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An Examination of Administrators' Framing of the Basic Skills Test Requirement

Ann Larson Traynor, Ed.D.

University of Connecticut, 2016

Abstract

This collective case study examines how teacher preparation program administrators framed the basic skills test requirement (BSR) in the context of its impact on the diversification of teacher education programs. The BSR is an entry gate requirement for admission to teacher education programs. Basic skills and subject area teacher licensure tests present a disproportionate entry barrier to teaching for students of color. Research questions were designed to elicit administrators' policies, practices and supports for students of color to meet the BSR. Methods included interviews with eight administrators at three institutions, document analysis, and the use of framing theory as an analytical tool.

I find that BSR policies and supports were related to senior-level administrator priorities and resource constraints. Administrators' worldviews were reflected in the type of support they provided for diversity, and administrators' diagnostic framing of the BSR was aligned with their role and responsibilities. Senior-level administrators' diagnostic framing focused on problems related to standards, test bias and test validity/reliability. Administrators in student support roles focused on issues related to test preparation and test bias. These findings have implications for teacher education policy, practice and research related to increasing teacher diversity.

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An Examination of Administrators' Framing of the Basic Skills Test Requirement

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B.A., Central Connecticut State University, 1988

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Ann Larson Traynor

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APPROVAL PAGE

Doctor of Education Dissertation

An Examination of Administrators' Framing of the Basic Skills Test Requirement

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TABLE OF CONTENTS

LIST OF TABLES v

CHAPTER 1: INTRODUCTION 1
Problem Statement 1
Purpose of the Study 3
Research Questions 4

CHAPTER 2: REVIEW OF LITERATURE AND CONCEPTUAL FRAMEWORK 6
Diversifying the Teaching Force 6
Entry Barriers for Students of Color 8
K-12 Preparation 9
Teacher Licensure Testing 9
Framing Theory 13

CHAPTER 3: METHODOLOGY AND ANALYSIS 15

CHAPTER 4: FINDINGS 22

CHAPTER 5: SIGNIFICANCE AND IMPLICATIONS 45

REFERENCES 51

APPENDIX: INTERVIEW PROTOCOL 59

FIGURE 1: FRAMING THEORY 22

LIST OF TABLES

Table

1. Study Participants 17

2. Sample Frames.....23

3. Research-Based Support Recommendations 61

4. Teacher Preparation Program Background Information.....61

5. Teacher Preparation Program Support Matrix 1.....62

6. Teacher Preparation Program Support Matrix 2.....63

CHAPTER 1: INTRODUCTION

Problem Statement

U.S. demographics indicate an increasing number of students of color and a persistently low number of teachers of color in the nation's public schools (Backus & Mueller, 2012; Bireda & Chait, 2011; Stone & Mueller, 2004). Nationally, 40.7% of K-12 students are ethnic minority[1], but only 14.6% of teachers are Black or Latino (Bireda & Chait, 2011). In the Northeastern state in which this study took place, 6% of teachers and 31% of students are Black or Latino (Boser, 2011). This disparity between students' and teachers' ethnic and racial background is worth addressing considering the "potential of teachers of color" (Villegas & Irvine, 2010, p. 176) to positively impact minority students' academic achievement and experiences in schools (Dee, 2004; Villegas & Davis, 2008). Impactful practices include "having high expectations" and "serving as advocates and cultural brokers" for students of color (Villegas and Irvine, 2010, p. 180).

State education agencies, legislatures, accreditation and advocacy organizations have increased their focus on the recruitment, preparation and retention of teachers of color. At the same time, teacher education programs are subject to increasing levels of accountability: they must report on admission criteria, student demographics, their progress with recruiting students into critical shortage areas, and the performance of students on entry and exit teacher licensure tests (CAEP, 2015; Title II, 2015).

For aspiring teachers of color, teacher licensure testing policies present a potentially disproportionate entry barrier to teaching. Until very recently (SDE, 2016b), the State

[1] I use 'minority' and 'students of color' interchangeably in this paper. My problem of practice is focused on Black and Latina/o students, since the focus of my work-related recruitment and retention is on Black and Latina/o students and critical shortage areas.

Department of Education (SDE) in the state in which this study took place required teacher candidates meet a pre-admission basic skills test requirement by passing Educational Testing Service's (ETS's) Praxis I tests (or Praxis Core Academic Skills Test as of September 2014) or by obtaining a basic skills test waiver. However, "Black and low-income students, who score lower on the SAT on average" (Louie, 2007, p. 2235), will often lack sufficient precollege preparation to pass the Praxis I test (Bennett, McWhorter, & Kuykendall, 2006; Gitomer, 2011; Nettles, Scatton, Steinberg & Tyler, 2011) or qualify for the waiver. Therefore, these students will have difficulty meeting the basic skills test requirement. Additionally, this Northeastern state has traditionally set high cut (passing) scores for teacher licensure tests (ETS, 2016), this is problematic since raising basic skills cut scores can reduce the number of students of color entering teaching (Memory, Coleman, & Watkins, 2003).

The potential disparate impact and high cut score practices may have influenced the state legislature's May 2016 decision to eliminate the basic skills test requirement for certification, as of July 1, 2016 (Gen. Stat. § 16-41, 2016). The state will still require aspiring teachers to take Praxis Core or qualify for the waiver for entry into a teaching program (SDE, 2016a), but teacher preparation programs may choose to admit students who have not passed the Praxis tests. The State Board of Education will issue updated waiver criteria guidance by January 2017 (Gen. Stat. § 16-41, 2016). During this transition, the current research can be helpful to assess how the inclusion of such tests has so far developed and been enacted, thus helping to inform the future teacher licensure testing policy decisions that will need to be made.

Purpose of the Study

With the changes to the basic skills test requirement, it is important to understand how current policies have impacted the number of students of color entering teaching and the challenges and constraints confronting teacher preparation programs as they support students to meet these requirements. Doing so provides a baseline to understand the potential efficacy of alternative models.

As conceptualized, the entry criteria to a teacher preparation program is straightforward and objective; students must meet basic skills test requirements prior to entering a teacher education program. Later, at the conclusion of course work, they must pass subject area tests to receive an institutional recommendation for certification and to enter the teacher labor market. However, despite the seemingly standard nature of this process, in practice, teacher preparation program administrators have a substantial role as gatekeepers to teacher education (Goodwin & Oyler, 2008). For example, although states may require entering teacher candidates meet the basic skills test requirement for entry into a program, administrators have some flexibility in deciding the kind of support (if any) provided to students to pass. Additionally, it is likely that there may be patterns to such behaviors both within individuals over time (e.g., an administrator responds similarly across different tests), and within and across institutions. In this way, an investigation of administrators' current practices related to these entry examinations may give insights into how administrators may respond to future requirements.

However, despite the need for such research, little appears. Although researchers have shown that both basic skills and subject area teacher licensure tests present a disproportionate entry barrier to teaching for Black and Latina/o college students, little attention has been paid to how teacher preparation program administrators make sense of tests that focus on granting access to

teacher preparation programs. In particular, a gap exists regarding the basic skills test requirement: what it measures, what the cut scores mean, what specific factors related to the assessment impact student performance, and the degree to which administrators believe it serves as an entry barrier to teaching. In my pilot study on such topics, administrators defined the test validity/high cut score issue as an information problem and not an equity issue. They were less compelled to act on it by advocating for lower cut scores, for example. This study expanded on the size and scope of my pilot project to examine the extent to which my original findings were transferable using a larger sample size of participants.

Therefore, the purpose of this qualitative case study is to understand whether and to what degree teacher education program administrators view the basic skills test requirement as problematic and, if so, how they frame their concerns and actions as a result. Since I focus on entry gate testing only, I do not include faculty since they typically have little interaction with students and involvement in decisions related to entry gate testing support. Continuing the work of Goodwin & Oyler (2008), I examined "gatekeeping practices in teacher education" to "provide data about the supports, decisions, policies, and interventions that need to be (or are) in place" (p. 485). This study extends prior research by including both elementary and secondary education majors, and examining gatekeeping practices related to "front end requirements for entrance into programs," (Goodwin & Oyler, 2008, p. 470) in the context of the impact of such policies on the diversification of teacher education programs.

Research Questions

1) What are teacher preparation program policies related to the basic skills test requirement?
2) What is the nature of teacher preparation program administrators' diagnostic framing of the basic skills test requirement?
3) What are teacher preparation program administrators' practices related to the basic skills test requirement?
    a. How does program support relate to administrators' frames?

This capstone is divided into five chapters. In the following chapter, I review the relevant literature and conceptual framework for my study. I discuss the rationale for diversifying the teaching force, entry barriers that exist for students of color, and the validity of using teacher licensure tests as a measure of teacher quality. An explanation of framing theory and its usefulness as an analytical tool for my study is also included. In chapter three, I provide an overview of the methods used in my study. In the fourth chapter, I discuss the findings, and in the final chapter, I discuss the study's significance and implications.

CHAPTER 2: REVIEW OF LITERATURE AND CONCEPTUAL FRAMEWORK

To contextualize my research questions, I first examine the literature related to why it is important to diversify the teaching force and the entry barriers related to the basic skills test requirement, such as inadequate K-12 preparation and teacher licensure testing policies, which could potentially impede this effort. I also discuss framing theory, which helps me to understand how administrators frame teacher diversity and the basic skills test requirement.

Diversifying the Teaching Force

The rationale for increasing teacher diversity is based on factors related to the demographic imperative and the impact teachers of color have on the achievement of students of color. The demographic imperative (Zeichner, 2003) refers to the increasing number of students of color and the low number of teachers of color. It also includes the "cultural divide between [White] teachers and their [K-12] students" (p. 493), and the 'opportunity gap' or disparity in access to resources (e.g., educational, financial, effective teachers) between White students and students of color (Haycock, 2001 in Achinstein, Ogawa, Sexton, & Freitas, 2010; Zeichner, 2003).

Researchers find that teachers of color improve academic achievement, student experiences in schools, and serve as role models for students of color (Dee, 2004; Dee, 2005; Irvine, 1990; Villegas & Clewell, 1998; Villegas & Irvine, 2010). In their review of the literature to create a "research-based rationale for increasing diversity in teaching," Villegas and Irvine (2010) identified five practices that improve the experiences and outcomes of students of color:

> (a) having high expectations of students; (b) using culturally relevant teaching; (c) developing caring and trusting relationships with students; (d) confronting issues of racism through teaching; and (e) serving as advocates and cultural brokers (p. 180).

The authors found the role model rationale "compelling," although there is limited empirical evidence supporting it (Villegas & Irvine, 2010, p. 178). There is a stronger case for ethnic matching of student and teacher. Using quantitative data from Tennessee Project STAR, Dee (2004) found that ethnic pairing of students and teachers increased student performance in math and reading. Other quantitative researchers found similar effects (Clewell et al., 2005 in Villegas & Irvine, 2010; Goldhaber & Hansen, 2010; Hanushek, 1992 in Villegas & Irvine, 2010). Goldhaber and Hansen (2010) use Praxis II test scores from 4,051 North Carolina teachers and state administrative records from 1994-95 through 2004-05 to link teachers with 174,828 students (p. 226). Their study revealed that Black teachers worked in harder-to-staff schools and their students "outperformed White teachers' students in both reading and math" (Goldhaber & Hansen, 2010, p. 231). This was true "in spite of Black teachers' poorer average performance on licensure tests" (Goldhaber & Hansen, 2010, p. 231).

The opportunity gap between White students and students of color is at least partially due to teacher attrition in hard-to-staff schools (Zeichner, 2003). In *Seven Trends: The Transformation of the Teaching Force*, Ingersoll, Merrill and Stuckey (2014) examined the current teacher labor market trends using National Center for Education Statistics (NCES) Schools and Staffing Survey (SASS) and Teacher Follow-Up Survey (TFS). The authors found that efforts to recruit more teachers of color has resulted in a 4.9% increase in the number of such teachers over the past 25 years (Ingersoll et al., 2014). However, while teachers of color are "two to three times more likely" (p. 18) to begin their career in low-income and urban schools, they are also more likely to leave these schools than White teachers. The primary reasons for attrition include "less-than-desirable working conditions" (Ingersoll et al., 2014, p. 24) and a lack of autonomy, revealing a need to focus on in-service retention efforts as well as recruitment.

The same degree of attrition exists in alternative teacher preparation programs. Irizarry and Donaldson (2012) examined the retention of Latina/o Teach for America (TFA) teachers using survey data of 2029 respondents, collected by Donaldson and Johnson (2010). They found that Latina/o teachers felt a connection to and were "significantly more likely to remain in their low-income school placement" and in teaching long term (Donaldson & Johnson, 2010, p. 183). Unlike Ingersoll and Stuckey (2014), the authors found that Latina/o teachers who leave teaching do so to pursue other opportunities rather than because of "poor working conditions" (Irizarry & Donaldson, 2012, p. 181). Conditions contributing to teacher attrition included insufficient support, autonomy, decision-making, and collaboration time with other teachers, and student motivation and discipline issues (Ingersoll & Stuckey, 2014; Irizarry & Donaldson, 2012). These findings highlight the need to consider a variety of recruitment and retention strategies to meet the needs of students and teachers of color with different interests, motivations, and challenges.

Entry Barriers for Students of Color

Despite the demographic imperative and the research-based rationale for increasing the recruitment and retention of teachers of color, barriers exist that hinder this effort. Many researchers have studied the entry barriers existing for students of color when moving from K-12 to higher education (Avery & Hoxby, 2004; Goldrick-Rab, 2007; Louie, 2007; Nivet, 2010; Olson & Rosenfeld, 1984) and into teacher education (Bianco, Leech & Mitchell, 2011). I focus on barriers related to meeting the basic skills test requirement and review the literature in two areas: K-12 preparation and teacher licensure testing. In the following sections, I discuss each of these issues in turn.

K-12 Preparation

Considering the opportunity gap that exists for students of color in this Northeastern state (Hemphill & Vanneman, 2011; Vanneman, Hamilton, Anderson, & Rahman, 2009), it is not surprising that inadequate K-12 preparation presents a potential entry barrier for students interested in pursuing a teaching degree (Lee, 2002; Louie, 2007; Venezia, Kirst, & Antonio, 2008). Students from minority and low-income backgrounds often "lack access to curriculum that would prepare one for college" (Louie, 2007, p. 2238). Irizarry and Donaldson (2012) found that tracking students into "lower level, less rigorous courses" served as a barrier to college and teacher education for Latina/o students (p. 176).

Bennett, McWhorter, and Kuykendall (2006) conducted a ten-year longitudinal action research study using survey and focus group data to examine Black and Latino/a pre-teaching students' experiences with Praxis I. Students identified barriers existing in the "poor preparation received by minority students even in suburban schools where they are pushed into remedial and vocational classes" (Bennett et al., 2006, p. 555). Because of this inadequate preparation, students failed to develop the necessary mathematics, reading and writing skills for success on standardized tests and so were unable to qualify for the Praxis waiver or pass the Praxis test, and therefore could not enter a teacher preparation program.

Teacher Licensure Testing

Inadequate K-12 preparation as well as other entry barriers for students of color may lead to difficulty meeting pre-admission teacher licensure testing requirements. This results in higher costs for students unable to qualify for the Praxis waiver and for those who must retake licensure tests several times, each time at a cost of $150 for all three subtests, or $90 for a single subtest (Bennett et al., 2006; ETS, 2014). This is costly in several ways, including time and money spent

on testing and test preparation, and for some, the lost opportunity to pursue a teaching career. Is the cost to students justified? The research tells us no.

Most of the literature on teacher licensure testing centers on the limited validity of using results from high-stakes tests to measure teacher effectiveness (Goldhaber, 2007; Goldhaber & Hansen, 2010; Goodman, Arbona, & de Ramirez, 2008; Memory, et al., 2003; Sutton, 2004). Researchers find that tests present opportunity costs and disproportionate entry barriers for students of color (Angrist & Guryan, 2004; Goldhaber, 2007; Irizarry & Donaldson, 2012; McNeal & Lawrence, 2009; Sutton, 2004), who often perform worse than White students (Angrist & Guryan, 2004; Goldhaber & Hansen, 2010; Goodman et al., 2008; McNeal & Lawrence, 2009; Sutton, 2004). When students of color do not pass licensure tests and are eliminated from the teacher labor market it also results in opportunity costs for urban school districts eager to hire minority teacher candidates (Goldhaber, 2007; Goodman et al., 2008; Sutton, 2004) and for states with priorities around minority teacher recruitment.

Goldhaber and Hansen (2010) found "disproportionate failure rates [in licensure testing] between races" (p. 230). Praxis I tests were found to have a differential impact on Black (Memory et al., 2003; Mikitovics & Crehan, 2002; Nettles et al., 2011) and Latina/o (Angrist & Guryan, 2008) test takers and subsequently reduce the number of Black and Latina/o teachers entering the teacher labor market. Memory et al. (2003) used student teaching evaluations and PPST (Praxis I) scores to examine "the impact of teaching effectiveness that might be predicted to result if the cut off score is raised by one point" (p. 217). They found that raising a cut score by only one point reduced the number of Black teacher candidates passing PPST reading by 5%, PPST mathematics by 4% and PPST writing by 9% (pp. 224-225). Since no current research focuses on the impact of raising the cut score on Praxis Core mathematics, reading or writing

assessments, which directly impacts entry into teacher preparation programs, we do not know if a similar disparate impact exists.

In work by Bennett et al. (2006), several Latino/a college students felt the pre-entry Praxis I test, especially in reading and writing, was biased against English language learners and students with insufficient testing and/or test preparation experience. Several of the Black and Latina/o students in the study also found bias in the test content. They felt it neither reflected their culture nor was the information typically encountered in their high school coursework. Others thought it was "an unfair barrier to reaching their dream of becoming teachers" and criticized the "educational system that did not prepare them" (Bennett et al, 2006, p. 557).

Angrist and Guryan (2008) agreed with Manski's (1987) recommendation to use a minimum SAT score rather than imposing "a unique barrier to teaching" (p. 500) by requiring the Praxis test. Since most college-bound students take the SAT or ACT, there is less of a financial barrier to using these tests. However, on average, students of color score lower on these college entrance exams (Louie, 2007, p. 2235), and they may still face a disproportionate and biased barrier to success even in the absence of the Praxis I. Deil-Amen and Lopez Turley (in Louie, 2007) and Hoffman and Lowitzki (2005) found that high school grades are a better predictor of academic success than the SAT. However, the SDE requires a minimum college GPA to enter a teacher preparation program, and does not use high school GPA as a measure. Nettles et al. (2011) found that undergraduate grade point average (UGPA) is correlated with Praxis I test performance, which means that UGPA could be used instead of Praxis I.

Considering the "substantial relationship between socioeconomic status (SES) and [SAT] test scores" (Sackett, Borneman, & Connelly, 2008, p. 221; Koretz, 2008, p. 264), pre-teaching college students from low-SES school districts may need test preparation support, either in high

school or in college. Villegas and Davis (2007; 2008) found that sufficient "academic and social support" (p. 592) in college is a critical element to the recruitment and retention of students of color. Nettles et al. (2011) recommended that teacher preparation programs familiarize students with the Praxis tests and test-taking strategies, and build the skills and knowledge necessary to pass the tests. They also recommended a "better alignment of high school curricula with Praxis I skills" (Nettles et al., 2011, p. 50). McNeal and Lawrence (2009) recommended tutoring for students entering college with low SAT scores or needing remedial reading or math courses. Bennett et al. (2006) found that SAT performance was a predictor of Praxis I success, allowing them to identify pre-teaching students who most needed test preparation support. They also confirmed the efficacy of test preparation and acknowledged that students were sometimes reluctant to engage in it (Bennett et al., 2006, p. 556). Baker-Doyle and Petchauer (2015) recommend mentoring, test preparation and study groups, and contend that teacher preparation program "expectations and opportunities provided for students to study for the exam," affect the "culture of preparation" (p. 27). This culture supports student persistence in their test preparation. As discussed in detail later, this study examines the extent to which institutional practices reflect these recommendations (see Table 3 for Research-Based Support Recommendations).

Beyond the testing requirements to enter teacher preparation programs, the majority of states also require that teacher candidates pass basic skills and subject specific content tests to obtain a teacher license (Goldhaber, 2007; Sutton, 2004). Moreover, this is true despite a lack of research supporting this practice (Angrist, 2004; Goldhaber, 2007). Additionally, it is the recommendation of the American Psychological Association and NCATE, the National Council for Accreditation of Teacher Education (now CAEP, the Council for the Accreditation of

Educator Preparation), to provide more than one measure of teacher achievement (Goodman et al., 2008; McNeal & Lawrence, 2009) and suggest further flaws in this licensure approach.

Teacher certification policies are driven by national accreditation standards, state-licensure policies, and by current education reform efforts (Sutton, 2004). Accreditation organizations, such as CAEP and subject-specific professional associations, like the National Council of Teachers of English (NCTE) set national standards. State teacher licensure testing policies, including those dealing with entry into preparation programs; however, are less transparent. ETS develops Praxis tests, sometimes in collaboration with state and national organizations, and recommends a minimum cut score (passing score) for each test (ETS, 2014). Cut scores are "typically set by expert consensus panels, not empirical data" (Goldhaber, 2007, p. 766) and neighboring states may have different testing requirements and/or set different cut scores for similar tests. This means a student deemed qualified to teach in one state may be considered unqualified in another. Goldhaber & Hansen (2010) found that, in regard to licensure, the "tests [Praxis II] may not have great predictive power for teachers who score above a given state's cut score" (p. 224) since "the purpose of the tests focuses on minimum competencies" (p. 224). This results in tradeoffs for states as potentially effective teachers are removed from the teacher labor market (Goldhaber, 2007; Goodman et al., 2008).

Framing Theory

Framing theory has been used to analyze how social movements, K-12 teachers and school leaders (Benford & Snow, 2000; Coburn, 2006; Park, Daly & Guerra, 2012) attempt to "remedy or alter some problematic situation or issue" (Benford & Snow, 2000, p. 616) through the way they frame issues. Benford and Snow (2000) identify three core, framing tasks: diagnostic framing, prognostic framing, and motivational framing. In diagnostic framing, actors define the

problem and assign blame. This framing "identifies certain individuals or groups as responsible for the problem and thus identifies those responsible for the change" (Cress & Snow, 2000; Stone, 1988 in Coburn, 2006, p. 347). In prognostic framing, a solution to the problem is suggested. A rationale for action is articulated in motivational framing. This rationale must be compelling to the individual (have resonance) to motivate action. According to Coburn (2006), "any representation of the cause of the problem inevitably highlights certain aspects of the situation while deemphasizing or ignoring others" (pp. 343-344).

Inadequate K-12 preparation and teacher licensure testing policies serve as potentially disproportionate, negative entry barriers to teaching for students of color. Adequate support is a critical element to help these students meet the basic skills test requirement and to increase teacher diversity. Framing theory allows me to examine how administrators frame the basic skills test requirement and teacher diversity, and how their frames are reflected in the support they provide to students (see Figure 1 for Framing Theory). For example, one administrator might frame the issue of testing as due to the problem of students' reading skills. Another administrator might frame the issue of low enrollment of students of color as these students' lack of experience with standardized tests.

CHAPTER 3: METHODOLOGY

I conducted a collective case study (Creswell, 2007, p. 74). This allowed me to understand how multiple institutions (each one a case) were similar or different in the ways they approached the basic skills test and student support. I also examined "within-case variance" (Flyvjerg, 2011, p. 197). I pursued a two-pronged approach: 1) examining teacher preparation program policies via documentation and 2) interviewing administrators to see how they frame policies and resultant behaviors. My study was bounded within place (multiple teacher preparation programs in one Northeastern state) and time (2014-2016, the period prior to the launch of Praxis Core until the present time).

Sample

I collected qualitative data by interviewing eight participants at three institutions (Creswell, 2007) chosen using an information-oriented selection strategy and maximum variation cases (Flyvjerg, 2011, p. 182). To select my sample, I used the *Guide to Approved Educator Preparation Programs* (May 2015) to create a list of traditional teacher preparation programs at colleges and universities in one Northeastern state. I then used Title II data (Title II, 2015) to select institutions with at least 100 teacher education students and to identify the number of students of color at each institution. The 2015 Title II data is based on 2013-14 enrollment information.

I used U.S. Department of Education's CollegeNavigator (2013-2014) and The College Board's bigfuture™ (2014) to select cases that were different in the following dimensions: 1) the percentage of Pell Grant recipients; 2) mid-range SAT scores or "what most students score who were admitted and enrolled" (The College Board, 2014); and 3) a mix of public and private universities.

Pell Grant

Only low-income students are eligible for the Pell Grant (Steinberg, Piraino, & Haveman, 2009) and I used it as a selection dimension (see Table 4 for Teacher Preparation Program Background Information) because the basic skills test requirement is also a potential entry barrier to teaching for low-income students (Louie, 2007). Considering this, institutions with a higher percentage of Pell recipients should also have a larger number of students not qualifying for the Praxis waiver, which may influence the level of test preparation support they provide.

SAT

I used SAT as a dimension in the selection process because I was interested in examining whether institutions with lower mid-range SAT scores, at or below the Praxis waiver amount (SAT score 1100 or higher in math and critical reading) (SDE, 2015b), provided more support than institutions with mid-range scores above the waiver amount (see Table 4 for Teacher Preparation Background Information).

Cases

The cases included three teacher preparation programs in one Northeastern U.S. state: Small Private University, Regional State University, and Research University. Small Private University (SPU) is a Catholic university in an upscale suburb of a large city. Regional State University (RSU) is a public, mid-sized university located in a small, industrial city. Research University (RU) is a large, public research university in a rural town (see Table 4 for Teacher Preparation Program Background Information). I assigned pseudonyms to each participant and institution, and to university offices and programs.

Study Participants

Table 1
Study Participants

Administrator	Institution	Role
Kate	SPU	Dean
Teresa	SPU	Academic Advisor
Bridget	RSU	Academic Counselor
Jean	RSU	Assistant Dean
Jim	RSU	Dean
Carlo	RU	Associate Dean
Helen	RU	Dir. of Teacher Ed.
Kennedy	RU	Academic Advisor

Participants at each institution included the dean or associate dean of the school of education, director of teacher education (or comparable position), and a staff member that worked with students on the basic skills test in some capacity. I first emailed the dean—the gatekeeper at institutions in my study—to request his/her institution's participation in the study (Creswell, 2007). In the email I provided the following information, as suggested by Bogdan and Biklen (in Creswell, 2007, p. 125): purpose of the study, time required for interviews, how I would maintain confidentiality of participants and institutions, dissemination of findings, and how institutions would benefit from the study. I then contacted participants by email to request an interview, stated the purpose of my study and offered to meet at a location convenient to them. I conducted one 60-minute interview with each administrator using the standardized approach for open-ended interviews (Patton, 1990) due to the limited time I had with each participant and my interest in gathering similar information from them. At this meeting, I gave participants a consent form to sign. I requested permission to follow up with a 30-minute phone call if I needed clarity on any of their answers.

I asked administrators the same questions (see Appendix for Interview Protocol) and probed with "detail-oriented questions" (Patton, 1990, p. 324) when necessary to gain clarity and

additional details. Questions were designed to elicit participants' policies, practices, and diagnostic frames related to teacher diversity, the basic skills test requirement and the support they and their institutions provided to students in meeting that requirement. For the purpose of this study, I define support as consisting of academic and emotional support, student advocacy and the allocation of resources (courses, materials, and personnel). I used a mix of "experience/behavior" and "opinion/values questions" (Patton, 1990, p. 290).

I took handwritten field notes during the interviews and recorded them using an Olympus Voice Recorder. I transcribed the interviews to make it easier to code the data, conduct a cross-case analysis and uncover themes. After receiving each transcript, I reviewed and edited it while listening to the participant's interview MP3.

Other Data Collection

I also collected data by taking photographs (in schools of education), reviewing websites, diversity plans, and support-related flyers at each institution as part of my analysis of how programs are supporting students around the basic skills test. I evaluated whether the support institutions provided reflects the recommendations listed in the Research-Based Support Recommendations Table (see Table 3). I also examined the state Minority Teacher Recruitment Committee and Minority Recruitment task force website documents related to recruitment and retention of teachers of color.

Analysis

Prior to data collection, I developed a list of tentative codes using my research questions and created a codebook with code definitions, indicators which identified the code, and exclusions (Boyatzis, 1998). To understand the support that "need[s] to be (or are) in place" (Goodwin & Oyler, 2008, p. 485), I created the following deductive codes from the literature on

recommended “academic and social support” (Villegas & Davis, 2008, p. 592; 2007): skill and knowledge development, test preparation support, and social support (e.g., advisors, mentors, cultural events, student groups). I also created codes using framing theory diagnostic and prognostic framing tasks. For example, codes such as basic skills problem definition frame, and basic skills assignment of blame frame focus on administrator diagnostic framing. I read each interview transcript line-by-line and listened to each interview MP3 file twice. I used Dedoose to code interview data and analyzed code excerpts from Dedoose using Microsoft Excel. I removed redundant codes and added new codes to capture emerging themes.

Within 24 hours of each interview, I used memoing to reflect and organize my thoughts. To interpret the data further, I created a matrix for institutional supports (see Tables 5 and 6 for Teacher Preparation Program Supports), and matrices related to themes uncovered during analysis: test preparation and the test’s utility as an assessment measure (see Table 1 for Sample Frames). In the writing phase, I focused on “an overall cross-case analysis” with “separate discussions of each case” (Yin, 2003 in Creswell, 2007, p. 197). I kept the description/analysis balance to 25/75 (Creswell, 2011, p. 197).

Limitations of the Research

Praxis Core is a new test aligned with Common Core State Standards and I found no current research using Praxis Core data. My literature review focused on studies that use Praxis I data and I made the assumption that the two tests measure fairly similar skills in math, reading and writing. Using literature related to Praxis Core would add to the significance of my qualitative findings.

Because I focused on participant perceptions, my sample size is small, and was from teacher preparation programs in one state only, the inferences I can draw from my findings are limited.

That said, a small sample size still provided me with rich information and allowed for an in-depth examination of each case.

I interviewed three participants from my pilot study. Since I asked similar questions, participants were already familiar with the focus of my questions; this is a limitation for my findings. However, these participants were and continue to be in key gatekeeping roles at their institutions and my findings would have been limited without their participation.

Research Positionality

I am a White woman conducting research related to entry barriers for students of color. I do this as an advocate for equitable supports and policies for students of color, it is not intended to be paternalistic. However, my identity influences my questions, analysis of data and conclusions and hence I need to be aware of how my assumptions may have played out in my analysis. To protect against such bias, I reviewed my findings and conclusions and critically reflected on possible assumptions and interpretations that could stem from my identity and beliefs (Scheurich & Young, 1997).

As the Research University certification officer, I am familiar with teacher licensure requirements and have contact with SDE Bureau of Educator Standards and Certification staff through certification-related meetings, emails and phone calls. As the director of academic advising for RU, I work directly with teacher candidates and see the impact licensure requirements have on students who fail to pass tests. Since I work at RU, an institution in this study, I wrote self-reflective memos asking myself challenging questions to protect against bias.

I understand that teacher licensure requirements may be a reflection of labor market trends. For example, as the K-6 student population in this Northeastern state has declined, fewer elementary education teachers are needed. However, for every elementary education teaching

position posted in a district, there are hundreds of applicants. The SDE may set higher cut scores to weed out potentially less qualified candidates. The trade-off occurs when these cut scores also eliminate potentially successful teachers. While I am sensitive to the needs of the labor market, my research design was informed by my interest in advocating for more racially equitable measures of academic achievement for teacher licensure. Additionally, since teacher licensure tests present a potential disproportionate entry barrier for students of color, I feel teacher preparation program administrators should advocate for lower cut scores.

CHAPTER 4: FINDINGS

In this chapter, I discuss three key findings related to my research questions. Research questions focused on administrators' diagnostic framing of the basic skills test requirement (BSR) and administrators' policies, practices and support, within the context of the diversification of teaching. In diagnostic framing, as discussed in Chapter 2, actors define the problem and assign blame; in prognostic framing, a solution to the problem is suggested.

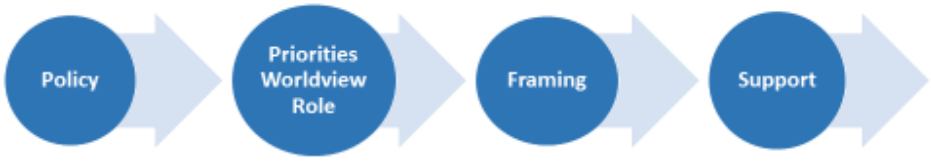

Figure 1. Framing Theory

I found that BSR policies and supports were related to senior-level administrator priorities and resource constraints, administrators' worldviews[2] were reflected in the type of support they provided for diversity, and administrators' diagnostic framing of the BSR was aligned with their role and responsibilities (see Figure 1). Senior-level administrators' diagnostic framing focused

[2] Worldview is often described as a "personal and historical point of view" (Vidal, 2008) and a "contrasting way of thinking about and seeing problems" (Larson, 2003).

on problems related to standards, test bias and test validity/reliability. Administrators in student support roles focused on issues related to test preparation and test bias.

Within each finding section below, I provide a cross case analysis followed by individual case analyses of administrators' diagnostic and prognostic framing. In sections one and three, I also include administrators' interaction with the State Department of Education.

Sample Frames

Table 2
Sample Frames

Content	Diagnostic Frame	Prognostic Frame
Test's Utility	SDE sets "arbitrary, unnatural cut scores." (Carlo)	Set cut scores to national norm (Carlo)
	The test "doesn't say that you're a good or bad teacher." (Kennedy)	"I do not think that the basic skills requirement is necessary just from seeing the information on the test." (Kennedy)
	"Certainly I think that returning adults struggle with the math." (Bridget)	"So our math tutoring center at the university will not, per se, help somebody prepare for Praxis." They can go with specific questions, "I'm having trouble with fractions." (Bridget)
	"The problem is that it [Praxis] screens out some people that you want, who can't do well on tests." (Jean)	"I would like to see some kind of alternative for people who have in effect test fright and can't do well on the test." (Jean)
Test Preparation	"I tell them to look at their [test] sub-scores. I'm amazed at how many say, 'What are those?' They don't look beyond the first page." (Teresa)	"I said, See this? This is your weakest area right here. Those are the areas you need to study." (Teresa)
	"It [Praxis content] is information that students have	"So it is really just they need to refresh their skills." (Kennedy)

already learned in a K-12 setting." (Kennedy)

"The freshmen – the way we're structured here on campus – it's hands-off. We don't really get an opportunity. That's how they [university administrators] want it." (Bridget)

"So in the spring...we invite every single of what we call a pre-BSED student and try to get them to come in. So we talk in great detail about Praxis then, because that's the first chance we've really had to talk to those freshmen." (Bridget)

Finding 1: Priorities and Resource Constraints Guide Policy and Support Decisions

Policies and support related to the basic skills test requirement are connected to senior-level administrators' priorities and resource constraints. Across cases, senior-level administrators' diagnostic framing of the BSR related to constraints around the allocation of resources (including professional staff and graduate students to advise, tutor and support students and financial support toward test fees and study material). Prior to this study, there were no university-wide retention initiatives related to student licensure testing support at SPU, RSU or RU. Students were only able to access support at university academic centers (e.g., writing or mathematics centers) if they identified specific concepts to be addressed (e.g., grammar, fractions); they could not request general test preparation. Therefore, across the institutions, tension existed between the support students needed to pass licensure tests and the limited institutional resources available for other, non-course related support.

Depending on how they interpreted the BSR problem, administrators from each institution chose to prioritize some issues while "deemphasizing or ignoring others" (Coburn, 2006). For example, administrators concerned with student pass rates on Praxis II may provide more support for these tests and little support for entry gate tests. RSU and SPU administrators stated they spent more time and fixed resources supporting current students to pass exit tests, such as Praxis

II. RSU Academic Counselor, Bridget stated, “We do a lot for that [Praxis II] and for Foundations of Reading tests.” This prioritization makes sense since teacher preparation programs must report exit test passing rates through yearly federal Title II reports, which are then posted on the Title II and SDE websites. Since schools of education will soon be accountable to the SDE for first time pass rates on exit tests, institutions may be even more inclined to direct their limited resources to exit gate support.

Administrator identified priorities included satisfying university and school of education enrollment and retention goals, and complying with state, federal and accreditor assessment, curricular, and reporting requirements. At all institutions in this study, BSR-related support has fluctuated and was often dependent on state and federal grant funding. Recently, however, a change in leadership at all three teacher preparation programs (at the time of the study Kate, Jim and Helen were with their institutions less than three years) has led to changing priorities, according to respondents. This has resulted in additional resources and new policies directed toward increasing diversity and supporting pre-teaching students to meet the BSR. This included a Praxis Core deadline extension, study groups and test fee waivers at RU, free, online Praxis Core study modules at RSU, and test preparation support at the SPU Center for Academic Excellence.

Small Private University. The primary focus at SPU was on increasing enrollment and retention for teacher preparation overall. As highlighted by respondents, the institution had a declining number of students applying to and enrolling at the university and a recent reduction of school of education staff. According to Teresa, “we’re under such pressure for enrollment. I don’t know if Kate will tell you that, but the enrollments are so low. We’re expensive.”

Little support and only one policy (a GPA waiver application) exists for entry gate requirements. SPU policies and support were designed for current teacher education students to meet exit testing requirements and support for current students included Praxis II study groups.

Recently, SPU was awarded a Title III grant, which helps institutions "expand their capacity to serve low-income students" (U.S. Department of Education, 2015). According to SPU dean, Kate, this grant has allowed them to,

> not only focus on student retention in general but also [on] all the supports and services necessary to increase student retention literally from physical spaces to individual supports and services, from academics to housing to social and emotional needs to relationships.

According to Kate, the Title III grant shifted the institution's focus to retention school-wide and Kate's focus to how the university could support the school of education's retention concerns. Teresa, SPU academic advisor, said,

> Our Center of Academic Excellence, I believe, was providing some assistance. We've had some changes in leadership with that office. They were preparing people, and then they decided if they couldn't pass the basic skills – it was Praxis I at that time – that they didn't basically deserve to come into the profession. That office didn't think it was our job to remediate them.

The week before our interview, Kate spoke to the director of the SPU Center for Academic Excellence about their decision to offer course-related support only. Because of Kate's intervention, they planned to provide support to students for Praxis Core. State funding for support is unreliable, however. As Kate explained, "This Northeastern state continues to say yes, we need to open the pathway for diverse minority teacher candidates. And yet, at the same regard

we see opportunities and incentives and supports that are necessary reduced." She was referring to the SDEs $10,000 Minority Teacher Incentive Grant, which was drastically reduced this year.

Regional State University. Jean is "faced toward the state department" (away from students) and her priorities seemed compliance-related: assessment and reporting requirements and adhering to SDE admissions entry regulations (e.g., barring program entry for students who have not passed Praxis Core, requiring faculty interviews of teaching candidates, and minimum 2.7 GPA). Although the SDE has not allowed students to be admitted to a teacher preparation program without meeting the BSR, they have allowed institutions to waive the minimum GPA requirement for admittance. BSR-related policies and support tied to Jean's priorities included a GPA waiver application. There was no official extension on the deadline to submit passing scores for Praxis Core. According to Bridget,

> The way we're structured here it's the Assistant Dean and Certification Officer [Jean] who has the final say about who's admitted to the program and who isn't admitted to the program so it's really that there is no policy that we give them a specific extension. It's generally if someone explains – they'd have to explain it to her [Jean] and she'd have to decide.

As Bridget explained it, Jean's compliance orientation led her to more literal interpretations of SDE regulations. Bridget presents Jean as someone who perceives herself to have little flexibility around regulations. Jean affirmed these views as stated in response to a question regarding her goals for increasing teacher diversity, "I don't have a lot of say because the rules [requiring the BSR and minimum GPA] are set by the state department." Taken together, she seemed to view the results of the current policies or their origins as a state responsibility, not an individual responsibility.

Whereas Jean seemed resigned to maintaining the status quo regarding implementation of state regulations, Jim's strategy was to find ways to accomplish his goals for student diversity despite the regulations. Jim's diagnostic framing of the BSR included the idea that there was insufficient time and resources to address inadequate K-12 preparation, prepare students to pass Praxis Core, and to help them achieve the state minimum GPA. Jim initiated the creation of math, reading and writing tutorial modules to prepare students to pass Praxis Core. This prognostic framing suggested that a free, online resource would compensate for the limited time and resources available for staff to tutor students and would allow students, especially adult students, to fit test preparation into their busy schedules. Applicants to postgraduate teaching programs had already achieved the required state minimum GPA. Jim's prognostic framing suggested that, in terms of resource allocation to increase student diversity, it made sense to prioritize the recruitment of those students. So, although Jim assigned blame to the SDE, he concluded teacher preparation programs must take responsibility for the change, since the SDE would not.

> I'm investing – in late decider options because most of the discussion is already off the table at that point because someone already figured out how to get into college, and graduate from college. You just have to follow the bouncing ball here. All roads, regarding teacher preparation, lead to the state department of education. If you know the explicit and/or implicit roadblocks or barriers that are there, you have to be able to navigate in and out of them in order to try to create opportunities for this, unless something systemically is going to change.

On one hand, such an approach may make sense from a resource perspective, in that it is less costly than hiring support staff to tutor and mentor undergraduate students to meet the BSR and

GPA requirements. On the other hand, it does not address removal of the entry gate barriers. For example, in the long run, it may be more efficacious relative to enhancing diversity to collaborate with other teacher preparation programs to lobby legislators and SDE staff to create more equitable entry gate requirements.

Research University. According to respondents, several recent BSR-related policies and supports stemmed from academic advisors noticing and then notifying higher-level administrators (Carlos and Helen) of entry barriers for students of color. For example, Carlo stated, "I did have one instance where an academic advisor said, "This particular student is really struggling financially. It's going to be a big burden, if not prohibitive, to pay for Praxis." Administrators' diagnostic framing of the BSR related to students' difficulty paying for and passing teacher licensure tests, and meeting application deadlines. This framing assigned blame to multiple parties: ETS for its high test fees and the SDE for its policies around setting high cut scores, requiring teacher education programs to only admit students who have met the BSR, and short implementation timelines for new tests.

As respondents explained, it was because of these issues that Helen created a policy to officially extend the deadline to submit Praxis Core test scores and Carlo authorized funding for teacher licensure testing fees and study materials.

Summary

Across institutions there were few policies related to the basic skills test requirement, with the exception of RUs deadline extension. Administrators stated they provided more support for Praxis II, and up until recently, support for Praxis Core was available on a limited basis only through individual appointments with academic advisors. Support has increased recently, however, through the development of online study modules and the creation of a dean's

emergency fund, which provides financial support for things such as transportation, tuition and Praxis test fees at RSU, frequent one-on-one and group support by advisors at RU, and access to support through the Center for Academic Excellence at SPU.

While priorities and resource constraints guided senior-level administrators' policy and support decisions, administrators, like all individuals, were also likely influenced by their worldviews, in this case, past experiences and views regarding student diversity. Additionally, administrators' worldviews as presented and understood through their stated views was reflected in the type of support they provided for diversity at their site. In this next section, I discuss both of these issues with a focus on how administrators support diversity.

Finding 2: Administrators' Worldviews Reflected in Diversity Support

When asked about their institutional and personal goals and actions related to diversifying the teaching force, administrators conceptualized diversity and how to support diversity in different ways. Administrators' worldviews, as interpreted through those personal goals and actions, seemed to be reflected in whether and how they provided this support to recruit and retain students of color into their teaching programs. A worldview is often described as a "personal and historical point of view" (Vidal, 2008) and a "contrasting way of thinking about and seeing problems" (Larson, 2003). Considering administrators' worldviews helped me to understand their contrasting ways of seeing problems. This section discusses administrators' worldviews and their institutions' related social and academic support of students. Academic supports are also discussed in greater detail in the following section.

Small Private University. In the SPU Conceptual Framework, diversity is a "core value" and its description focuses on culturally responsive teaching practices, not diversity recruitment or retention goals or types of diversity (e.g., race, gender). This framing was reflected in the

participants' comments. For example, according to Kate, "We don't have specific numeric goals [for diversity], other than to increase from where we are now." SPU focuses on the social support of students by providing them with a sense of community, according to respondents. Kate said that she "believes many of our young teacher education students are looking for a community" and described SPU as "geographically connected to the Urban City community…[with] a very strong Latina/o community of practice." In fact, at the time of this study, SPU was close to being designated a Hispanic-Serving Institution (25% Hispanic full-time university-wide student population), although only 7% of teacher education students were Hispanic.

Personally, Kate said she values an inclusive view of diversity, which she described as having "all ethnic backgrounds, language backgrounds, cultural backgrounds, ability backgrounds represented." She said she "articulates that in [her] practice just [by] being me and putting who I am out there and my beliefs about inclusivity and valuing all individuals [which] is probably the strongest action that I take to bring that forward." Kate's apparent worldview of student support led to prognostic framing related to supporting all students, and no one group in particular. In this way, though perhaps well intentioned, her prognostic framing does not acknowledge that students of color may have different experiences, challenges, and motivations that require unique recruitment and retention strategies. It is not a surprise then, that her support strategy of what some might deem as "colorblindness" has resulted in no specific supports for students of color. Additionally, there were no goals, initiatives or programming for students of color. Teresa confirmed that "they're [SPU] not doing anything different than they would be for regular recruitment of candidates."

Though she agreed with Kate's assessment of the current efforts related to BSR, Teresa located the problem and solution to diversifying teaching outside of her university and within

school districts. Aligned with this framing, she focused on placing students of color in jobs, not getting them admitted to a teaching program. She said, “I try to be responsive when I get a call from a district who needs a DSAP [Durational Shortage Area Permit] candidate quickly. A lot of times, it’s in an urban area, and the candidate they have in mind is a minority candidate.” This solution was based on her understanding that “there are not enough minority teachers employed.”

Regional State University. At RSU, increasing diversity was a goal within the School of Education’s 2011-2016 strategic plan and this plan included specific goals related to recruitment, retention and advisement of underrepresented students. As Bridget pointed out, “Well [for] Jim and then our dean before him too, it was just something that was very important to them. And, of course, if it’s important to leadership it all trickles down.” The strategic plan was in place prior to Jim’s arrival and many of the current supports in place (e.g., the new advising center) were a result of that plan. However, Jim’s apparent worldview shaped how he used research and evidence to guide recruitment and support decisions; this appears to have influenced recent priorities. He stated that his decision to invest in recruitment for postgraduate programs, what the literature calls “late deciders,” was because “we know from the literature that those types of programs attract more diversity.” Jim’s prognostic framing of diversity also related to using data to drive changes to support and to increase student diversity. RSU examines student data, he said “to see if there are any predictive data using inferential statistics around what is the likely profile of someone to be successful in our programs and what are our barriers to access” for students of color. Barriers included freshman and sophomore general education courses where students of color were underperforming. He found “specific patterns with actual faculty, so it has the potential to be quite contentious.”

While Jim's main focus was on academic support, Bridget's primary focus was on social support. Bridget's prognostic framing of diversity centered on the importance of social support and a visual representation of diversity. She said RSU is supporting diversity by providing a "safe, comfortable place" for students in the new advising center (which Jim advocated for) and by displaying images of diversity in the hallway cabinet and the murals of African Americans lining the stairwell walls on the first floor. This social support extends to a yearly three-week, non-academic study abroad trip led by Bridget to Jamaica. Her diagnostic framing of diversity also related to the issue of student recruitment. Her apparent worldview of recruiting for diversity was reflected in prognostic framing related to early outreach to high school and college students. Each year, she recruits Educational Opportunity Program students (one of three federal TRIO programs for first generation college students) when they arrive on campus each summer. Until two years ago, ERSU (another regional state university) hosted the yearly Future Teacher's Convention for 300 middle and high school students. Because of their prioritization of early outreach, RSU agreed to take over hosting the students when ERSU discontinued the program.

Research University. Administrators' worldviews, as revealed in their responses, included the idea that schools of education should work to achieve equity by looking to and engaging in research as a mechanism for change and by providing students with mentors. As taken from his statements, Carlo's apparent worldview suggests that evidence is a necessary component of goal setting. According to Carlo,

> It's not just about getting people of color in the classrooms to teach. I know that that is certainly one of the goals, and one of our goals, but the thought is, because that's the right thing to do to get more representation of the various races and ethnicities. But it's also, in the literature there's some evidence to indicate that

> students of color can do better when they are taught by teachers that have similar backgrounds, look like them.

For the past two years, RU has been part of the American Association of Colleges for Teacher Education (AACTE) Networked Improvement Community (NIC) on Diversifying the Teacher Workforce, an initiative targeted at increasing the number of Black and Latino males entering teaching. Because of administrator participation in monthly NIC calls and related reporting requirements for recruitment and retention goals and activities, administrators shifted to create specific numerical goals and to a renewed focus on mentorship, a strategy researchers find positively impacts student diversity (Villegas & Davis, 2008). This led to the hiring of two Black academic advisors in January 2015, the creation of a new mentoring program, D.E.M.O. (Diverse Educators Making Outstanding Change), led by Helen and Kennedy, and support for the student-led Leadership in Diversity group. Previously, the only mentorship-related activity was the yearly diversity dinner to provide support and networking opportunities for current and future students of color, alumni, and school and university administrators.

As suggested through her comments, Kennedy's worldview of increasing student diversity appeared to be influenced by her son, a student of color who will soon enter K-12 schools and by the idea that diversity should include a research focus and conversations about race. When asked about diversity efforts at RU, she stated that "faculty from other colleges come and present about their current research and engage our students in discussions around diversity." Additionally, she is co-facilitator of Critical Conversations, "[where] we actually engage our staff and faculty in issues about diversity so that they can work with our students of color better."

Summary

Worldview is related to an individual's point of view (Vidal, 2008) and how they perceive a problem (Larson, 2003). Administrators' support reflected aspects of their worldview of issues around race, class, and diversity. At SPU, their inclusive conception of diversity resulted in no specific diversity goals, initiatives or related support. RSU and RU administrators' worldviews related to using research and evidence to guide recruitment and support decisions. This was reflected in teacher preparation program research activities related to identifying barriers and best practices for increasing student diversity and subsequent recruitment and retention practices based on that research.

Administrator diagnostic and prognostic framing of the BSR and student support emanated from, and was influenced by, administrators' priorities, resource constraints and perceived worldviews. It was administrators' primary role and responsibilities, however, which shaped the focus of their framing and is the focus of the next section.

Finding 3: Role Determines the View

Administrators in Senior-Level Roles

The focus of administrators' diagnostic framing of the BSR aligned with administrators' role and responsibilities. Senior-level administrators' diagnostic framing of the BSR focuses on problems related to standards, test bias and test validity/reliability. Administrators' diagnostic framing of the basic skills test requirement's (BSR) utility as an assessment measure related to: 1) assessment inadequacies of the test; 2) the disparate impact of basic skills tests; and, 3) misguided policy decisions. Administrators' prognostic framing of this problem centered on a more reasonable approach to assessment of pre-service teachers, including the elimination of redundant measures and high test cut scores.

Administrators' diagnostic framing of the BSR also related to the overregulation of teacher education and the burdensome testing requirements for teacher education students. During a teacher preparation program and prior to certification, content and pedagogical knowledge for aspiring teachers are measured in several ways: grades in education and subject area courses, teaching evaluations, and Praxis II, ACTFL and the Foundations of Reading tests. Additionally, this Northeastern state will soon require students pass the $300 pedagogical content knowledge assessment, edTPA (formerly called Teacher Performance Assessment).

Most administrators said they felt conflicted about use of the Praxis Core as an entry-gate screener for teacher preparation. They agreed that teachers should possess basic skills, but questioned whether Praxis Core was the right way to measure those skills. Researchers have found that Praxis tests have a differential impact for Black (Memory et al., 2003; Mikitovics & Crehan, 2002; Nettles et al., 2011) and Latina/o (Angrist & Guryan, 2008) students. Across cases, administrators expressed concern about test bias for students of color, English language learners (ELLs) and students with disabilities. Tests are used to predict student performance or ability in some area (e.g., skills necessary for teaching). Test bias can stem from (among other things), "cultural or linguistic factors," and this bias "undermines the validity of a particular inference" (Koretz, 2008, p. 262). For example, inadequate testing time and "difficulty with English vocabulary" (Heubert & Hauser, 1999, p. 225 in Bennett et al., 2006) can result in test bias for English language learners. In the case of Praxis Core, test bias results in "disproportionate failure rates" (Goldhaber & Hansen, 2010) for students of color.

Regional State University. At RSU, both Jim and Jean expressed concern around the test's assessment inadequacies. Jim questioned the logic of using a test based on Common Core standards when students were not educated under those standards. His diagnostic framing

included the idea that the test was implemented too soon by the SDE and that it did not measure current students' K-12 skills and knowledge. Jim said, "You're making some assumptions about someone's body of knowledge of information based on a set of experiences they didn't have, then you're going to measure that, it seems to me to violate some basic assumptions about assessment."

Jean's diagnostic framing of the BSR related to test bias in two areas: the test's disparate impact on students of color and on students with disabilities. For students of color, her prognostic framing included students changing their major to social work when they could not pass Praxis Core. She said this process allowed these students to remain in the school of education and continue helping people in a different but equally meaningful way. For adult students with disabilities, her diagnostic framing related to the high cost of re-evaluation to receive testing accommodations from ETS. Evaluations cost thousands of dollars and can serve as a barrier to meeting the BSR for students with disabilities, according to Jean. Her prognostic framing was to allow an alternate measure for these students; she did know what that should be, however. Jim's diagnostic framing of the BSR also related to the disparate impact of the test on students of color: "I just want to reiterate that I think it's necessary…but, when we're talking about diversifying the teaching workforce, I think in some ways it can work against us in ways that I don't think were originally intended." His prognostic framing was aligned and was to provide free, online Praxis Core study modules to prepare students for the test and to compensate for test bias.

Both senior-level administrators at RSU engaged in diagnostic framing related to misguided policy decisions of the SDE. The SDE does not limit the number of times a student can take Praxis Core, and Jean framed this as another assessment problem. Her solution was to limit the

number of times a student can take the test. This view aligned with her diagnostic framing since it addressed the test reliability issue (i.e., that a student can eventually pass the test once they take it enough times). Jean was the only senior-level administrator with diagnostic framing around student test "fright" as an assessment issue of the BSR. Test anxiety may be a validity issue since the student may underperform on the test due to factors outside her knowledge of the content. Jean's prognostic framing of this issue was also aligned and was to remove the test as a requirement and replace it with an alternate measure.

Jim's diagnostic framing of the BSR related to the SDEs misguided practice of setting high cut scores. Jim's prognostic framing around this issue suggested that the SDE reverse its decision to increase cut scores for Praxis Core reading and writing in 2017. According to Jim, there was little chance of that happening. He framed the unreasonably high cut scores problem as due to SDE Bureau of Certification staff, "a very small group of people in charge of some very big decisions."

Small Private University. Kate's diagnostic framing of the BSR (and other testing requirements) related to the overregulation of teacher preparation by national and state accreditors,

> If we're gonna go to a performance evaluation nationally and in the state, mainly the edTPA, which does have embedded in it a demonstration of content knowledge, why then must we keep all these content knowledge tests? Because everything we seem to be doing in outcomes-based education is additive, not replacing.

Additionally, Kate questioned whether her institution had sufficient supports in place for these tests and identified the need to examine support outcomes, such as whether study groups

improved student performance on Praxis II. She said, “We make that assumption [that something works] a little bit more than we should.” Her diagnostic framing focused on the inability to examine support outcomes because of resource constraints due to overregulation. Her prognostic framing aligned with this diagnosis and related to reducing reporting requirements. Kate stated that teacher education programs are “so overburdened by other data requirements” that assessment regarding outcomes was sometimes difficult to do.

Research University. Carlo was an outlier among the other senior-level administrators I interviewed in that he thought the basic skills test requirement was unnecessary. Carlo stated that the Praxis Core was “misplaced” and centered the problem on the inadequacies of the test as an “authentic measure of teaching ability” and its disparate impact on students of color. Carlo’s prognostic framing matched the recommendation of Nettles et al. (2011) to use GPA as an alternate measure, along with personal statements or interviews.

Helen’s diagnostic framing of the BSR related to the insufficient time available to students to prepare for the new version of Praxis. Although this framing assigned blame to the SDE for its unreasonable implementation timeline, she took responsibility for the change by giving applicants extra time to submit passing Praxis scores. Therefore, the focus of framing at RU was on misguided policy decisions. This Northeastern state, like other states, uses “expert consensus panels” (Goldhaber, 2007, p. 766) and Carlo expressed concern with the SDE’s practice of setting, “arbitrary, unnatural cut scores,” above the national norm. Helen’s diagnostic framing of the BSR was similar to Carlo’s and centered on onerous teacher licensure testing policy decisions by the SDE:

> So it's not the test [Praxis Core] in and of itself. It's like how – there's multiple tests and how the state policy – how the state deals with them, right [raises the

> pass rates to points way above the national norm]. They could deal with them either reasonably or unreasonably. They can become a burden or they could just kinda be a hurdle. You know, those are different things.

Administrators in Student Support Roles

The diagnostic framing of the BSR by administrators in student support positions (e.g., academic advisor or counselor) focused on issues related to test preparation and test bias. Advisors' prognostic framing for test preparation issues were similar across cases and aligned with the recommendations of Nettles et al. (2011). These solutions included familiarizing students with the test (to relieve test anxiety), advising students to focus on weak areas as identified by test sub-scores, and providing students with test-taking strategies.

Across cases, advisors identified several circumstances where test preparation and test bias played a role in the likelihood of a student passing Praxis Core on the first attempt. Advisors identified issues related to test bias for students of color, English language learners and adult students. Test preparation issues included the size of the time gap between when students take high school courses and when they take the Praxis test; when students begin preparing for the test; the amount and quality of time spent preparing; and the length of test preparation sessions.

The time gap-related diagnostic framing of the BSR refers to the negative impact a large gap can present for students. For example, students completing geometry a few years ago may need to refresh their skills while students with a larger time gap may need to relearn geometry concepts. Student procrastination was another test preparation-related issue identified in advisors' diagnostic framing. This framing assigned blame to students who delayed test preparation or the request of fee waivers or accommodations (e.g., extra time to take test) from

ETS, both of which can take several months to receive. These delays may result in a shorter window of time between taking the test and the teacher education program application deadline.

Small Private University. Considering the resource constraints at SPU, it is not surprising that the primary focus of Teresa's diagnostic and prognostic framing was outside of the institution. Her diagnostic framing of the BSR related to test preparation challenges due to inadequate K-12 preparation. Her prognostic framing was aligned and included advising high school counselors to "suggest to [students] that they do very well on their SATs so they get a waiver, or take the test shortly after the SATs because [she] thinks a lot of the questions are similar. The prognostic framing of SPU faculty reflected the recommendation of Nettles et al. (2011) to align high school curriculum with Praxis skills. According to Teresa, faculty suggested that high school students self-identify as interested in teaching and then high school teachers would familiarize students with the Praxis test and develop students' skills in reading, writing and math prior to entering college.

Teresa's diagnostic framing of the BSR also related to test preparation time allocation, including student procrastination and inadequate time management and study skills. Although she assigned blame to the students, she took responsibility for the change and her prognostic framing aligned with her diagnostic framing. Teresa attempted to convince freshman to start preparing early, familiarized students with the test, supported students in requesting accommodations, and encouraged students to look at failed test sub-scores so they knew which areas to focus on.

Regional State University. Bridget's diagnostic framing of the BSR related to test preparation focused on the university's restriction on outreach to students during their first semester, which made it difficult for advisors to share information on testing requirements and

preparation. Her prognostic framing was in alignment since it related to communicating with students as early as possible through group advising sessions and a newsletter, *Be Advised*, "specifically targeted to second semester freshmen in pre-BSED programs" (RSU, 2011-2012). Bridget's diagnostic framing of the BSR around test bias focused on the challenges experienced by English language learners with the Praxis Core Reading test and adult learners with the Praxis Core Mathematics test. Prognostic framing around this issue was aligned and centered on advising students to request accommodations from ETS and to visit the university mathematics center for additional support.

Research University. Similar to Teresa, Kennedy's diagnostic framing of the BSR around test preparation centered on time allocation challenges and led to prognostic framing emphasizing study time spent on weak areas. Her diagnostic framing of the BSR around test preparation, time gap issues led her to prognostic framing related to refreshing the skills students learned in high school. Kennedy and another advisor created a Praxis Core study group. In this group, Kennedy taught math formulas to students using strategies that helped her learn math, including flash cards and memorization, and the other advisor works with students on reading and writing. This group expanded from four 90-minute sessions to six sessions of the same length because she believed four sessions did not provide sufficient time to teach test-taking strategies (e.g., process of elimination) and to help students refresh concepts and learn how to reduce anxiety.

Among administrators in advising roles, Kennedy was the most focused on issues related to test bias for students of color. She stated,

> I would say a large portion of our students of color have difficulty passing the first time, do not receive a waiver because of their SAT or ACT scores, and the

> majority of our White students will come in with the waiver already, so they don't even have to see the test. They don't have to take the test, so it becomes a question of who are we pushing out of our programs.

Her prognostic framing was aligned with her diagnostic framing related to test bias and included the elimination of the BSR (she was the only advisor to suggest this solution). When discussing test bias, Kennedy's diagnostic framing included the idea that the SDE imposed burdensome testing requirements. She stated that the BSR was not a valid measure, since it did not indicate whether someone would be a good teacher. Also, because skills were measured in multiple ways during students' K-12 and early college experience (e.g., course grades, AP tests, standardized test scores), it was not needed.

Summary

The diagnostic framing of administrators around the BSR aligned with their roles and responsibilities. Across cases, the diagnostic framing of administrators in senior-level roles focused on the overregulation of teacher preparation, which included burdensome testing and reporting requirements, which respondents said impacted their ability to offer support to students. Their diagnostic framing also included a focus on SDE misguided policy decisions related to setting high test cut scores and the inadequacies of Praxis Core as an entry gate measure. Both senior-level administrators and those in student support roles problematized test bias for students of color, English language learners and adult students. Additionally, for administrators in student support roles, the diagnostic framing of the BSR related to test preparation issues, including the size of time gap between K-12 and taking the test, when students begin preparing for the test, the amount and quality of time spent preparing, and the length of test preparation sessions.

Conclusions

Administrators at all three institutions faced similar issues related to increasing student diversity and helping students meet the basic skills test requirement. These challenges included: resource constraints and overregulation of teacher education, which then impacted the type and amount of support available; inadequate K-12 preparation, which made it difficult for some students to meet the BSR in time to enter a teaching program; and, the use of Praxis Core as an entry gate requirement.

All administrators identified test validity and reliability issues with Praxis Core. Most administrators acknowledged the need for an entry gate measure, although none felt Praxis Core was the right measure. This was due to perceptions regarding flaws in the test's design or related to the SDE's misguided policy decisions around cut scores or implementation time lines. However, despite administrators' agreement that Praxis Core was not the right entry gate to teacher education, they have not attempted to lobby the SDE or legislators for alternate measures.

Recommendations for how to support students to meet the BSR were very similar. These included: 1) early outreach to students to familiarize them with the test, reduce test anxiety and to allow them sufficient time to prepare; 2) providing students with test taking strategies, (e.g., focus time on weak areas); and providing students with sufficient individual and group study sessions.

CHAPTER 5: SIGNIFICANCE AND IMPLICATIONS

Significance and Implications

Implications for Policy and Practice

On July 1, 2015, lawmakers in this Northeastern state passed An Act Concerning Minority Teacher Recruitment and Retention (Gen. Stat. § 15-108, 2015), requiring the creation of a task force "to study and develop strategies to increase and improve the recruitment, preparation and retention of minority teachers." In February 2016, the state legislature authorized the task force to complete a "review of best practices" and determine "whether the Praxis examination, as currently administered in the state, has an effect on minority teacher recruitment." Unexpectedly, in May 2016, the state legislature voted to eliminate the basic skills test requirement for certification as of July 1, 2016 (Gen. Stat. § 16-41, 2016). However, students admitted to teacher preparation programs in this Northeastern state must still "take the state reading, writing and mathematics competency examination, prescribed by and administered under the direction of the State Board of Education" (Gen. Stat. § 16-41, 2016), which will be Praxis Core (SDE, 2016a). Students' test scores will be used by teacher preparation programs as "a diagnostic tool for the purpose of providing remedial instruction" (Gen. Stat. § 16-41, 2016). Students may waive the Praxis Core using current SDE-recommended waiver criteria (1100 or higher in mathematics and critical reading on the SAT or 19 or higher in mathematics and 22 or higher in English on the ACT) (SDE, 2016a).

This study has implications for teacher preparation program administrators and policy makers making decisions about the policies and supports that should be in place for an effective minority recruitment and retention plan. Findings underscore the critical importance of a thoughtful plan to adequately support Black and Latina/o students to meet entry gate requirements, enter a

teacher preparation program, and pursue teaching careers. In the findings section, I identified factors that could potentially impede these efforts. In the section below, I discuss recommendations related to each of my three findings. These recommendations address the need for program collaboration, administrator professional development, examination of past BSR implementation, and areas for future research.

Recommendations

Finding 1: Priorities and resource constraints guide administrator policy and support decisions

1) **Senior-level teacher education administrators should work together to support information sharing across teacher preparation programs.** Teacher preparation programs must lead the effort to shape teacher licensure testing-related policies and support for students of color at teacher preparation programs in this Northeastern state. This can happen by proactively building relationships with and lobbying state legislators for more equitable and less cost prohibitive measures, such as lowering cut scores and reducing testing overall. Administrators can also give policymakers feedback on proposed teacher preparation legislation and how implementation will impact students and teacher preparation programs. If administrators have fewer burdensome testing and other standards-related requirements, it means that they can allocate more resources to meaningful support-related activities (e.g., longer and more frequent test preparation sessions).

2) **Administrators should share test preparation and recruitment resources across teacher preparation programs**: online Praxis study modules; examination of course data to identify entry barriers for students of color; and, test preparation strategies. Even with increased prioritization of support, teacher preparation programs will find it difficult to create and sustain meaningful recruitment and test preparation programs without adequate resources, especially

since many of the academic and social supports are time or resource intensive (e.g., mentoring programs). Due to limited and declining state and institutional resources to recruit and support students to meet licensure testing requirements, sharing resources is one way to provide more support to students at less cost.

Finding 2: Administrators' worldviews are reflected in diversity support

1) **Senior-level administrators and advisors in student support roles should engage in professional development.** In order to understand how their assumptions, biases, and experiences may influence their policy and practice related to support for students of color, administrators at all levels should engage in cultural competency development, facilitated self-reflection and teacher preparation program equity audits.

2) **Administrators should engage in training on how to plan and enact an effective minority teacher recruitment program**. Across cases, administrators expressed a desire to increase teacher diversity. However, administrators who have not prioritized student support, or who are lacking sufficient resources and specific goals around diversity, such as SPU, had fewer academic and social supports available for students of color. Priorities can shift, however, as evidenced by Kate's advocacy for university-based supports after participating in this study. Therefore, it is important to increase administrators' awareness of the types of recruitment and support that will improve students' performance on teacher licensure tests and will increase the number of Black and Latina/o students pursuing teaching.

Finding 3: Role Determines View

1) **Teacher education senior-level administrators and advisors in student support roles should engage in conversations about testing problems and solutions.** Because administrators with different roles and responsibilities tended to focus their framing of the BSR in different areas, it will be important for administrators at all levels to engage in conversations about their interpretation of testing problems and solutions, for both entry and exit testing. It is especially important for senior-level administrators to understand the challenges faced by students around meeting licensure test requirements, since these administrators allocate resources.

2) **Researchers should observe staff meetings** to further explore how administrators' role and responsibilities relate to their diagnostic and prognostic framing of teacher licensure testing requirements. Through observations, researchers could also examine the extent to which administrators discuss the teacher licensure testing related problem areas identified in this study: standards, test bias, test validity/reliability, and test preparation.

3) **Researchers should examine faculty diagnostic and prognostic framing** of entry and exit gate testing requirements, and how they view their role in supporting students to meet these requirements.

4) **Policy makers should examine past implementation of the BSR.** Because interpretation and implementation of policy and resultant support varies across administrators and teacher preparation institutions, it is important for State Department of Education policy makers to evaluate past implementation of the basic skills test requirement. For example, policy makers could examine how test and waiver cut scores and test implementation timelines have impacted teacher preparation programs and the number of students admitted to teacher education programs.

5) **Policy makers should consider administrator-identified solutions to BSR-related issues**. Because teacher preparation program administrators understand the ways entry gate policies impact students and teacher preparation programs, the SDE should consider administrator-identified solutions to issues around standards, test bias, test preparation and test validity/reliability as they make policy decisions. Suggested solutions included: setting test cut scores based on national norms; reducing testing overall; selecting appropriate tests; setting reasonable implementation timelines; and, allowing alternate measures to BSR (e.g., high school or college GPA).

My recommendations point to ways teacher preparation programs and policy makers can improve efforts to recruit, support and retain Black and Latina/o students to enter teaching. One challenge will be finding someone to manage and lead teacher preparation program collaboration and the professional development of administrators. A limitation to pursuing state-specific equitable measures or alternate measures to testing is CAEP Standard 3.2. This standard requires teacher preparation candidates to take a "nationally normed ability/achievement assessments such as ACT, SAT, or GRE" (CAEP, 2015) or another state assessment. However, as the number of students entering teaching continues to decline, the SDE and CAEP need to consider the elimination of unnecessary entry and exit gates to teaching.

Significance

This Northeastern state and 36 other states have made the recruitment of future teachers of color a priority (Bachler, 2003; Villegas & Davis, 2008). If teacher preparation programs do not invest in teacher licensure testing support, students of color may decide to pursue faster or cheaper routes to teaching (e.g., TFA) or change their major if they cannot pass tests or do not want to pay for taking the test multiple times.

If increasing the number of Black and Latina/o teachers is a priority for teacher preparation program administrators, and licensure testing is known to negatively impact the pool of diverse applicants, then advocating for more equitable entry and exit gate requirements and providing information on ways to support teacher candidates and improve testing outcomes is critical to increase the number of students of color entering teaching. It is a priority for me.

References

Achinstein, B., Ogawa, R. T., Sexton, D., & Freitas, C. (2010). Retaining teachers of color: A pressing problem and a potential strategy for "hard-to-staff" schools. *Review of Educational Research*, *80*(1), 71-107.

An Act Concerning the Recommendations of the Minority Teacher Recruitment Task Force. Conn. Gen. Stat. § 16-41 (2016). Retrieved from https://www.cga.ct.gov/2016/ACT/pa/2016PA-00041-R00SB-00379-PA.htm

An Act Concerning the Recommendations of the Minority Teacher Recruitment Task Force. Conn. Gen. Stat. § 15-108-5 (2016). Retrieved from https://www.cga.ct.gov/2016/TOB/s/pdf/2016SB-00379-R01-SB.pdf

An Act Concerning Teacher Certification Requirements for Shortage Areas, Interstate Agreements for Teacher Certification Reciprocity, Minority Teacher Recruitment and Retention and Cultural Competency Instruction. Conn. Gen. Stat. § 15-108-5 (2015). Retrieved from http://www.cga.ct.gov/2015/act/pa/pdf/2015PA-00108-R00SB-01098-PA.pdf

Angrist, J. D., & Guryan, J. (2004). Teacher testing, teacher education, and teacher characteristics. *American Economic Review*, 241-246.

Angrist, J. D., & Guryan, J. (2008). Does teacher testing raise teacher quality? Evidence from state certification requirements. *Economics of Education Review*, *27*(5), 483-503.

Avery, C., & Hoxby, C. M. (2004). Do and should financial aid packages affect students' college choices?. In *College choices: The economics of where to go, when to go, and how to pay for it* (pp. 239-302). University of Chicago Press.

Bachler, S., & Hill, T. L. (2003). Recruiting teachers of color: A 50-state survey of state policies. *Denver, CO: Education Commission of the States*.

Backus, K., & Mueller, L.M. (2012). *State-level bridged race estimates for Connecticut, 2011*, Connecticut Department of Public Health, Office of Health Care Quality, Statistics, Analysis & Reporting, Hartford, CT.

Baker-Doyle, K. J., & Petchauer, E. (2015). Rumor Has It: Investigating Teacher Licensure Exam Advice Networks. *Teacher Education Quarterly*,*42*(3), 3.

Benford, R. D., & Snow, D. A. (2000). Framing processes and social movements: An overview and assessment. *Annual Review of Sociology*, 611-639.

Bennett, C. I., McWhorter, L. M., & Kuykendall, J. A. (2006). Will I ever teach? Latino and African American students' perspectives on PRAXIS I. *American Educational Research Journal*, *43*(3), 531-575.

Bianco, M., Leech, N. L., & Mitchell, K. (2011). Pathways to teaching: African American male teens explore teaching as a career. *The Journal of Negro Education*, 368-383.

Bireda, S., & Chait, R. (2011). Increasing teacher diversity: strategies to improve the teacher workforce. *Center for American Progress*. Retrieved from http://www.americanprogress.org/

Bogdan, R., & Biklen, S. K. (1997). *Qualitative research for education*. Boston: Allyn & Bacon.

Boser, U. (2011). Increasing teacher diversity: a state-by-state analysis of teachers of color. *Center for American Progress*. Retrieved from http://www.americanprogress.org/issues/2011/11/pdf/teacher_diversity.pdf

Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. Sage.

Clewell, B. C., Puma, M. J, & McKay, S. A. (2005). *Does it matter if my teacher looks like me? The impact of teacher race and ethnicity on student academic achievement.* Paper presented at the meeting of the American Educational Research Association, Montreal.

Coburn, C. E. (2006). Framing the problem of reading instruction: Using frame analysis to uncover the microprocesses of policy implementation. *American Educational Research Journal*, *43*(3), 343-349.

The College Board. (2014). bigfuture™. Retrieved from https://bigfuture.collegeboard.org

Connecticut General Assembly. (2016, January 25). *Minority Teacher Recruitment Task Force Meeting Minutes.* Retrieved from https://www.cga.ct.gov/ed/tfs/20150622_Minority%20Teacher%20Recruitment/

Connecticut State Department of Education. (2016, July 22). *Information Regarding: Public Act 16-41 An Act Concerning the Recommendations of the Minority Teacher Recruitment Task Force.*

Connecticut State Department of Education. (2016, May). *Basic skills test eliminated for Connecticut educator certification. Retrieved from* http://www.sde.ct.gov/sde/lib/sde/pdf/cert/certalert_may2016.pdf

Connecticut State Department of Education. (2016, May). *Guide to assessments for educator certification in Connecticut. Retrieved from* http://www.sde.ct.gov/sde/lib/sde/PDF/Cert/guides/assess_for_cert.pdf

Connecticut State Department of Education. (2016, January 6). *Overview of Connecticut certification testing requirements.*

Connecticut State Department of Education. (2015, January 14). *An update on minority teacher recruitment*. Retrieved from http://www.sde.ct.gov/sde/lib/sde/pdf/alliance_districts/convening/update_on_minority_teacher_recruitment.pdf

Connecticut State Department of Education. (2015, January). *Basic skills test waiver criteria*. Retrieved from http://www.sde.ct.gov/sde/lib/sde/pdf/cert/certalert_january2015.pdf

CAEP (2015). *Standard 3: Candidate quality, recruitment, and selectivity.* Retrieved from http://caepnet.org/standards/standard-3

Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative sociology*, *13*(1), 3-21.

Cress, D. M., & Snow, D. A. (2000). The outcomes of homeless mobilization: The influence of organization, disruption, political mediation, and framing. *American Journal of Sociology*, 1063-1104.

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. Sage.

Dee, T. (2004). Teachers, race, and student achievement in a randomized experiment. *The Review of Economics and Statistics*, 86(1), 195–210.

Dee, T. S. (2005). A teacher like me: Does race, ethnicity, or gender matter? *American Economic Review*, 158-165.

Deil-Amen, R., & Lopez Turley, R. (2007). A review of the transition to college literature in sociology. *The Teachers College Record*, *109*(10), 2324-2366.

Donaldson, M. L., & Johnson, S. M. (2010). The price of misassignment the role of teaching assignments in Teach for America teachers' exit from low-income schools and the teaching profession. *Educational Evaluation and Policy Analysis*, *32*(2), 299-323.

Education Testing Service (2015). *Praxis core academic skills for educators tests overview.* Retrieved from https://www.ets.org/praxis/about/core

Education Testing Service (2016). *Praxis series passing scores by test and state* Retrieved from http://www.ets.org/s/praxis/pdf/passing_scores.pdf

Education Testing Service (2015). *Connecticut test requirements.* Retrieved from https://www.ets.org/praxis/ct/requirements

Education Week. (February 15, 2013). *Overhaul of teacher prep standards targets recruitment, performance.* Retrieved from http://blogs.edweek.org/edweek/teacherbeat/2013/02/teacher_prep_ accreditation_ove.html

Fiss, P. C., & Zajac, E. J. (2006). The symbolic management of strategic change: Sensegiving via framing and decoupling. *Academy of Management Journal*, *49*(6), 1173-1193.

Flyvbjerg, B. (2011). Case study. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE Handbook of Qualitative Research* (4th ed, pp. 301316). Thousand Oaks, CA: Sage.

Gitomer, D. H., Brown, T. L., & Bonett, J. (2011). Useful signal or unnecessary obstacle? The role of basic skills tests in teacher preparation. *Journal of Teacher Education*, *62*(5), 431-445.

Goldhaber, D. (2007). Everyone's doing it, but what does teacher testing tell us about teacher effectiveness? *Journal of Human Resources*, 42(4), 765-794.

Goldhaber, D., & Hansen, M. (2010). Race, gender, and teacher testing: How informative a tool is teacher licensure testing? *American Educational Research Journal*, 47(1), 218-251.

Goldrick-Rab, S. (2007). What higher education has to say about the transition to college. *The Teachers College Record*, *109*(10), 2444-2481.

Goodman, G., Arbona, C., & de Rameriz, R. D. (2008). High-Stakes, minimum-competency exams: How competent are they for evaluating teacher competence? *Journal of Teacher Education, 59*, 24-40.

Goodwin, A. L., & Oyler, C. (2008). Teacher educators as gatekeepers: Deciding who is ready to teach. *Handbook of research on teacher education: Enduring questions in changing contexts, 3*, 468-489.

Guide to Approved Educator Preparation Programs in Connecticut [Flyer]. (May 2015) Hartford, CT: Bureau of Educator Standards and Certification.

Hanushek, E. A. (1992). The trade-off between child quantity and quality. *Journal of political economy*, 84-117.

Haycock, K. (2001). Closing the achievement gap. *Educational leadership,58*(6), 6-11.

Hemphill, F. C., & Vanneman, A. (2011). Achievement Gaps: How Hispanic and White

Students in Public Schools Perform in Mathematics and Reading on the National Assessment of Educational Progress. Statistical Analysis Report. NCES 2011-459. *National Center for Education Statistics*.

Higher Education Act Title II. (2015). Institutional and program report card system (IPRC) user manual. Retrieved from https://title2.ed.gov/Public/TA/IPRCMANUAL.pdf

Hoffman, J. L., & Lowitzki, K. E. (2005). Predicting college success with high school grades and test scores: Limitations for minority students. *The Review of Higher Education*, *28*(4), 455-474.

Ingersoll, R., Merrill, L., & Stuckey, D. (2014). Seven Trends: The Transformation of the Teaching Force.

Irizarry, J., & Donaldson, M. L. (2012). Teach for América: The Latinization of U.S. Schools and the Critical Shortage of Latina/o Teachers. *American Educational Research Journal*, *49*(1), 155-194.

Irvine, J. J. (1990). *Black students and school failure. Policies, practices, and prescriptions*. Greenwood Press, Inc., 88 Post Road West, Box 5007, Westport, CT 06881.

Koretz, D. M. (2008). *Measuring up*. Harvard University Press.

Ladson-Billings, G. (1998). Just what is critical race theory and what's it doing in a nice field like education? *International Journal of Qualitative Studies in Education*, 11(1), 7-24.

Larson, G. S. (2003). *A Worldview of Disaster: Organizational Sensemaking in a Wildland Firefighting Tragedy*. National Emergency Training Center.

Lee, J. (2002). Racial and ethnic achievement gap trends: Reversing the progress toward equity?. *Educational researcher*, *31*(1), 3-12.

Louie, V. (2007). Who makes the transition to college? Why we should care, what we know, and what we need to do. *The Teachers College Record*, *109* (10), 2222-2251.

Manski, C. F. (1987). Academic ability, earnings, and the decision to become a teacher: Evidence from the National Longitudinal Study of the High School Class of 1972. In *Public sector payrolls* (pp. 291-316). University of Chicago Press.

McNeal, K., & Lawrence, S. (2009). Teachers from the “Neighborhood”: Standardized Testing as a Barrier to Certification of Minority Candidates. *Urban Learning, Teaching, and Research*, 1.

Memory, D. M., Coleman, C. L., & Watkins, S. D. (2003). Possible tradeoffs in raising basic skills cutoff scores for teacher licensure: A study with implications for participation of African Americans in teaching. *Journal of Teacher Education*, *54*(3), 217-227.

Mikitovics, A., & Crehan, K. D. (2002). Pre-Professional Skills Test scores as college of education admission criteria. *The Journal of Educational Research*, *95*(4), 215-223.

NCES. (2011, June). https://nces.ed.gov/nationsreportcard/studies/gaps/

Nettles, M. T., Scatton, L. H., Steinberg, J. H., & Tyler, L. L. (2011). Performance and passing rate differences of African American and White prospective teachers on Praxis [TM] examinations: A joint project of the National Education Association (NEA) and Educational Testing Service (ETS). Research Report. ETS RR-11-08. *Educational Testing Service*.

Nivet, M. A. (2010). Minorities in academic medicine: review of the literature. *Journal of vascular surgery*, *51*(4), S53-S58.

Ocasio, K. M. (2014). Nuestro Camino: A Review of Literature Surrounding the Latino Teacher Pipeline. *Journal of Latinos and Education*, *13*(4), 244-261.

Olson, L., & Rosenfeld, R. A. (1984). Parents and the process of gaining access to student financial aid. *The Journal of Higher Education*, 455-480.

Park, V., Daly, A. J., & Guerra, A. W. (2013). Strategic Framing How Leaders Craft the Meaning of Data Use for Equity and Learning. *Educational Policy*, *27*(4), 645-675.

Patton, M. Q. (1990). *Qualitative evaluation and research methods*. SAGE Publications, Inc.

Petchauer, E. (2012). Teacher Licensure Exams and Black Teacher Candidates: Toward New Theory and Promising Practice. *The Journal of Negro Education*, *81*(3), 252-267.

Pryor, S. “An update on minority teacher recruitment committee.” Executive summary to State Board of Education, Connecticut, 2014.

Sackett, P. R., Borneman, M. J., & Connelly, B. S. (2008). High stakes testing in higher education and employment: appraising the evidence for validity and fairness. *American Psychologist*, *63*(4), 215.

Scheurich, J. J., & Young, M. D. (1997). Coloring epistemologies: Are our research epistemologies racially biased?. *Educational researcher*, 4-16.

Sleeter, C. E., & Milner, H. R. (2011). Researching successful efforts in teacher education to diversify teachers. *Studying diversity in teacher education*, 81-103.

Steinberg, M. P., Piraino, P., & Haveman, R. (2009). Access to higher education: Exploring the variation in Pell Grant prevalence among US colleges and universities. *The Review of Higher Education*, *32*(2), 235-270.

Stone, C.L., & Mueller, L.M. (2004). *State-level bridged race estimates for Connecticut, 2000 – 2002*. Connecticut Department of Public Health, Office of Health Care Quality, Statistics, Analysis & Reporting, Hartford, CT.

Stone, D. A. (1989). Causal stories and the formation of policy agendas. *Political science quarterly*, 281-300.

Strauss, A. L., & Corbin, J. M. (1990). *Basics of qualitative research* (Vol. 15). Newbury Park, CA: Sage.

Sutton, R. E. (2004). Teaching under high-stakes testing: Dilemmas and decisions of a teacher educator. *Journal of Teacher Education, 55,* 463-474.

Title II. (2015). *Connecticut 2015 Title II Report. Complete Report Card*. Retrieved from https://title2.ed.gov/Public/Report/PrintReport.aspx?Year=2015&StateID=09

U.S. Department of Education. (2016, May 6). *The State of Racial Diversity in the Educator Workforce*. Retrieved from http://www.ed.gov/news/press-releases/report-state-racial-diversity-educator-workforce

U.S. Department of Education. (2015, October 16). *Title III Part A Programs - Strengthening Institutions*. Retrieved from http://www2.ed.gov/programs/iduestitle3a/index.html

U.S. Department of Education. (2013-2014). *College Navigator*. Institute of Education Sciences, National Center for Education Statistics. Retrieved from https://nces.ed.gov/collegenavigator/

Vanneman, A., Hamilton, L., Anderson, J. B., & Rahman, T. (2009). Achievement Gaps: How Black and White Students in Public Schools Perform in Mathematics and Reading on the National Assessment of Educational Progress. Statistical Analysis Report. NCES 2009-455. *National Center for Education Statistics*.

Venezia, A., Kirst, M. W., & Antonio, A. L. (2008). Betraying the college dream: How disconnected K-12 and postsecondary education systems undermine student aspirations.

Vidal, C. (2008). Wat is een wereldbeeld?(What is a worldview?). *Nieuwheid denken. De wetenschappen en het creatieve aspect van de werkelijkheid, in press. Acco, Leuven*.

Villegas, A. M., & Clewell, B. C. (1998). Increasing teacher diversity by tapping the paraprofessional pool. *Theory Into Practice, 37(2),* 121–130.

Villegas, A. M., & Davis, D. E. (2007). Approaches to diversifying the teaching force: Attending to issues of recruitment, preparation, and retention. *Teacher Education Quarterly*, *34*(4), 137-147.

Villegas, A. M., & Davis, D. E. (2008). Preparing teachers of color to confront racial/ethnic disparities in educational outcomes. *Handbook on research in teacher education*, 583-605.

Villegas, A. M., & Irvine, J. J. (2010). Diversifying the teaching force: An examination of major arguments. *The Urban Review*, *42*(3), 175-192.

Villegas, A., & Lucas, T. F. (2004). Diversifying the teacher workforce: A retrospective and prospective analysis. *Yearbook of the National Society for the Study of Education*, *103*(1), 70-104.

Woulfin, S. L. (2015). Catalysts of Change. *JSL Vol 25-N3*, *25*, 526.

Woulfin, S. L., Donaldson, M. L., & Gonzales, R. (2015). District Leaders' Framing of Educator Evaluation Policy. *Educational Administration Quarterly*, 0013161X15616661.

Yin, R. K. (2003). *Case study research: Design and methods*. Sage publications.

Zeichner, K. (2003). The adequacies and inadequacies of three current strategies to recruit, prepare, and retain the best teachers for all students. *The Teachers College Record*, *105*(3), 490-519.

Appendix

Interview Protocol

Script: This study examines the basic skills test requirement and how institutions provide support to students to meet this requirement. This interview will take approximately 60 minutes. Thank you for agreeing to participate in this interview.

Hand the consent form to participant. Could you please take a look at this consent form and sign it for me?

Thank you. Is it okay I start recording now?

Background and Current Role

1. Can you tell me a bit about yourself and how you ended up working as a XXX.
2. Follow-up: Were you ever a K-12 teacher? What did you teach?
3. What has been your career path in higher education?
    Follow-up: were you ever a faculty member?

Across the nation, people are interested in diversifying the teaching force.

4. What are your institution's goals around increasing teacher diversity in Connecticut?
    Follow-up: What is your institution doing to increase diversity?

5. What are your goals around increasing teacher diversity?
    Follow-up: What are you doing related to increasing diversity?

Program Admissions Criteria

6. Can you describe a candidate who is qualified for your teacher education program?
    Follow-up: What makes someone unqualified?

Teacher Licensure Testing and the Basic Skills Test Requirement

7. What is your personal experience with taking teacher licensure tests?

Hand Praxis flyer and read this:

The Connecticut State Department of Education requires that teacher candidates meet the basic skills test requirement by passing Educational Testing Service's (ETSs) Praxis Core tests or by obtaining a Basic Skills Test Waiver. As you know, students qualify for the waiver by achieving minimum cut scores on the SAT (1100 or higher in mathematics and critical reading) or ACT (19 or higher in mathematics; 22 or higher in English).

8. In your mind, is the basic skills test requirement necessary? Why?
9. Who at your institution passes Praxis Core?
    Follow-up: Why do you think that is?
10. Can you tell me about a time a student passed and you were surprised?
    Follow-up: Can you tell me about a time a student did not pass and you were surprised?

Student Support – Basic Skills Test

11. What kind of test preparation support do you provide to students to pass the Basic Skills test? (e.g., tutoring, study groups, fee waivers, extensions)

Follow-up: Do you differentiate who receives support?

Social Support

12. Can you tell me what social supports you provide to students? (e.g., student groups, cultural events, advising or mentoring)

Support – Skill/knowledge Development

13. Can you tell me about any skill or knowledge development work you do with students?
14. Can you tell me how your program came to decide on providing the support you just described?
15. Tell me about a time where you felt that your program's support made the difference in the student's success with the Praxis.

Final Question

16. Is there anything else about the basic skills test requirement or student support that you want to share with me?

Thank you again for your participation. I may have a few follow up questions. Do you prefer these via email or via a phone call?

Table 3

Research-Based Support Recommendations

Type of Support	Researcher
Align high school curriculum with Praxis skills	McNeal & Lawrence, 2009
Social support	Villegas & Davis, 2007; 2008
Test preparation in high school	Koretz, 2008; Sackett, et al., 2008
Test preparation in college (includes familiarizing students with Praxis test)	Koretz, 2008; Nettles, 2011; Sackett, et al., 2008; Villegas & Davis, 2008
Skill and knowledge development	Nettles, 2011

Table 4

Teacher Preparation Program Background Information

Case	Students of Color	Teacher Education Students	Pell Grant Recipients	SAT Mid-Range
Small Private University	13%	146	35%	450-530CR 440-530M
Regional State University	11.5%	486	35%	460-550CR 460-560M
Research University	12%	377	21%	560-660CR 590-690M

Table 5

Teacher Preparation Program Supports Matrix 1: Individual Cases

Case	Social Supports	Test Preparation	Skill and Knowledge Development
Small Private University	Advisors Community	Familiarize students w test Study skills strategies (focus time on weak areas) Provide more support for Praxis II Test anxiety workshops	Recommend extra math courses
Regional State University	Advisors Advising Ctr Depictions of div in building Group adv for transfer students Study Abroad	Be Advised newsletter Familiarize students w test Emergency fund Provide study guides Create online study modules Use data to inform support Provide more support for Praxis II Prior test prep support w grant $$	Math, reading writing skill development for specific concepts at Univ support ctrs.
Research University	Advisors Conference presentations Diversity dinner Leadership in Div. Group	Familiarize students w test Study skills strategies (focus on weak areas) Praxis Core study group Test Fee waivers	Math, reading writing skill development for specific concepts at Univ support ctrs. Refresh/teach math concepts

Social Justice focused FYE course	Provide study guides Test anxiety workshops

Table 6

Teacher Preparation Program Supports Matrix 2 – Cross Case

Support	Institution		
Test Preparation	SPU	RSU	RU
Accommodations or test fee waiver from ETS (support for)			x
Deadline extension			x
Emergency fund		x	
Encourage early testing	x	x	x
Familiarize students with test	x	x	
Create online study modules		x	
Praxis study sessions			x
Provide more support for Praxis II	x	x	
Provide study material		x	x
Test anxiety support	x	x	x
Test taking strategies – focus on weak areas	x		x
Test taking strategies – process of elimination			x
Test fee waivers			x
Use student course data to inform future support		x	
Support	Institution		
Social Support	SPU	RSU	RU
Advisors	x	x	x
Diverse advising staff			x
Advising center		x	
Conference presentations			x
Depictions of diversity in building		x	
Diversity dinner			x
FYE Social Justice in Education course			x
Group advising for transfer students		x	

Leadership in Diversity student group			x
Study abroad (education)		x	x
Support	Institution		
Skill and Knowledge Development	SPU	RSU	RU
Align HS courses w Praxis content (faculty suggest HS teachers do this)	x		
Math, reading writing skill development for specific concepts at Univ support ctrs.	x	x	x
Refresh/teach math concepts			x
Recommend extra math courses	x		
Tell HS counselors to tell students do well on SAT	x		