Perceived market of students for such a program
O   Potential supplementary revenue sources
O   Lack of other colleges/universities in the region developing similar programs
O   Competition with other colleges/universities in the region developing similar   programs
O   Philosophical desire to draw different and/or underserved clientele into teaching
O   Other _____

Local/Regional Context

For questions 15-19, consider "local" to refer to the area immediately surrounding your institution. Consider "regional" to refer to a radius of a couple hundred miles from your institution.

15.   For each level, please indicate the availability of teaching jobs locally.

Elementary Schools

Rare/Scarce	Not widely available	Widely Available	Abundant
O	O	O	O

Middle Schools

Rare/Scarce	Not widely available	Widely Available	Abundant
O	O	O	O

High Schools

Rare/Scarce	Not widely available	Widely Available	Abundant
O	O	O	O

16.   In which subject areas are teaching jobs most available locally (select no more than three)?
    O   General Elementary
    O   Specific Elementary subject
    O   Middle/Secondary Math
    O   Middle/Secondary Science
    O   Middle/Secondary Social Studies
    O   Middle/Secondary English Language Arts/Reading
    O   Special Education
    O   English as a Second Language
    O   Foreign Language

O   Physical Education
O   Art/ Music
O   Industrial Arts   .
O   Technology
O   Other _____
O   Other _____

17.   For each level, please indicate the availability of teaching jobs <u>regionally</u>.

Elementary Schools

Rare/Scarce	Not widely available	Widely Available	
Abundant			
O	O	O	O

Middle Schools

Rare/Scarce	Not widely available	Widely Available	
Abundant			
O	O	O	O

High Schools

Rare/Scarce	Not widely available	Widely Available	
Abundant			
O	O	O	O

18.   In which subject areas are teaching jobs most available <u>regionally</u> (select no more than three)?
O   General Elementary
O   Specific Elementary subject
O   Middle/Secondary Math
O   Middle/Secondary Science
O   Middle/Secondary Social Studies
O   Middle/Secondary English Language Arts/Reading
O   Special Education
O   English as a Second Language
O   Foreign Language
O   Physical Education
O   Art/ Music
O   Industrial Arts
O   Technology
O   Other _____
O   Other _____

19.   How would you best characterize the options available for preparing non-traditional teaching candidates in your region?

O   There are many options available to potential candidates.
O   There are some other options available to potential candidates.
O   There are limited options available to potential candidates.
O   There are no other options available to potential candidates.

Recruitment

20.   Which of the following statements best reflects the recruitment challenges of your program?
    O   We would not have sufficient numbers of students without the recruitment efforts we undertake.
    O   We take recruitment seriously, but attract a high number of candidates through word of mouth or other informal methods.
    O   Even with minimal recruitment we would attract sufficient numbers of quality candidates.

Questions 21-26 relate to the selectivity of your program. Please answer them with your best approximation. We understand that you might not have this data readily available, so please indicate how confident you are in your responses to these questions.

21.   What would you ESTIMATE the average undergraduate GPA of candidates enrolled in your program to be?
    O   3.8 or higher
    O   3.3-3.8
    O   2.8-3.3
    O   2.3-2.8
    O   1.8-2.3
    O   Not Applicable

22.   How confident are you in the accuracy of your answer?
    O   Not very confident
    O   Somewhat confident
    O   Very confident
    O   It is precise

23.   What would you ESTIMATE the average scores on the SAT for candidates enrolled in your program to be?
    O   Greater than 1400
    O   1400-1200
    O   1200-1000
    O   1000-800
    O   Less than 800
    O   Don't know
    O   Information not collected

24.   How confident are you in the accuracy of your answer?

O   Not very confident
O   Somewhat confident
O   Very confident
O   It is precise

25. What would you ESTIMATE the average combined score on the ACT for candidates enrolled in your program to be?
O   Greater than 32
O   32-28
O   27-24
O   23-20
O   19-16
O   Less than 16
O   Don't know
O   Information not collected

26. How confident are you in the accuracy of your answer?
O   Not very confident
O   Somewhat confident
O   Very confident
O   It is precise

Skills
27. In percentages, please estimate the highest degree candidates have attained when they enter your program.

Degree Status	Percentage
No degree	
Associate's degree	
Bachelor's degree	
Some credits toward a Master's degree	
A Master's degree	
M.D./J.D./Ph.D/Ed.D or similar	

28. Please estimate what percentage of candidates earned an undergraduate or graduate degree from institutions in each of the categories of selectivity listed below?
O   No degree upon entering program   _____
O   Not very selective institutions   _____
O   Moderately selective institutions   _____
O   Highly selective institutions   _____

29. Approximately what percentage of applicants to your program is accepted into the program?
More than 75%   50%-75%   25%-50%   Fewer than 25%

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O   O   O   O

30.   Approximately what percentage of applicants accepted into your program enroll in the program?

        More than 75%   50%-75%   25%-50%   Fewer than
25%

        O   O   O   O

Candidates

Knowledge

31.   Approximately what percentage of candidates is seeking certification in a subject area directly related to their undergraduate or graduate field of study?

        More than 75%   50%-75%   25%-50%   Fewer than 25%   Don't
Know

        O   O   O   O   O

Experience

32.   Approximately what percentage of candidates is seeking certification in a subject area directly related to their previous work experience?

        More than 75%   50%-75%   25%-50%   Fewer than 25%   Don't
Know

        O   O   O   O   O

Motivation

33.   Think about the jobs candidates held immediately before entering your program. Please rate the following statements according to your <u>impression</u> of their importance in contributing to candidates' decisions TO LEAVE their previous work.

	Not at all important	Somewhat important	Important	Very important	Don't Know
a. Retirement	①	②	③	④	⑤
b. Sought greater autonomy	①	②	③	④	⑤
c. Sought greater pay	①	②	③	④	⑤
d. Sought work schedule more compatible with personal life (e.g., family responsibilities)	①	②	③	④	⑤
e. Sought work that contributed to broader community	①	②	③	④	⑤
f. Sought work with personal connections	①	②	③	④	⑤

270

with peers and clients					
g. Lost job through downsizing/lay-off/firing	①	②	③	④	⑤
h. Other (Please specify)	①	②	③	④	⑤
i. Other (Please specify)	①	②	③	④	⑤

34. Rate the following statements according to your <u>impression</u> of their importance in contributing to candidates' decisions TO BECOME a teacher.

	Not at all important	Somewhat important	Important	Very important	Don't Know
a. Teaching will provide an opportunity to impact the broader community.	①	②	③	④	⑤
b. Like working with children	①	②	③	④	⑤
c. Have valuable subject-area knowledge they will be able share with students	①	②	③	④	⑤
d. Comparatively few barriers to entering teaching	①	②	③	④	⑤
e. Want a new challenge.	①	②	③	④	⑤
f. Daily/annual academic schedule is compatible with personal life (e.g., family responsibilities, hobbies)	①	②	③	④	⑤
g. Prospect of tenure will limit the threat of firing/lay-offs/downsizing	①	②	③	④	⑤
h. Need a job quickly	①	②	③	④	⑤
i. Fringe benefits (health, retirement, etc) are good	①	②	③	④	⑤
j. Salary is good, based on a nine month contract	①	②	③	④	⑤
k. Other (Please specify)	①	②	③	④	⑤
l. Other (Please specify)	①	②	③	④	⑤

35. In percentages, what is the <u>approximate</u> age distribution of the candidates in your program?

Age	Percentage
Under 25	_____
26-35	_____
36-45	_____
46-55	_____
Over 55	_____

36. In percentages, what is the <u>approximate</u> overall distribution of the following categories in   your program?

Category	Percentage
Female	_____
Male	_____
African-American	_____
Asian/Pacific Islander	_____
Hispanic	_____
Native American	_____
White	_____

Job Placement

37. To the best of your knowledge, how successful are candidates from your program in finding teaching jobs?

More than 75% find teaching positions	50%-75% find teaching positions	25%-50% find teaching positions	Fewer than 25% teaching positions	We have no records tracking candidate placement
O	O	O	O	O

38. How confident are you in the accuracy of your answer?
   O   It is precise
   O   Very confident
   O   Somewhat confident
   O   Not very confident

39. The following table seeks to learn about the initial teaching placement of your candidates. Please indicate the percentage who found placement in the following settings.

	More than 75%	75-50%	50-25%	Fewer than 25%	Don't know
Traditional Public School					
Parochial/Independent School					
Charter School					

Urban School					
Suburban School					
Rural School					
"Majority Minority" School					
"High Needs" School (a school with a high percentage of students from limited economic means)					

39.   Please use the space below to share any additional information on what makes your program distinctive.

Part I: Reasons for Leaving Previous Employment

1.   Think about the job you currently hold (or held immediately before entering the ARC program). Please rate the following statements according to their importance in contributing to your decision to leave your previous work.

	Not at all important	Somewhat important	Important	Very important
a. Retirement	①	②	③	④
b. Sought personal connection with clients	①	②	③	④
c. Sought more autonomy	①	②	③	④
d. Sought greater pay	①	②	③	④
e. Sought interaction with other colleagues	①	②	③	④
f. Sought greater employer loyalty to employees	①	②	③	④
g. Sought work schedule more compatible with personal life (e.g., family responsibilities)	①	②	③	④
h. Sought work that contributed to broader community	①	②	③	④
i. Sought active work	①	②	③	④
j. Lost job through downsizing/lay-off/firing	①	②	③	④
k. Change in nature of work responsibilities	①	②	③	④
l. Job ended after a set term/Intended for job to be short term	①	②	③	④
m. Other (Please specify)	①	②	③	④
n. Other (Please specify)	①	②	③	④

Part II: Reasons for Choosing Teaching

2.   When did you first seriously consider a position in teaching?
   O   Last six months
   O   6-24 months
   O   2-5 years

3. Rate the following statements according to their importance in contributing to your decision TO BECOME a teacher.

	Not at all importance	Somewhat important	Important	Very important
a. Experience/knowledge gained in previous job provided skills to teach	①	②	③	④
b. Teaching will provide me with an opportunity to impact the broader community that was lacking in my previous work	①	②	③	④
c. I like working with children	①	②	③	④
d. Teaching will present opportunities to forge close relationships with colleagues	①	②	③	④
e. I have valuable subject-area knowledge I will be able share with students	①	②	③	④
f. Compared to other professions, there are relatively few barriers to keep me from entering teaching	①	②	③	④
g. The daily academic schedule will be compatible with my life situation	①	②	③	④
h. The yearly academic calendar will be compatible with my life situation	①	②	③	④
i. I want a new challenge.	①	②	③	④
j. I welcome the creative challenge of preparing engaging lessons.	①	②	③	④
k. The academic calendar will provide opportunities to pursue other hobbies and interests.	①	②	③	④
l. The prospect of tenure will ensure constant employment, limiting the threat of firing/lay-	①	②	③	④

offs/downsizing.				
m. I need a job and will be able to find one relatively easily in teaching.	①	②	③	④
n. Based on my past experiences, I'm confident I can succeed in teaching.	①	②	③	④
o. The fringe benefits (health, retirement, etc) are good.	①	②	③	④
p. The salary is good, based on a nine month salary	①	②	③	④
q. Other (Please specify)	①	②	③	④
r. Other (Please specify)	①	②	③	④

4. a. Would you have left your previous employment anyway if a position in teaching
         had not been an option?
         O   Yes
         O   No (If NO, please go to question 5.)

    b. If you answered YES to question 4a., what other work did you consider
         outside of teaching?

    _____

5. How much did acceptance into the Connecticut ARC program impact your
     decision to enter teaching?
     O   Not at all (I would have sought another route into teaching)
     O   A little bit (I would have likely sought another route into teaching)
     O   A good deal (I likely would not have sought another route into teaching)
     O   Completely (If not for acceptance into the ARC program, I would not
          become a teacher)

6. What paths to teaching did you consider in addition to the Connecticut ARC
     program? (Select all that apply)
     O   None
     O   Teaching in an independent or parochial school
     O   Certification program through a Connecticut college or university
     O   Certification program at a college or university in another state

O   Certification program through a private or not-for-profit organization

Which state_____

Which program_____

7.   Rate the following factors' importance for choosing the Connecticut ARC program.

	Not at all important	Somewhat important	Important	Very important
a. Proximity/ convenience to where I live	①	②	③	④
b. Selectivity and status of program	①	②	③	④
c. Speed with which I can earn certification	①	②	③	④
d. Quality of preparation	①	②	③	④
e. Success in the classroom of previous ARC graduates	①	②	③	④
f. Received financial support to attend	①	②	③	④
g. Program's reputation for help in securing teaching jobs	①	②	③	④
h. My values are compatible with program's themes	①	②	③	④
i. Other (please specify)	①	②	③	④
j. Other (please specify)	①	②	③	④

Part III: Expectations of Teaching Practice

8.   a.   How long do you expect to be a practicing teacher?
          O   Fewer than 3 years
          O   3-5 years

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        O   6-10 years
        O   10-15 years
        O   More than 15 years

b.   If you plan on teaching fewer than 10 years, please select the choice below that BEST describes why you expect to leave the classroom?
- O   Age/Retirement
- O   Teaching meets just a current employment need
- O   Personal/Family considerations (e.g., spouse retiring or relocating for work)
- O   Move to other education positions (e.g., administration, university teaching, consulting)
- O   Do not expect to be able to sustain my enthusiasm over an extended period
- O   Leave to take better job in another field
- O   Other (please specify) _____

c.   What is your approximate expected income for you first year teaching?

     $___ ___ ___, ___ ___ ___.0 0

9.   The following questions relate to the setting in which you hope to teach. For each, select the option that <u>BEST</u> describes your expectations.

a.   I plan to teach in a:
- O   Public School
- O   Independent School
- O   Religious/Parochial School
- O   Charter School
- O   Uncertain

b.   I plan to teach:
- O   K-2nd Grade
- O   3rd-5th Grade
- O   Middle School/Junior High
- O   High School

c.   I plan to teach in a(n):
- O   Urban Setting
- O   Suburban Setting
- O   Rural Setting
- O   Uncertain

d.   How important is it to you to teach in a "high needs" school (a school with large percentages of students from limited economic means)?
- O   I will teach in a "high needs" school
- O   I hope to teach in a "high needs" school

c. I plan to teach in a(n):
    O   Urban Setting
    O   Suburban Setting
    O   Rural Setting
    O   Uncertain

d. How important is it to you to teach in a "high needs" school (a school with
    large percentages of students from limited economic means)?
    O   I will teach in a "high needs" school
    O   I hope to teach in a "high needs" school
    O   It does not matter to me if I teach in a "high needs" school
    O   I hope not to teach in a "high needs" school
    O   I will not teach in a "high needs" school

e. How important is it to you to teach in a "majority minority" school (a
    school where more than half of students classify themselves as a
    racial/ethnic minority)?
    O   I will teach in a "majority minority" school
    O   I hope to teach in a "majority minority" school
    O   It does not matter to me if I teach in a "majority minority" school
    O   I hope not to teach in a "majority minority" school
    O   I will not teach in a "majority minority" school

Part IV: General Information

College Education

10.   a.   What is the highest level of education you have attained? (Select only one)
            O   Bachelor's Degree
            O   Some graduate hours
            O   Master's Degree
            O   Fewer than 15 hours beyond a Master's Degree
            O   15-35 hours beyond a Master's Degree
            O   More than 35 hours beyond a Master's Degree
            O   Ph.D/Ed.D

       b.   In what year did you receive your bachelor's degree?

            _____ Year

       c.   What was your major field of study?

            _____ Major

       d.   Did you have a second major field of study?
            O   Yes
            O   No
            (If no, please go to Question 10f)

       e.   What was your second major field of study?

            _____ Major

       f.   Did you have a minor field of study?
            O   Yes
            O   No
            (If no, please go to Question 10h)

       g.   What was your minor field of study?

            _____ Minor

       h.   What was your grade point average for your undergraduate studies?
            O   3.80 or higher
            O   3.8-3.3
            O   3.3-2.8
            O   2.8-2.3
            O   2.3-1.8
            O   Lower than 1.8

i.   To the best of your recollection, please provide your scores to any of the standardized tests listed below that you have taken.

SAT (_____) _____ _____ _____
       Year taken   Verbal   Math   Writing Sample

ACT (_____) _____
       Year taken   Combined

GRE (_____) _____ _____ _____ ____
       Year taken   Verbal   Quantitative   Analytical   Writing
Sample

11.   What is the name of the college or university where you earned your bachelor's degree?
       a.   Name of college or university

       _____

       b.   In what city and state is it located?

       _____

Answer Question 12 only if you have completed a graduate degree

12.   a.   What is the nature of your graduate degree?
             O   M.A./M.S.
             O   M.F.A.
             O   J.D.
             O   Ed.D.
             O   Ph.D.
             O   Other (Please Specify)_____

       b.   In what year did you receive your graduate degree?

             _____ Year

       c.   What is the name of the college or university where you earned this degree?
             1.   Name of college or university

       _____

             2.   In what city and state is it located?

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d.   What was your field of study?

_____

<u>Demographic questions</u>

13.   Check whether you are male or female.
       O   Male
       O   Female

14.   Check whether you are of Hispanic or Latino origin.
       O   Yes
       O   No

15.   What is your race?
       •   Mark one or more races to indicate what you consider yourself to be.
             O   White
             O   Black or African-American
             O   Asian
             O   Native Hawaiian or Other Pacific Islander
             O   American Indian or Alaska Native
             O   Other

16.   What is your year of birth?

       19__ __

Previous work experience

17.   Briefly list all of the significant jobs you have held in the past 30 years, beginning with your most recent job.

Place of employment	Approximate start date	Approximate ending date	Position(s) held	Responsibilities	Salary in last year at job
e.g. Bank of America	Fall 1986	Summer 1992	Financial Consultant	Financial Planning	40,XXX

18.   What previous experience do you have working with children? (Please select all that   apply)
    O   Parent
    O   Worked directly with children in previous employment
    O   Worked indirectly with children in previous employment (e.g., advocacy work)
    O   Volunteered with youth (e.g., scouts, religious youth group)
    O   Had significant experience working with children when I was younger (e.g., tutoring, babysitting, camp counselor)
    O   Other (Please specify)
_____

19.   Please use the space below to add any additional information you would like to
        share that has not been adequately addressed through the above questions.

Candidate Interview Protocol

Thank you for sharing your time and agreeing to talk with us. We know your time is valuable and have every intention of keeping this discussion under 30 minutes. Please remember that all data we are collecting is strictly confidential. We will be audiorecording this conversation and I will be transcribing the conversation. This is only for research purposes. If at any time you would like us to stop the tape, please say so and we will glad stop recording. Additionally, if there are questions you are uncomfortable answering, simply indicate that you do not wish to answer that question and we will proceed to the next item. If after we have finished our discussion or anytime in the future you decide that you do not want your interview used, please contact us and we will not include it in our data.

Are you ready to begin? I am going to turn on the recorder now.

1. Please describe your previous job before beginning this program. What were your responsibilities?

2. What did you like about the work? What did you dislike?

3. What were the factors that led to your leaving your previous work? Was there one central factor?

4. (Look at survey question 3—ask for clarification as to why this best describes your previous work.)

5. Describe other significant work experience? (Be specific in the actual phrasing of this question. Use the response to survey question 30 to frame the question.)

6. Other than teaching, what other careers did you consider when deciding to leave your current job?

7. Why did you choose teaching? Why didn't you choose the others?

8. When did you first start thinking about a career in teaching? How long after you first considered a career in teaching did you begin to pursue a career?

9. Why did you choose this program? Which programmatic factors were important to your decision?

10. How satisfied have you been with the program? Is there anything the program does not offer that you wish it did?

11. (Look at survey question 14—are there any responses that need more explanation.)

12.   (Look at survey question 15b—if answer either of the first two options, ask for clarification).

13.   What about teaching is most attractive to you?

14.   What about teaching is least attractive to you?

15.   What about teaching is makes you most apprehensive?

16.   (Look at survey question 17—ask for clarification of any responses in the "strongly agree" or "strongly disagree category)

17.   (Look at survey question 18—ask for clarification as to why this best describes your decision to teach)

18.   What previous experience do you have working with children?

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