Advancing Equity: Expanding and Diversifying the Teacher Workforce

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Abstract

Policymakers have responded to teacher shortages with various initiatives but have done so without adequate evidence about factors that influence prospective teachers' career decisions. This study explores undergraduates' interest in and perceptions of a career in teaching and investigates how these factors vary by race/ethnicity. While a large proportion of our survey respondents indicated an interest in teaching, we found misalignment between the factors individuals prioritize in a future career and how they perceive a teaching career. Differences exist across racial/ethnic groups. The study has implications for policies and investments aimed at expanding and diversifying the teacher workforce.

Keywords: teacher diversity, teacher shortage, teacher recruitment, educational policy, racial/ethnic data, teacher pipeline

Introduction

A high-quality, diverse teacher workforce is key to providing equitable educational opportunities for all students. High-quality teachers of diverse backgrounds support student engagement (Brewster & Bowen, 2004), increase student motivation (Siegle et al., 2014), and improve student outcomes (Darling-Hammond, 2000). Particularly in times of social unrest, we look to schools and teachers as "engine[s] of social and individual improvement" (Cuban, 1990; p. 8). Recent global and national circumstances—including the coronavirus pandemic, increased visibility of police brutality against Black men and women, and the rise of hate groups—have shed light on the racism and inequities that persist in the United States. As our society grapples with the causes and consequences of these tragedies, schools need teachers who can support students coping with racial injustice, financial hardships, social isolation, and inequitable access to educational resources.

Yet, the current teacher workforce does not meet the demands of all schools and students. The national teacher shortage is severe and growing. A 2016 report by the Learning Policy Institute estimated that the teacher shortage could reach 316,000 by 2025 (Sutcher et al., 2016). The consequences of this shortage vary by context. For instance, high-poverty schools with high percentages of students of color are more likely to have less qualified, less experienced teachers than low-poverty, predominantly White schools (Lankford et al., 2002; Sutcher et al., 2019). This inequitable distribution of teacher quality compounds existing opportunity and achievement gaps between White students and students of color, which contributes to differential academic, health, and labor market outcomes (Carter & Welner, 2013).

Students of color also have less access than their White peers to teachers of their same race. In 2017, 18 percent of public elementary and secondary teachers were teachers of color, while 53 percent of students were students of color (NCES 2020a; NCES 2020b). And the percentage of students of color enrolled in public elementary and secondary schools is growing. Between 2000 and 2017, the percentage of Hispanic students increased by at least one percentage point and by as many as 17 percentage points across all 50 states and the District of Columbia; the percentage of Black students increased by as many as four percentage points in 17 states (NCES, 2020b). While the total share of teachers of color has also expanded—from 13 percent in 1987-1988 to 18 percent in 2011-2012—the comparative rates of growth suggest that the racial/ethnic mismatch between students and teachers of color will remain significant (U.S. Department of Education, 2016).

These widening gaps in representation are particularly concerning because studies show that all students benefit from having teachers of color. Across races and ethnicities, students perceive Black and Latinx teachers more favorably than White teachers on outcomes like holding students to high academic standards, supporting their efforts, helping them organize content and explain concepts clearly, and providing useful feedback (Cherng & Halpin, 2016). Additionally, teachers of color provide social and emotional support for all students that leads to improved longitudinal test scores and fewer suspensions (Blazar, 2019).

Students of color see further benefits from teachers of color. Relative to White teachers, Black educators offer Black students a range of academic and personal assets, including higher expectations for success (Gershenson et al., 2018), improved test score performance (Dee, 2004), valuable cultural knowledge and social ties (Yosso, 2005), familiar role models (Villegas &

Lucas, 2004), and an understanding of social, political, and economic inequalities that Black students face (Ladson-Billings, 1994). Black and Latinx teachers are less likely to perceive same race/ethnicity students as disruptive or off task (Dee, 2005) and more likely to recommend students to a gifted and talented program (Redding, 2019). Further, evidence suggests that Black students who are exposed to more Black teachers receive fewer suspensions and office referrals (Lindsay & Hart, 2017), and Latinx students who have Latinx teachers have fewer unexcused absences (Gottfried et al., 2021).

Policymakers have attempted to address the insufficient supply and inequitable distribution of teachers by offering economic incentives, creating alternative teacher certification pathways, improving preservice and in-service teachers' professional development opportunities, and addressing poor working conditions (Rice et al., 2009). To recruit teachers of color, in particular, policymakers have offered scholarships for teacher preparation and loan forgiveness for teaching in high-need schools or subject areas; implemented "grow-your-own" programs to attract high school students, paraprofessionals, and other district employees of color into teaching; developed induction programs aimed at supporting new teachers of color; and attempted to improve school working conditions by preparing school leaders to work with diverse staff and students (Carver-Thomas, 2018). But due to a lack of evidence about the factors that influence individuals' decisions to pursue a career in teaching, these often costly strategies may not adequately address the issues that drive teacher shortages. While several scholars have explored the factors that influence undergraduate preservice teachers' decisions to pursue teaching (e.g., Glutsch & König, 2019; Serow et al., 1992; Watt & Richardson, 2007), few have focused on undergraduate students who may be interested in teaching but are not necessarily

enrolled in a teacher preparation program. This group, whom we refer to as undergraduate prospective teachers (UPTs), is a primary contributor to the teacher supply (U.S. Department of Education, 2015) and an important population to understand as we work to identify policies, practices, and investments that could attract a high-quality, diverse teacher workforce.

This study expands the evidence base for teacher recruitment policies by investigating UPTs' *interest* in and *perceptions* of teaching—two factors that influence individuals' intent to pursue the career. Due to the critical shortages of teachers of color, this article focuses specifically on how UPTs of various racial and ethnic groups view teaching and teacher recruitment policies. Using quantitative survey data from a broader mixed methods study grounded in expectancy-value theory and the economic concepts of opportunity cost and hedonic wage theory, we examine the following research questions:

- 1. What is the level of interest in a teaching career for students from various racial/ethnic backgrounds?
- 2. How do UPTs' perceptions of teaching align with their career priorities (i.e., factors they value when choosing a career)? How do differences between these students' career priorities and their perceptions of teaching vary by racial/ethnic background?
- 3. What policies, practices, and investments might make teaching a more attractive career for UPTs from various racial/ethnic backgrounds?

Conceptual Framework and Literature Review

Much of the literature on factors that influence prospective teachers' career decisions is guided by Eccles' and colleagues' (1983) expectancy-value theory (Bowsher, 2015; Giersch, 2016; Han et al., 2018; Padhy et al., 2015; Stokes, 2007; Watt & Richardson, 2007).

Expectancy-value theory contends that two factors determine the educational, occupational, and leisure-time activities in which individuals choose to engage: 1) expectancies for success, or how well individuals expect to perform in the activities they are considering; and 2) subjective task values, or how they value aspects of those activities. Watt and Richardson (2007) operationalized the Eccles model to develop their Factors Influencing Teaching Choice (FIT-Choice) scale and to inform their investigation into what motivates preservice teachers to pursue a teaching career. Several researchers have continued Watt and Richardson's work on the FIT-Choice model (Watt et al., 2012), including some who have used it to explore factors influencing undergraduate (Bowsher, 2015; Giersch, 2016) and high school prospective teachers' intent to teach (Han et al., 2018).

Our framework (Figure 1) draws on these theories and incorporates the economic concepts of opportunity cost—the value of a good one has to give up to obtain a different good (Lovenheim & Turner, 2018)—and hedonic wage theory—the idea that individuals consider both monetary rewards and work environment characteristics when choosing a profession (Chambers, 1981). Taken together, these theories and concepts suggest that five sets of factors influence UPTs' intent to teach: (a) individual characteristics; (b) socialization influences; (c) perceptions of the benefits and costs of teaching; (d) perception of their teaching ability; and (e) perceptions of teacher policies. In the following sections, we define these sets of factors and present empirical evidence on how each relates to individuals' teaching-related career intentions.

Individual Characteristics

Individual characteristics include demographic (e.g., race, sex [Newby et al., 1995]) and academic characteristics (e.g., major, year [Moin et al., 2005]). Scarce but notable evidence

Brown et al. (2019) found that Black male undergraduate student-athletes' interest in athletic coaching is positively associated with an interest in teaching. At the high school level, Smith et al. (2004) found that race/ethnicity may be negatively associated with interest in teaching because Black male high school students were more interested in pursuing computer science, engineering, medical/health, or business careers than teaching careers.

Some studies also suggest that UPTs' academic characteristics, like major, class standing, and achievement level, influence their intent to teach. For instance, math majors and natural science majors may be more interested in teaching than engineering majors (Moin et al., 2005; Plecki et al., 2013). Further, high school students who express interest in history or English may be more likely than their counterparts to favor teaching as a career (Dutton & Keislar, 1961).

Socialization Influences

Socialization influences capture indicators of familial support, prior schooling experiences, and media messaging that may influence the career decisions of individuals from different backgrounds (Christensen et al., 2019; Padhy et al., 2015; Plecki et al., 2013). For example, one study suggests that negative schooling experiences and media reports about teaching may discourage students from the profession (Padhy et al., 2015). Further, several studies suggest that Black high school students may be discouraged from teaching by teachers' low expectations, microaggressions, and negative talk about teaching salaries and working conditions (Bianco et al., 2011; Goings & Bianco, 2016; Graham & Erwin, 2011; Smith et al., 2004). Black students may also be deterred from teaching by perceptions that their parents, friends, and communities see teaching as a career garnering little respect (Bianco et al., 2011;

Goings & Bianco, 2016). Access to caring teachers and Black teachers, however, may encourage these students to teach (Goings & Bianco, 2016).

Perceptions of the Benefits and Costs of Teaching

Research shows that prospective teachers' perceptions of a range of benefits and costs of teaching shape their intent to teach. Perceived benefits of teaching include interest in the work of teaching, including interest in working with children (Pietrzak et al., 2011), and the ability to make a societal contribution (Plecki et al., 2013; Stokes, 2007). Giersch (2016) found that prospective teachers respond to reminders of the social value of teaching, such as the opportunity to educate future informed, engaged citizens. Other evidence indicates that having ample vacation time, long summers off, and the freedom to create a family-friendly work schedule resonate with some prospective teachers (Bowsher, 2015; Giersch, 2016).

Studies also document the ways that financial, opportunity, and human costs discourage prospective teachers from pursuing careers in education. These perceived costs of teaching include its low social status, low salary, low job security, and limited opportunities for career mobility (Bowsher, 2015; Christensen et al., 2019; Goings & Bianco, 2016; Padhy et al., 2015; Pietrzak et al., 2011; Plecki et al., 2013; Purves et al., 2005). Further, evidence suggests that some prospective teachers perceive teaching to be a career that does not require intellectual challenge (Plecki et al., 2013) and that involves long working hours (Han et al., 2018; Plecki et al., 2013; Purves et al., 2005), working with students who lack discipline and have poor attitudes

¹ Conceived as a perceived benefit of a teaching career, interest in the work of teaching refers to the extent to which an individual enjoys specific tasks associated with a teaching career (e.g., sharing knowledge, interpersonal interaction, working with children/adolescents). Interest in the work of teaching and interest in pursuing a teaching career are distinct concepts. See Table 2 for the survey items our study uses to measure interest in work.

towards learning (Padhy et al., 2015; Pietrzak et al., 2011), and coping with large class sizes and minimal autonomy (Purves et al., 2005).

Perceptions of Teaching Ability

Perceived teaching ability accounts for individuals' estimations of their teaching abilities and self-efficacy for teaching (Watt & Richardson, 2007). Research has found that undergraduate students' motivation to pursue a career in teaching is fueled by their expectations that they will perform well in the education field because they possess the competence to teach and can manage the difficulty and the demands of teaching (Bowsher, 2015). Favorable perceptions of teaching abilities and self-efficacy for teaching are positively related to individuals' intent to pursue a teaching career (Christensen et al., 2019; Padhy et al., 2015). Evidence shows that this relationship holds for preservice teachers in several countries (Fokkens-Bruinsma & Canrinus, 2012; Goller et al., 2019; Watt & Richardson, 2007), including the United States (Watt et al., 2012).

Perceptions of Teacher Policies

The final component of our model is individuals' perceptions of teacher policies, which may encourage or discourage prospective teachers' progression into teaching careers. Teacher policies address financial incentives (Coffman et al., 2019), accountability systems (Han, 2018), teacher certification requirements (Hanushek & Pace, 1995), working conditions (Han et al., 2018), and other policies and investments intended to affect individuals at various points in the teacher pipeline. Studies show that financial incentives, like loan forgiveness and scholarship programs, may attract students to teaching careers (Coffman et al., 2019; Plecki et al., 2013). One study suggests that low-income students who applied to Teach for America (TFA) were

more likely to join TFA when offered additional grants and loans on top of their initial funding package (Coffman et al., 2019).

Alternatively, policies related to teacher certification pathways and working conditions may discourage or encourage undergraduates from teaching. For instance, evidence indicates that students may be discouraged by the prospect of taking a teacher certification exam and the increased course requirements associated with teacher preparation programs (Hanushek & Pace, 1995), as well as the existence of test-based accountability policies (Han, 2018). At the same time, policies that signal the professionalization of teaching, like requiring a bachelor's degree or teacher certification, have been found to encourage students to consider it as a respectable career (Park & Byun, 2015).

This paper focuses on the relationship between UPTs' perceptions of the benefits and costs of teaching and their interest in the career. It also explores prospective teachers' perceptions of teacher policies and the extent to which certain policies, practices, and investments might make teaching a more attractive career choice, particularly for UPTs of color. The following section provides a detailed description of our data, methods, and analysis.

Data and Methods

This paper is derived from a sequential, equal-status mixed methods study (Leech & Onwuegbuzie, 2009) of undergraduates at the University of Maryland (UMD), a university that offers a variety of academic majors and enrolls a diverse student body. The study used institutional data and an online survey followed by focus groups with select survey respondents to explore undergraduates' interest in and perceptions of teaching, with a particular emphasis on prospective teachers who have a past or present interest in teaching and who we may be able to

recruit into the teaching profession. Drawing from this study, the current paper uses survey data on the interest level and perceptions of UPTs across racial/ethnic groups.

Description of the Survey

Guided by our conceptual framework, our survey sought information about respondents' demographic and academic characteristics, teaching-related socialization influences, interest in a teaching career, and intent to pursue it as a career, as well as their perceptions of the benefits and costs of teaching, their teaching ability, and teacher policies. This paper uses survey data on students' demographic and academic characteristics (e.g., race, ethnicity, ² major), interest in teaching, perceptions of the benefits and costs of teaching, and perceptions of teacher policies. The "interest in teaching" item asked respondents to select one of five statements that best described their interest in teaching: 1) I am not currently and have never considered a career in teaching; 2) I have considered a career in teaching in the past but am not currently considering it; 3) I may consider teaching as a future career, but I am not planning to teach immediately after graduation; 4) Teaching or preparing to teach is one of multiple career options I am considering pursuing after graduation; and 5) Assuming I get a teaching job, I will definitely teach immediately after graduation or after I earn my teacher certification. We defined respondents who selected statements 2, 3, 4, or 5 as prospective teachers. We used two types of survey items to capture respondents' perceptions of the benefits and costs of teaching and their teaching ability. The first type was value items, which asked respondents to rate on a five-point scale how

² The race item asked respondents to select one or more racial categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) (U.S. Census Bureau, 2020a). We linked the U.S. Census Bureau (USCB) race classification web page to the race item to provide respondents with racial category definitions. The ethnicity item asked whether respondents were of Hispanic or Latino origin and provided the USCB's definition of Hispanic or Latino as "a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race" (U.S. Census Bureau, 2020b). In line with the Census Bureau's definition of race and ethnicity as separate identities, we treated race and ethnicity as separate variables.

important career factors were to them, where 1 indicated "not at all important" and 5 indicated "very important." The second type was *perception items*, which asked respondents to rate on a six-point scale the degree to which they agreed (or disagreed) that teaching offered those factors, where 1 indicated "strongly disagree," 5 indicated "strongly agree," and 6 indicated "I don't know." Value and perception items represented constructs derived from our conceptual model. Each construct (e.g., pecuniary benefits, workload) included 1-5 survey items.³ Items related to perceptions of teacher policies asked respondents to rate on a three-point scale the degree to which financial and non-financial policies would encourage them to teach, where 1 indicated "not at all encourage" and 3 indicated "definitely encourage."

Sample

We recruited undergraduate students from across UMD via email to participate in our survey. A total of 2,266 undergraduates responded to our survey, which amounted to a response rate of eight percent. After excluding duplicates, respondents who completed less than half of the survey,⁴ and respondents who did not report their race and ethnicity, our final sample included 1,644 undergraduates, 1,225 of whom were prospective teachers. Table 1 presents the demographic characteristics of survey respondents and the UMD undergraduate student population in 2020. The majority of respondents (62 percent) were White, followed by Asian (21 percent), Black (9 percent), Hispanic (10 percent), more than one race (6 percent), and Indigenous⁵ (2 percent). The majority of survey respondents (69 percent) were female, while 30 percent were male and less than one percent identified their sex as other. Although our sample

³ See Appendix B for a complete list of constructs and associated survey items.

⁴ If individuals completed more than half of our survey more than once, we kept their most recent or most complete response.

⁵ Because response rates from American Indian/Alaska Native and Native Hawaiian/Other Pacific Islander respondents were low, we combined these two racial groups into an Indigenous category. Characterizing these respondents as Indigenous is consistent with scholarly research practices in the fields of literature, communications, and education (Bartman Watson, 2017; Csizmadia et al., 2013; Hong, 2018; Kant et al., 2018).

included a diverse pool of students, it is not entirely representative of the UMD student population. A low response rate, compounded by the overrepresentation of White and female students in our sample, suggests that findings are generalizable only to survey respondents.

Nonetheless, this exploratory study provides meaningful information about UPTs' interest in and perceptions of teaching, and lays the groundwork for further research with this population.

Analysis

Analyses for our first research question included data from all survey respondents. To address this question, we tabulated frequencies for the interest in teaching survey item. Then, we tabulated respondents' interest in teaching by their race/ethnicity.

Prior to conducting analyses for the study's other research questions, we imputed missing data for value, perceptions, and teacher policy survey items using two background characteristics that are key to this paper's aims: interest in teaching and race/ethnicity.⁶ Follow-up significance tests suggested that, overall, our imputed and non-imputed samples were not statistically significantly different from one another.

Analyses for our second and third research questions only included data from UPTs (n=1,225), who were respondents who selected responses 2, 3, 4, or 5 to the interest in teaching survey item. For our second research question, we calculated mean responses of all UPTs and by racial/ethnic group on value and perceptions survey items.⁷ To do so, we first calculated alpha levels for the value items and the perceptions items for each construct, respectively. When both value and perceptions items for a construct had an alpha of 0.70 or greater, we averaged the means for each item to generate a construct mean, which was the average of means for each item

⁶ We had 10 total categories for imputation based on these background characteristics: two interest in teaching groups (interested, not interested) multiplied by five racial groups (Asian, Black, Indigenous, more than one race, White).

⁷ We excluded respondents who selected "I don't know" on teaching items from our analysis of teaching items.

within a construct. For example, the value mean for pecuniary benefits was the average of the salary and benefits value items. When either value or perceptions items, or both, had an alpha less than 0.70, we calculated means for each individual item. For a list of constructs, items, and their alpha values, see Appendix B. After calculating construct and item means, we conducted two-tailed unequal variance t-tests for UPTs in each racial/ethnic group versus all other UPTs for each value and perceptions construct and item (e.g., Asian UPTs versus all other UPTs for the importance of salary). Table 2 and Appendix C present value and perceptions results for teaching benefits, and Table 3 and Appendix D present value and perceptions results for teaching costs. In the findings section below, we present results that meet the 95 percent confidence level (p<.05). Similarly, for our third research question, we calculated mean responses of all UPTs and by racial/ethnic group on teacher policy survey items, and conducted two-tailed unequal variance t-tests for UPTs in each racial/ethnic group versus all other UPTs for each policy item (e.g., Black UPTs versus all other UPTs for perceptions of higher starting salaries). Table 4 and Appendix E present these results.

Findings

The following sections discuss the findings for our three research questions. We begin by describing respondents' levels of interest in teaching, with particular attention to how interest varies across racial/ethnic groups. We then discuss the factors that UPTs value when choosing a career and their perceptions of how a career in teaching aligns with those factors. Finally, we discuss the policies, practices, and investments that might make teaching a more attractive career for UPTs from different racial/ethnic groups.

Interest in a Teaching Career

Our first research question examines the level of interest in a teaching career for students from various racial/ethnic backgrounds. As shown in Figure 2, approximately 75 percent of the 1,644 respondents in our sample had a past or current interest in teaching; 25 percent had never considered teaching as a career. While only 6 percent of our survey respondents definitely planned to teach, others indicated some degree of interest. Almost 10 percent indicated that teaching was one of several career options they were considering; over a quarter may consider this career in the future; and almost one-third had considered teaching in the past.

These patterns were similar across racial/ethnic groups. The majority of respondents in each racial/ethnic group—in most cases, over 75 percent—had considered a career in teaching, were currently considering a career in teaching, or were planning to be teachers (Figure 3).

Fewer than one-third of students in every group had never considered a career in teaching; in most cases (Indigenous, more than one race, White, Hispanic), fewer than 25 percent of the respondents reported that they had never considered teaching. The group with the largest proportion of students who had never considered a career in teaching (33 percent) was Black respondents. Given this evidence of interest in teaching across racial/ethnic groups, we looked at UPTs' career priorities and how they perceive a career in teaching.

Alignment between Career Priorities and Perceptions of Teaching

Our conceptual framework, grounded in theoretical and empirical research on individuals' career decisions, identifies a number of factors that shape individuals' career decisions. In the sections that follow, we rely on that framework to discuss our findings related to our second set of research questions: How do UPTs' perceptions of teaching align with their

career priorities, and how do differences between career priorities and perceptions of teaching vary by racial/ethnic background?

Our findings, presented in Figures 4 and 5, show students' perceptions of the importance of each factor (e.g., salary, work schedule) in their career decisions and their view of the extent to which teaching reflects that factor. Importance of the factor in choosing a career is on the horizontal axis and perception of teaching with respect to that factor is on the vertical axis. Points in the right-side quadrants of the box are factors of greater importance to students; those in the upper right quadrant are perceived to be both important and associated with a teaching career, while those in the lower right quadrant are perceived to be important but less associated with a teaching career. Arguably, this lower right quadrant is where we might focus policies and investments to change perceptions of teaching in areas that are important to UPTs.

Findings are presented by racial/ethnic groups. Consistent with our conceptual framework, we first describe findings on students' perceptions of career benefits and then we turn to perceptions of career costs.

Perceptions of Benefits

Our conceptual framework includes a set of benefits that have been found to influence career decisions. The first panel in Figure 4 shows students' perceptions of pecuniary benefits, which include salary and benefits (e.g., retirement, healthcare). Across racial/ethnic groups, respondents rated compensation as highly important in their career choice (mean=4.45 on a 5-point scale) but were less positive in their perceptions of teacher compensation (mean=3.02). The placement of pecuniary benefits in the lower right quadrant suggests a potential opportunity

to address teacher compensation (or students' perceptions of it) given its importance as a factor in UPTs' career decisions.

Our model also includes a number of non-pecuniary benefits. The remaining set of panels in Figure 4 show, by racial/ethnic groups, average perceptions about enjoyment of work, working with children, work schedule, job availability/security, professional growth, identity alignment, and social contribution. With few exceptions, these factors fell into the top right quadrant of our graphs, which indicates that respondents perceive the factors to be both important and associated with a teaching career. Perceptions about promotion and identity alignment edged toward the lower right quadrant, indicating opportunities to change perceptions of teaching in areas that are important to UPTs. In terms of their importance to UPTs, all of these benefits, except working with children, had average ratings across racial/ethnic groups above 4. However, survey respondents' perceptions of the degree to which a teaching career offers these benefits were more variable. The factor most strongly associated with teaching was the opportunity to work with children and adolescents (mean=4.66), yet respondents rated this factor as their least important benefit. The second factor most associated with teaching was the career's social contribution (mean=4.48), which surfaced as important to respondents (mean=4.40). Enjoyment of work was also strong in both career importance (mean=4.20) and association with teaching (mean=4.39). Interestingly, survey respondents indicated that the work schedule was important in their career decisions (mean=4.15), but their perceptions of a teaching schedule were less positive than one might expect (mean=3.90) given the anecdotal evidence that many go into teaching because they like to have holidays and summers off. While job availability/security (mean=4.50), professional development and promotion (mean=4.52), and identity fulfillment and alignment (mean=4.65)

scored high in terms of importance, survey respondents viewed these three factors as less associated with a career in teaching than some of the other factors. The two items that contribute to our professional growth construct show UPTs may be more pessimistic about the degree to which teaching offers opportunities for promotion (mean=3.12) compared to professional development opportunities (mean=3.82).

We observed a number of interesting differences across racial/ethnic groups in UPTs' views of career benefits (Table 2). For example, compared to other respondents, Asian students placed lower average importance on having a career that is intellectually stimulating (mean=4.26). Black UPTs, compared to other groups, assigned greater average importance to careers that allow them to share their knowledge with others (mean=4.57), to work with children (mean=3.65), to engage in professional development (mean=4.72), and to make a social contribution (helping people, combating social inequality, and serving society) (mean=4.67). In addition, Black students, on average, reported more positive perceptions than other groups that the teaching profession is a stimulating career that offers opportunities for professional growth (mean=3.87) and is aligned with how they see themselves as professionals (mean=3.64). On average, Indigenous students assigned greater importance than other respondents to work schedule (mean=4.52) but had a more negative perception of the teaching work schedule (mean=3.5).8 White students did not differ from other respondents in the importance of career benefits, but on average, they viewed teaching as less attractive in terms of work schedule (mean=3.95), professional growth opportunities (mean=3.46), and alignment with how they see themselves as professionals (mean=3.18). Compared to other respondents, Hispanic students, on

⁸ Since only 24 Indigenous UPTs responded to the survey, we are cautious not to overstate our claims about their views on teaching.

average, assigned greater importance to work schedule (mean=4.39) and viewed teaching as more likely to be fulfilling work (mean=3.96). Respondents of two or more races did not statistically significantly differ from other racial/ethnic groups.

Perceptions of Costs

Taken together, survey respondents were less positive about the costs than the benefits associated with a career in teaching. Our framework included two financial costs: the cost of earning a credential and the opportunity cost associated with salary. As shown in Figure 5, how respondents value each of these factors was misaligned with how they view the teaching profession: on average across racial/ethnic groups, respondents reported high importance for these factors and low perceptions of their association with teaching. Responses around salary opportunity cost were particularly noteworthy. This factor captured respondents' views about the degree to which a teaching career offers a salary and salary growth competitive with their other career options. On average, respondents rated importance at 4.42 but a teaching career at 2.33, putting this factor well into the lower right quadrant. The cost of earning a credential showed similar misalignment between importance (mean=3.89) and the costs for teaching (mean=2.94).

Our framework also incorporates non-pecuniary costs, which include coursework and degree requirements, workload, social status, and safety and well-being. Among the more important non-pecuniary cost factors were the costs related to safety and well-being (mean=4.53) and the costs related to coursework to enter a profession (mean=4.27). The average responses on safety and well-being (mean=3.43) and coursework (mean=2.94) were relatively low for the teaching profession, with perceptions of the graduation timeline being particularly low

⁹ Higher ratings for cost items denote a lower cost, whereas lower ratings denote a higher cost. See Table 2 for survey item language.

(mean=2.51). Workload followed a similar pattern with an average importance rating (mean=4.19) that was higher than the perception of teaching rating (mean=3.43). The least important career-related cost among our respondents was social status (mean=3.61), which closely matched respondents' average perceptions of teaching (mean=3.32).

Again, a number of interesting differences emerged across racial/ethnic groups in their perceptions of career-related costs (Table 3). Compared to respondents from other racial/ethnic groups, Asian students, on average, assigned greater importance to the social status of a career (mean=3.72), and they reported higher average perceptions that teaching would not require them to take student loans and would not extend their graduation timeline (mean=3.89). Black students, compared to other respondents, assigned higher average importance to one or more aspects of almost every cost category in our framework including the cost of earning a credential (taking out student loans and having to work while in school) (mean=4.25), not feeling drained at the end of the workday (mean=4.24), having salary growth opportunities (mean=4.64), being valued for the career's contribution to society (mean=4.35), working in a physically safe environment (mean=4.67), and requiring coursework that is aligned with the effort they want to invest (mean=4.60). Black UPTs also reported relatively positive views of the teaching profession, including higher average perceptions of the volume of work (mean=4.06) and amount of effort required in the career (mean=4.49), coursework requirements (mean=3.36), and opportunities for salary growth (mean=2.85)—though their views of salary growth opportunities were still quite low. Compared to other respondents, Indigenous students assigned greater average importance to the cost of earning a credential (mean=4.48) and safety (mean=4.85). They had especially high ratings for mental well-being (mean=4.88), a factor they also

associated more highly with teaching than did other respondents (mean=3.86). Compared to other respondents, Hispanic students assigned greater importance to avoiding student loans (mean=4.10) and pursuing work that does not leave them drained (mean=4.10) and occurs in a physically safe environment (mean=4.57). They had a higher average perception that educator preparation coursework would prepare them for multiple career opportunities (mean=3.26). Notably, compared to respondents from other racial/ethnic groups, White students, on average, assigned lower importance and perceptions of teaching across all cost factors. As was the case for career benefits, respondents of two or more races did not statistically significantly differ from other groups.

Policies, Practices, and Investments and the Attractiveness of Teaching

Our third research question focused on the policies, practices, and investments that might make teaching a more attractive career for undergraduate prospective teachers from various racial/ethnic backgrounds.

Financial Incentives and Supports

Our survey asked respondents to indicate the degree to which various financial incentives and supports would encourage them to teach. Salary-based financial incentives included higher starting salaries for teachers, increased teacher salaries or bonuses based on high teacher performance, increased teacher salaries or bonuses for work in high-needs schools (e.g., under-resourced, low-performing), and increased teacher salaries or bonuses for hard-to-staff content areas (e.g., STEM, special education). Non-salary financial incentives included an undergraduate scholarship to earn teacher certification, reduced or free tuition for undergraduate

courses required for teacher certification, student loan forgiveness programs for teachers, a scholarship to earn a master's degree in teaching, and a stipend for time spent student teaching.

Prospective teachers from all racial/ethnic backgrounds indicated that various financial incentives and supports would somewhat or definitely encourage them to pursue a career in teaching. As shown in Figure 6, means for all nine financial supports were between 2 and 3 on a 3-point scale with 1 indicating that the incentive would "not at all encourage" them to teach, 2 indicating that the incentive would "somewhat encourage" them to teach, and 3 indicating that the incentive would "definitely encourage" them to teach. Salary-based financial incentives tended to have slightly higher means than non-salary financial supports, but respondents reported finding all the policies similarly encouraging. Respondents rated higher starting salaries as the most encouraging policy (mean=2.75) and an undergraduate scholarship to earn teacher certification the least encouraging (mean=2.32).

Students of various racial/ethnic groups rated the salary-based financial incentives as similarly important, with strong positive responses across the board (Figure 7, Table 4). The only statistically significant difference was that Asian students were more positive than other respondents in their views of increased salaries or bonuses for hard-to-staff content areas (mean=2.59). The lack of differences among groups indicates that financial incentives may be effective at encouraging prospective teachers across racial/ethnic groups to pursue teaching.

With respect to non-salary financial incentives, we found several differences across racial/ethnic groups (Figure 8, Table 4). Compared to students in other groups, Black UPTs reported stronger encouragement from student loan forgiveness programs (mean=2.69), and Hispanic students reported stronger encouragement from student teaching stipends (mean=2.67)

and scholarships for teaching degrees at both the undergraduate (mean=2.47) and master's levels (mean=2.64). In contrast, White students, compared to others, reported lower average levels of encouragement from student teaching stipends (mean=2.55) and undergraduate scholarships (mean=2.29).

Other Policy Levers

In addition to financial incentives and supports, our survey asked respondents to indicate the degree to which various policy levers related to school working conditions would encourage them to teach. Policy levers included access to high-quality professional development opportunities, more opportunities for professional advancement, smaller class sizes, increased teacher autonomy in the classroom, less emphasis on student testing, increased presence of school support staff (e.g., counselors, social workers), and increased safety and security in schools.

In general, prospective teachers' mean scores for these policy levers were lower than those for financial policy incentives, but they were still between 2 (somewhat encouraging) and 3 (definitely encouraging) (see Figure 9). Means for non-financial initiatives ranged from 2.15 to 2.49, with the most encouraging initiatives being less emphasis on student test scores (mean=2.49), increased presence of support staff (mean=2.47), and more opportunities for professional advancement (mean=2.44). The least encouraging initiative was smaller class sizes (mean=2.15).

Asian, Black, Indigenous, and Hispanic prospective teachers indicated being more encouraged to teach by the grouping of non-financial policy levers than the average respondent not in their racial/ethnic group (Figure 10, Table 4). On average, Asian students reported being

more responsive than their peers to opportunities for professional advancement (mean=2.55) and access to high-quality professional development (mean=2.49). Compared to other respondents, Black students, on average, reported higher encouragement to teach from an increased presence of support staff (mean=2.61), high-quality professional development (mean=2.57), and smaller class sizes (mean=2.28). Compared to students from other groups, Indigenous respondents, on average, were more encouraged by opportunities for professional advancement (mean=2.75), increased safety and security in schools (mean=2.71), and smaller class sizes (mean=2.50). On average, Hispanic students reported being more encouraged than other respondents to decreases in the emphasis on test scores (mean=2.62) and increased safety and security in schools (mean=2.48). With few exceptions, White students had the lowest average ratings among racial/ethnic groups for this set of policy levers.

Summary and Discussion

This paper is part of a broader study designed to identify potential pools of undergraduate prospective teachers and to understand their perceptions of teaching and the factors that might draw them into the profession. Given the lack of diversity in the teacher workforce and the growing diversity among the student population, critical shortages of teachers of color exist and have important implications for the experiences and outcomes of all students. Using a mixed methods study grounded in expectancy-value theory and the economic concepts of opportunity cost and hedonic wage theory, we examined UPTs' level of interest in a teaching career; how their perceptions of teaching align with factors they value when choosing a career; and the policies, practices, and investments that might make teaching a more attractive career.

Throughout the study, we looked for differences across racial/ethnic groups.

Several key findings emerged from the analysis. First, a large proportion of our survey respondents indicated that they have a past or present interest in teaching. This level of interest included those who considered a teaching career in the past, those who were currently considering it, those for whom teaching was one of multiple career options, and those who definitely planned to teach. Across most racial/ethnic groups, more than 75 percent of respondents indicated that they had considered or were currently considering a career in teaching. Only Asian and Black student groups had fewer than 75 percent of respondents who at some point considered teaching. Notably, among Black respondents, one-third of respondents had never considered a career in teaching. While not derived from a representative sample, these findings suggest that there may be pools of untapped prospective teachers among undergraduate students, and that opportunities exist to recruit more teachers of color from this population.

Second, we identified a number of factors that respondents reported as important in selecting a career but that they perceived not to be associated with the teaching profession. These misalignments present possible opportunities for policies, practices, and investments that might change perceptions of teaching in areas that are important to UPTs. Key factors that reflected this pattern of misalignment between value and perceptions of teaching included compensation, opportunities for promotion, identity alignment, the opportunity costs of teacher salaries, the costs associated with earning a teaching credential, and coursework requirements. Respondents were very positive in their perceptions of the degree to which teaching allows individuals to work with children, but this factor did not emerge as important as other career priorities among our respondents. In addition, we found it interesting that though respondents rated work schedule

as important, they did not perceive it to be more strongly associated with a career in teaching, given the common assumption that many teachers are attracted to the profession for its schedule.

We also identified potentially important differences across racial/ethnic groups in career priorities and perceptions of teaching. Students of color (Asian, Black, Indigenous, and Hispanic) who responded to our survey were more sensitive than White students to the costs of earning a teaching credential, especially when it comes to taking out loans. This finding may reflect the stark racial disparities in student loan debt that exist between Black and White students in particular, where Black undergraduate students tend to have more debt at and beyond graduation than their White peers (Scott-Clayton & Li, 2016). Additionally, the Black prospective teachers in our study were more likely than other respondents to prioritize social contribution, working with children, and opportunities for professional growth in a career; they also had higher perceptions than others that teaching offers professional growth opportunities. Indigenous and Hispanic students assigned greater importance than other respondents to the work schedule, and Hispanic students perceived teaching to be fulfilling and well aligned with their identity as a professional. Interestingly, compared to other groups, White UPTs, on average, consistently placed less importance on the costs of a career in teaching and had lower perceptions of teaching with respect to costs.

Third, our findings on the policies, practices, and investments that might attract UPTs into the profession are consistent with findings on their perceptions of the profession. Across racial/ethnic groups, respondents were most positive about financial incentives that included higher starting salaries and policies to offset the costs of earning the credential (e.g., scholarships, loan forgiveness). Survey respondents also recognized the importance of other

policy levers like opportunities for professional advancement, a decreased emphasis on student test scores, and more support staff to support their work.

While all racial/ethnic groups reported similarly strong preferences for salary-based incentives, Black and Hispanic students reported that additional financial incentives (e.g., student teaching stipends, loan forgiveness, scholarships) offered greater encouragement for entering the teaching profession than did other groups. Similarly, non-financial incentives like high-quality professional development, opportunities for advancement, increased school safety, smaller class sizes, increased support staff, and decreased emphasis on test scores were more encouraging to students of color than to White students.

Taken together, these findings have implications for policies and investments aimed at expanding and diversifying the teacher workforce. They reinforce that salary matters as undergraduate students consider career options, both in terms of the salary level and how it compares to other professions. This finding is not new, but it compels us to rethink teacher salaries if we are serious about creating a high-quality, diverse teacher workforce. Our study also highlights students' negative perceptions—particularly among students of color—about the cost of entering the profession as well as the potential of financial incentives, if carefully designed, to help address those concerns. The misalignment between how respondents value opportunities for career advancement and their perceptions of a lack of career advancement potential in teaching is another area that demands attention from policymakers. We also see the potential to leverage the social contributions of teaching in our efforts to recruit teachers of color, given that respondents, particularly Black students, reported that factor to be both important and associated with teaching. The positive perceptions, especially among students of color, with respect to a range of

financial incentives and policies related to working conditions support findings from other research that recommends the careful, coordinated, and targeted design of a *package* of policies, practices, and investments to recruit and retain a high-quality, diverse teacher workforce (Rice et al., 2009; Sutcher et al., 2019).

We recognize that this study has a number of limitations that prevent the generalization of our findings to the broader undergraduate student population. The study is based on data from one institution, and given the response rate, our findings can only be attributed to survey respondents. That said, this exploratory study allows us to build on existing theory and research to better understand how we might grow a high-quality, diverse teacher workforce. Future work will probe our survey findings through focus groups with undergraduate prospective teachers to better understand the factors that influence their career decisions, their perceptions of a career in teaching, and the policies, practices, and investments that will recruit the high-quality, diverse teacher workforce needed to provide equitable educational opportunities for all students.

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Table 1. Sample Characteristics

	Survey	Sample	UMD Population			
	Frequency Percentage		Frequency	Percentage		
Race/Ethnicity						
Asian	345	20.99	5,890	19.08		
Black or African American	154	9.37	3,700	11.98		
Indigenous	29	1.76	54	0.17		
Two or more races	104	6.33	1,438	4.66		
White	1,012	61.56	14,387	46.60		
Hispanic	166	10.10	3,045	9.86		
Other	_	_	2,361	7.65		
Sex						
Female	1,139	69.28	14,828	48.03		
Male	495	30.11	16,047	51.97		
Other	10	0.61	_	_		
Total	1,6	544	30,875			

Note: Population statistics are based on the UMD undergraduate population in 2020 (University of Maryland Office of Institutional Research, Planning & Assessment, 2020). Because response rates from American Indian/Alaska Native and Native Hawaiian/Other Pacific Islander respondents were low, we combined these two racial groups into an Indigenous category. Characterizing these respondents as Indigenous is consistent with scholarly research practices in the fields of literature, communications, and education (Bartman Watson, 2017; Csizmadia et al., 2013; Hong, 2018; Kant et al., 2018).

Table 2. Mean Perceptions of Career Benefits and Perceptions of Teaching by Race/Ethnicity (includes Statistical Testing of Differences Between Groups)

	All Asian		Black		Hispanic		Indigenous		2+ races		White		
	Importance Pero	eption Importance	Perception	Importance	Perception								
Pecuniary	4.45	3.02 4.47	3.10	4.45	3.07	4.53	2.93	4.58	2.96	4.55	3.05	4.42	2.99
Pays well enough to support my desired lifestyle	4.44	2.62 4.48	2.80	4.47	3.77	4.56	2.53	4.67	2.44	4.53	2.71	4.41	2.54*
Offers attractive benefits packages	4.45	3.54 4.46	3.54	4.44	3.53	4.49	3.46	4.50	3.41	4.57	3.43	4.44	3.56
Interest in work: enjoyment of teaching tasks	4.20	4.11	4.36	4.29	4.5	4.26	4.36	4.24	4.52	4.24	4.52	4.22	4.37
Allows me to share my knowledge with others	4.40	4.53 4.33	4.52	4.57*	4.61	4.48	4.47	4.58	4.65	4.49	4.63	4.39	4.51
Involves interpersonal interaction	. 4.20	4.65 4.12	4.61	4.36	4.72	4.28	4.58	4.21	4.65	4.22	4.80*	4.20	4.64
Requires me to think on my feet	3.80	1.35 3.70	4.25	3.87	4.39	3.38	4.29	3.79	4.48	3.82	4.49	3.83	4.35
Involves intellectually stimulating work	4.40	4.05 4.26*	4.08	4.36	4.27*	4.49	4.11	4.38	4.3	4.43	4.21	4.45	3.99*
Interest in work: work with children/adolescents	3.22	1.66 3.28	4.62	3.65*	4.68	3.41	4.69	3.54	4.78	3.12	4.58	3.14	4.68
Work schedule	4.15	3.90 4.13	3.75*	4.26	3.86	4.39**	3.78	4.52*	3.50	4.29	3.98	4.11	3.95*
Offers generous holiday and vacation time	4.04	4.02 4.02	3.86	4.17	3.95	4.27**	3.91	4.46*	3.50	4.21	3.96	3.99	4.10*
Has work hours that align with my other interests and commitments		3.79 4.24	3.64	4.34	3.82	4.51**	3.69	4.58	3.59	4.37	4.00	4.22	3.82
Job availability/security	4.50	3.81 4.54	3.79	4.48	3.94	4.53	3.68	4.69	3.77	4.61	3.90	4.47	3.80
Has widely available jobs	4.35	3.86 4.42	3.81	4.31	4.01	4.41	3.71	4.67	3.91	4.47	4.13	4.32	3.83
Offers job security	4.64	3.76 4.67	3.77	4.65	3.91	4.65	3.64	4.71	3.68	4.75	3.76	4.61	3.74
Professional growth	4.52	3.52 4.51	3.54	4.65*	3.87**	4.57	3.57	4.65	3.83	4.50	3.56	4.50	3.46*
Offers opportunities for promotion	4.46	3.12 4.46	3.19	4.58	3.45*	4.53	3.14	4.63	3.55	4.42	3.14	4.44	3.02*
Offers opportunities to develop more knowledge and skills	4.58	3.82 4.55	3.78	4.72*	4.16**	4.61	3.91	4.67	4.13	4.58	3.85	4.56	3.78
Identity alignment	4.65	3.51 4.61	3.55	4.73	3.74	4.69	3.67	4.65	3.87	4.70	3.53	4.65	3.46
Aligns with how I see myself as a professional	4.51	3.26 4.56	3.30	4.65	3.64*	4.54	3.38	4.54	3.70	4.61	3.31	4.49	3.18*
Is likely to be fulfilling for me	4.80	3.79 4.76	3.86	4.82	3.89	4.83	3.96	4.75	4.15	4.80	3.78	4.80	3.74
Social contribution	4.40	4.48 4.31	4.47	4.67**	4.58	4.48	4.47	4.39	4.55	4.50	4.54	4.38	4.47
Offers opportunities to help people	4.57	4.59 4.47	4.61	4.74*	4.62	4.66	4.57	4.75	4.67	4.63	4.70	4.58	4.57
Offers opportunities to combat social inequality and promote social justice		4.16 4.10	4.14	4.64**	4.34	4.29	4.15	4.29	4.14	4.32	4.17	4.13	4.14
Provides a service to society	4.44	1.69 4.26	4.65	4.63*	4.79	4.51	4.67	4.13	4.81	4.54	4.73	4.44	4.68

Note: Importance items asked respondents to rate the degree to which they valued various career factors on a five-point scale where 1 indicated "not at all important" and 5 indicated "very important." Perception items asked respondents to rate the degree to which they agreed (or disagreed) that teaching offers the factors presented in the career values items on a six-point scale where 1 indicated "strongly disagree," 5 indicated "strongly agree," and 6 indicated "I don't know." We excluded "I don't know" responses from this analysis. Asian n=246; Black n=105; Indigenous n=24; two or more races n=81; White n=769; Hispanic n=126. Hispanic respondents may be of any race. We used two-sample t-tests to determine statistically significant differences between racial/ethnic groups. * or ** indicates that a group was statistically significantly different from all other undergraduate prospective teachers on a particular factor. *p < 0.05, **p < 0.01.

Table 3. Mean Perceptions of Career Costs and Perceptions of Teaching by Race/Ethnicity (includes Statistical Testing of Differences Between Groups)

	A	11	As	ian	Bl	ack	Hisp	anic	Indig	enous	2+1	aces	W	hite
	Importance	Perception												
Cost to earn a teaching credential	3.89	2.94	3.89	3.16*	4.25**	3.03	4.01	2.94	4.48**	3.07	3.98	3.02	3.81**	2.85**
Would not require me to take out student loans.	3.89	2.88	3.91	3.13*	4.22**	2.99	4.10*	2.89	4.46*	3.05	3.99	2.92	3.81*	2.79*
Would not require me to give up a job while I'm completing coursework and degree requirements.		3.04	3.88	3.21	4.28**	3.23	3.91	3.02	4.50*	3.00	3.98	3.11	3.82*	2.95*
Workload	4.19	3.43	4.25	3.52	4.30	3.59	4.27	3.40	4.36	3.65	4.27	3.43	4.14*	3.36*
Requires a manageable volume of work.	4.29	3.71	4.36	3.87	4.31	4.06**	4.32	3.68	4.38	4.04	4.30	3.68	4.27	3.61**
Requires a reasonable amount of effort.	4.18	4.13	4.18	4.21	4.21	4.49**	4.23	4.07	4.42	4.39	4.21	4.14	4.17	4.05**
Allows sufficient time for other activities that are important to me.	4.48	3.58	4.44	3.61	4.63	3.53	4.56	3.53	4.71	3.45	4.58	3.52	4.46	3.58
Does not involve work that would leave me drained after a typical day at work.	3.94	2.81	4.09	2.96	4.24*	2.92	4.10	2.73	4.21	3.00	4.07	2.79	3.83**	2.74*
Allows me to disconnect from work at the end of the work day.	4.05	2.79	4.16	2.86	4.10	2.85	4.11	2.86	4.08	3.39	4.21	2.96	3.99*	2.73
Salary opportunity cost	4.42	2.33	4.47	2.38	4.70	2.62	4.41	2.44	4.40	2.65	4.32	2.45	4.39	2.25*
Offers a salary competitive with my other career options.	4.38	2.22	4.47	2.27	4.51	2.49	4.29	2.33	4.21	2.57	4.28	2.33	4.35	2.15*
Offers salary growth opportunities similar to my other career options.	4.45	2.44	4.46	2.48	4.64*	2.85*	4.52	2.58	4.58	2.67	4.35	2.57	4.42	2.35*
Social status	3.61	3.32	3.72	3.42	3.80	3.38	3.45	3.32	3.78	3.60	3.66	3.31	3.53*	3.27
Is a well-respected profession in society.	3.72	3.59	3.81	3.7	3.78	3.56	3.53	3.58	4.04	3.75	3.78	3.63	3.66	3.56
Is valued for its contributions to society.	4.01	3.85	4.05	3.92	4.25*	3.89	3.92	3.80	4.13	3.96	3.99	3.86	3.97	3.82
Is a high-status occupation.	3.09	2.49	3.30*	2.63	3.36	2.65	2.90	2.54	3.17	3.08	3.21	2.44	2.97**	2.41*
Safety	4.53	3.43	4.51	3.49	4.70*	3.44	4.58	3.46	4.85**	3.46	4.65	3.40	4.49*	3.41
Allows for employees to maintain their mental well-being.	4.6	3.47	4.54	3.56	4.73	3.60	4.59	3.56	4.88**	3.86*	4.73	3.46	4.58	3.42
Occurs in a physically safe environment.	4.47	3.41	4.49	3.45	4.67*	3.33	4.57	3.38	4.83**	3.21	4.58	3.31	4.41*	3.43
Coursework	4.27	2.94	4.32	3.05	4.43*	3.36**	4.19	3.01	4.32	3.38	4.34	2.95	4.23*	2.83**
Would not extend my graduation timeline.	4.08	2.51	4.18	2.75*	4.28	2.85	4.02	2.48	3.83	3.05	4.26	2.43	4.01*	2.38**
Are aligned with the effort I want to invest.	4.42	3.29	4.46	3.34	4.60*	3.69**	4.39	3.41	4.63	3.55	4.42	3.36	4.38*	3.20*
Would prepare me for multiple career options.	4.39	3.07	4.36	3.13	4.51	3.74**	4.37	3.26	4.63	3.77**	4.46	3.17	4.38	2.92**
Would allow time in my academic plan to take other courses that I want to take.	4.2	2.87	4.28	3.03	4.35	3.30*	3.98*	2.84	4.21	3.33	4.24	2.84	4.15	2.75**

Note: Importance items asked respondents to rate the degree to which they valued various career factors on a five-point scale where 1 indicated "not at all important" and 5 indicated "very important." Perception items asked respondents to rate the degree to which they agreed (or disagreed) that teaching offers the factors presented in the career values items on a six-point scale where 1 indicated "strongly disagree," 5 indicated "strongly agree," and 6 indicated "I don't know." We excluded "I don't know" responses from this analysis. Asian n=246; Black n=105; Indigenous n=24; two or more races n=81; White n=769; Hispanic n=126. Hispanic respondents may be of any race. We used two-sample t-tests to determine statistically significant differences between racial/ethnic groups. * or ** indicates that a group was statistically significantly different from all other undergraduate prospective teachers on a particular factor. *p < 0.05, **p < 0.01.

Table 4. Mean Perceptions of Teacher Policies by Race/Ethnicity (includes Statistical Testing of Differences Between Groups)

	All	Asian	Black	Hispanic	Indigenous	2+ races	White
Financial Incentives							
Salary-based Salary-based							
Higher starting salaries	2.75	2.74	2.79	2.82	2.79	2.70	2.75
Performance-based salaries or bonuses	2.65	2.69	2.63	2.72	2.67	2.67	2.63
Increased salaries or bonuses for work in high-needs schools	2.58	2.60	2.64	2.65	2.58	2.61	2.57
Increased salaries or bonuses for hard-to-staff content areas	2.52	2.59*	2.41	2.63	2.63	2.53	2.51
Other financial support							
Stipend for student teaching	2.57	2.61	2.60	2.67*	2.58	2.62	2.55
Reduced or free tuition for undergraduate teacher certification courses	2.53	2.58	2.60	2.61	2.71	2.51	2.50*
Scholarship for a master's degree in teaching	2.51	2.49	2.50	2.64*	2.54	2.53	2.52
Student loan forgiveness programs for teachers	2.42	2.41	2.69**	2.49	2.46	2.47	2.38*
Undergraduate scholarship to earn teacher certification	2.32	2.36	2.43	2.47*	2.58	2.30	2.29*
Non-Financial Initiatives							
Less emphasis on student test scores	2.49	2.45	2.59	2.62*	2.67	2.53	2.48
Increased presence of support staff (e.g. school counselors, psychologists, social works, and others)	2.47	2.45	2.61*	2.56	2.58	2.59	2.50
More opportunities for professional advancement	2.44	2.55**	2.54	2.53	2.75**	2.51	2.38**
Increased access to high-quality professional development	2.35	2.49**	2.57**	2.46	2.63	2.44	2.26**
Increased safety and security in schools	2.34	2.38	2.40	2.48*	2.71**	2.41	2.31*
Increased teacher autonomy	2.33	2.33	2.45	2.37	2.42	2.38	2.30
Smaller class sizes	2.15	2.17	2.28*	2.23	2.50*	2.25	2.11**

Note: Using a three-point scale where 1 indicated "not at all encourage," 2 indicated "somewhat encourage," and 3 indicated "definitively encourage," survey items asked respondents to rate the degree to which the above incentives and initiatives would encourage them to teach. Asian n=246; Black n=105; Indigenous n=24; two or more races n=81; White n=769; Hispanic n=126. Hispanic respondents may be of any race. We used two-sample t-tests to determine statistically significant differences between racial/ethnic groups. * or ** indicates that a group was statistically significantly different from all other undergraduate prospective teachers on a particular factor. *p < 0.05, **p < 0.01.

Tables and Figures

Figure 1. Conceptual Model of Teaching-Related Career Choice

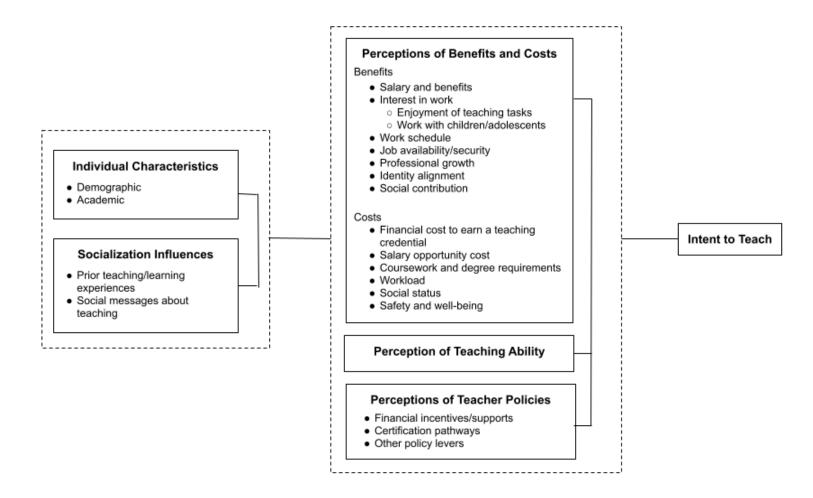
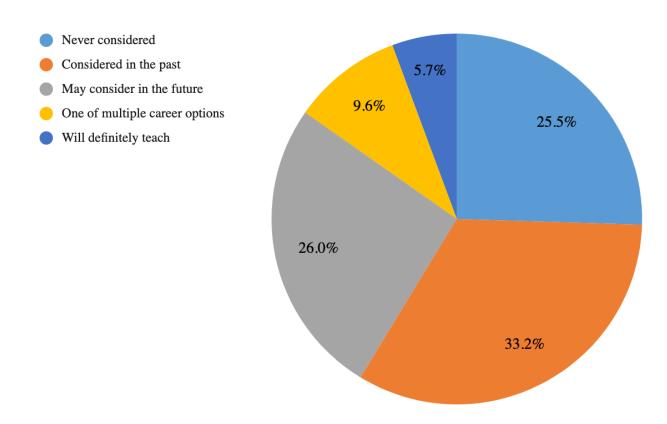
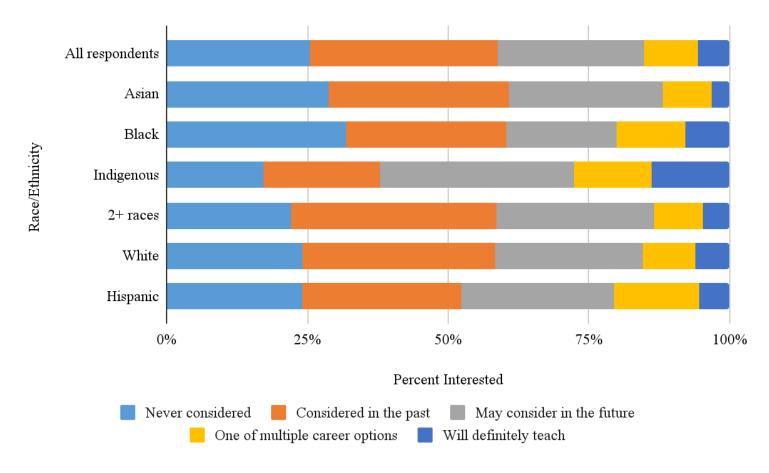


Figure 2. Interest in Teaching (All Respondents)



Note: Percentages are based on a sample of 1,644 survey respondents.

Figure 3. Interest in Teaching by Race/Ethnicity



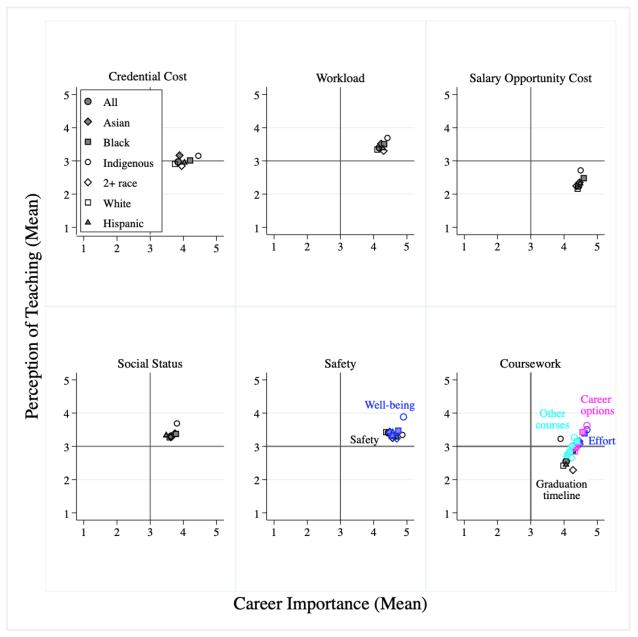
Note: All respondents n=1,644; Asian n=345; Black n=154; Indigenous n=29; two or more races n=104; White n=1,012; Hispanic n=166. See Appendix A for frequencies and percentages.

Pecuniary Enjoyment Work with Children 2 All Asian Black Indigenous 2+ race White Hispanic 5 5 ż ż 3 3 3 Perception of Teaching (Mean) Work Schedule Job Availability & Security Professional Growth Availability Development **®**o Security Promotion 5 5 2 2 5 3 3 3 Identity Alignment Social Contribution 5 Fulfillment Alignment Career Importance (Mean)

Figure 4. Mean Perceptions of Career Benefits by Race/Ethnicity

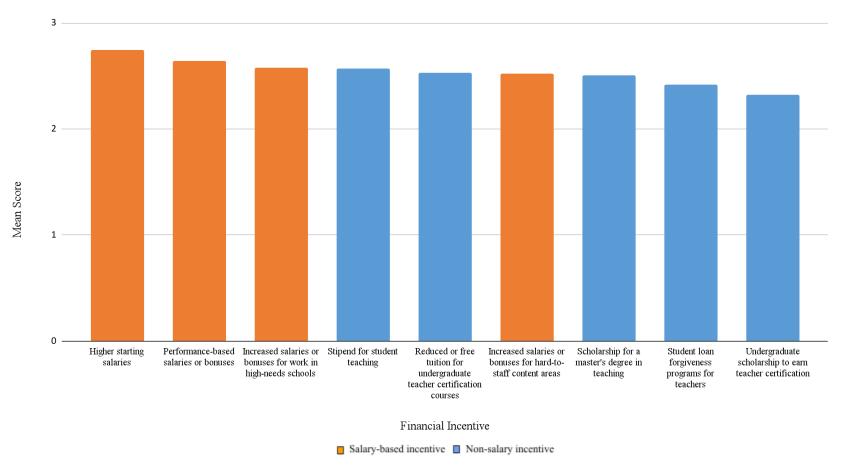
Note: Each plot represents a benefit construct from our conceptual model. When both value and perceptions items for a construct had an alpha of 0.70 or greater, we present construct means (enjoy teaching, work with children, schedule, social contribution). When either value or perceptions items, or both, had an alpha of less than 0.70, we present individual item means (job availability and security, professional growth, identity alignment). All prospective teachers n=1,225; Asian n=246; Black n=105; Indigenous n=24; two or more races n=81; White n=769; Hispanic n=126.

Figure 5. Mean Perceptions of Career Costs by Race/Ethnicity



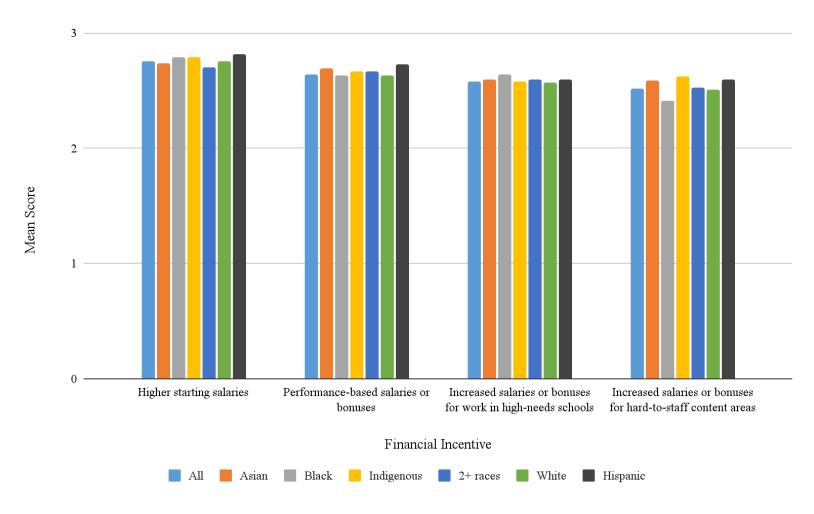
Note: Each plot represents a cost construct from our conceptual model. When both value and perceptions items for a construct had an alpha of 0.70 or greater, we present construct means (cost to earn a teaching credential, workload, salary opportunity cost, social status). When either value or perceptions items, or both, had an alpha of less than 0.70, we present individual item means (safety, coursework). All prospective teachers n=1,225; Asian n=246; Black n=105; Indigenous n=24; two or more races n=81; White n=769; Hispanic n=126.

Figure 6. Mean Score for the Degree to which Financial Incentives Would Encourage Undergraduate Prospective Teachers to Pursue Teaching



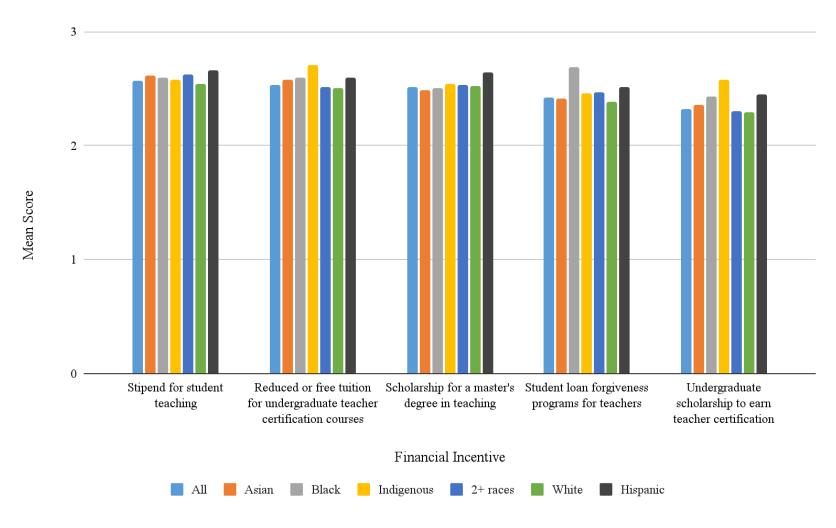
Note: Means are based on a sample of 1,225 undergraduate prospective teachers.

Figure 7. Mean Score for the Degree to which Salary-Based Financial Incentives Would Encourage Undergraduate Prospective Teachers to Pursue Teaching, by Race/Ethnicity



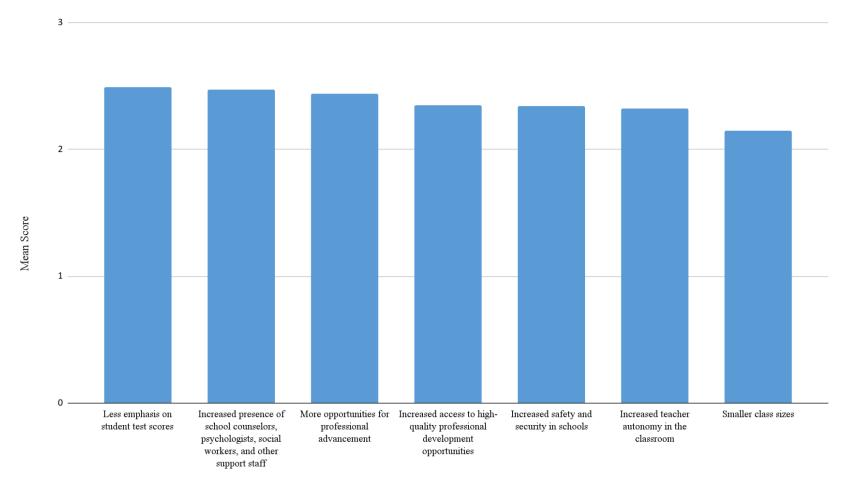
Note: All prospective teachers n=1,225; Asian n=246; Black n=105; Indigenous n=24; two or more races n=81; White n=769; Hispanic n=126.

Figure 8. Mean Score for the Degree to which Non-Salary Financial Incentives Would Encourage Undergraduate Prospective Teachers to Pursue Teaching, by Race/Ethnicity



Note: All prospective teachers n=1,225; Asian n=246; Black n=105; Indigenous n=24; two or more races n=81; White n=769; Hispanic n=126.

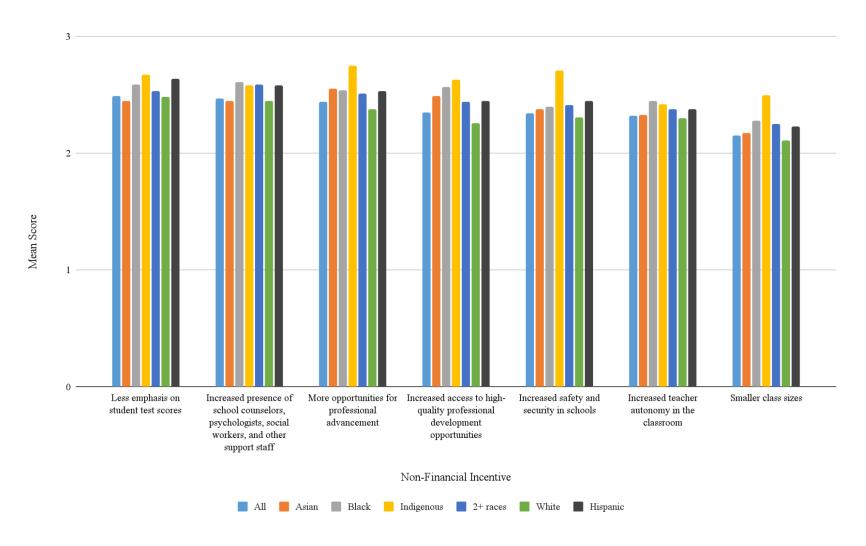
Figure 9. Mean Score for the Degree to which Non-Financial Initiatives Would Encourage Undergraduate Prospective Teachers to Pursue Teaching



Non-Financial Incentive

 $\it Note$: Means are based on a sample of 1,225 undergraduate prospective teachers.

Figure 10. Mean Score for the Degree to which Non-Financial Initiatives Would Encourage Undergraduate Prospective Teachers to Pursue Teaching, by Race and Ethnicity



Note: All prospective teachers n=1,225; Asian n=246; Black n=105; Indigenous n=24; two or more races n=81; White n=769; Hispanic n=126.

Appendices

Appendix A. Interest in Teaching by Race/Ethnicity

	All res	pondents	Asi	an	Bla	Black Indi		Indigenous 2+ races		races WI		nite	Hispanic	
Interest	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Never considered	419	25.49	99	28.7	49	31.82	5	17.24	23	22.12	243	24.01	40	24.1
Considered in the past	546	33.21	111	32.17	44	28.57	6	20.69	38	36.54	347	34.29	47	28.31
May consider in the future	428	26.03	94	27.25	30	19.48	10	34.48	29	27.88	265	26.19	45	27.11
One of multiple career options	158	9.61	30	8.7	19	12.34	4	13.79	9	8.65	96	9.49	25	15.06
Will definitely teach	93	5.66	11	3.19	12	7.79	4	13.79	5	4.81	61	6.03	9	5.42
Total	1,644	100	345	100	154	100	29	100	104	100	1,012	100	166	100

Appendix B. Race/Ethnicity, Interest in Teaching, and Perceptions of Teacher Policies and Benefits and Costs of Teaching Survey Items

Construct	Item
Race	What is your race? Select one or more of the following options.
Ethnicity	Are you of Hispanic or Latino origin? • Yes • No
Interest in teaching	Which of the following best describes your current interest in a career? I am not currently and have never considered a career in teaching. I have considered a career in teaching in the past but am not currently considering it. I may consider teaching as a future career, but I am not planning to teach immediately after graduation. Teaching or preparing to teach is one of multiple career options I am considering pursuing after graduation. Assuming I get a teaching job, I will definitely teach immediately after graduation or after I earn teacher certification.
Perceptions of financial policies	To what extent would each of the following financial supports/incentives encourage you to pursue a career in teaching? • An undergraduate scholarship to earn teacher certification • Reduced or free tuition for undergraduate courses required for teacher certification • Student loan forgiveness programs for teachers • A scholarship to earn a master's degree in teaching • A stipend (small salary) for time spent student teaching • Higher starting salaries for teachers • Increased teacher salaries or bonuses based on high teacher performance • Increased teacher salaries or bonuses for work in high-needs schools (e.g., under-resourced, low-performing) • Increased teacher salaries or bonuses for hard-to-staff content areas (e.g., STEM, special education)
Perceptions of non-financial policies	To what extent would each of the following policy initiatives encourage you to pursue a career in teaching? Increased access to high-quality professional development opportunities More opportunities for professional advancement Smaller class sizes Increased teacher autonomy in the classroom Less emphasis on student test scores Increased presence of school counselors, psychologists, social workers, and other support staff Increased safety and security in schools Other (write in)

The following items captured perceptions of the benefits and costs of teaching. For each item, we asked respondents to indicate a) the extent to which each factor was important to them when choosing a career, and b) the degree to which teaching offers each factor. When both value and perceptions items had an alpha of 0.70 or greater, we used construct means for our analysis. When either value or perceptions items, or both, had an alpha of less than 0.70, we used individual item means for our analysis (indicated by *).

Construct	Item	Alpha (Value Items)	Alpha (Perceptions Items)
Pecuniary benefits	Pays well enough to support my desired lifestyle.	0.71	0.70
recuitary benefits	Offers attractive benefits packages (e.g., retirement, healthcare).	0.71	0.70
	Allows me to share my knowledge with others.		
Interest in work: enjoyment of teaching	Involves a lot of interpersonal interactions.	0.76	0.75
tasks	Requires me to think on my feet.	0.70	0.73
	Involves intellectually stimulating work.		
Interest in work: work with children/adolescents	Allows me to work with children and/or adolescents.	1.00	1.00
Work schedule	Offers generous holiday and vacation time that aligns with my other interests and commitments.	0.79	0.73
Work schedule	Has work hours that align with my other interests and commitments.	0.79	0.73
Job availability/security*	Has widely available jobs.	0.74	0.69
Job availability/security	Offers job security.	0.74	0.09
Professional growth*	Offers opportunities for promotion.	0.64	0.67
Professional growth	Offers opportunities to develop more knowledge and skills.	0.04	0.67
Identity alignment*	Aligns with how I see myself as a professional.	0.61	0.84
identity angliment.	Is likely to be fulfilling for me.	0.01	0.84
Social contribution	Offers opportunities to help people.	0.81	0.72

	Offers opportunities to combat social inequality and promote social justice.		
	Provides a service to society.		
	Would not require me to take out student loans.		
Cost to earn a teaching credential	Would not require me to give up a job while I am completing coursework and degree requirements.	0.74	0.76
Salary opportunity cost	Offers a salary competitive with my other career options.	0.86	0.91
Salary opportunity cost	Offers salary growth opportunities similar to my other career options.	0.86	0.91
Would not extend my graduation timeline.			
C*	Are aligned with the effort I want to invest.	0.67	0.7/
Coursework and degree requirements*	Would prepare me for multiple career options.	0.67	0.76
	Would allow time in my academic plan to take other courses that I want to take.		
	Requires a manageable volume of work.		
	Requires a reasonable amount of effort.		
Workload	Allows sufficient time for other activities that are important to me.	0.77	0.81
	Does not involve work that would leave me drained after a typical day at work.		
	Allows me to disconnect from work at the end of the work day.		
	Is a well-respected profession in society.		
Social status	Is valued for its contribution to society.	0.83	0.70
	Is a high-status occupation.		
	Allows for employees to maintain their mental well-being.	0.65	0.65
Safety and well-being*	Occurs in a physically safe environment.	0.65	0.65

Appendix C. T-test Results for Career Benefits and Perceptions of Teaching by Race/Ethnicity

	Asi	an	Bl	ack	Hisp	anic	Indig	enous	2+ r	aces	WI	hite
	Importance	Perception										
Pecuniary	0.029	0.093	0.007	0.053	0.091	-0.103	0.14	-0.065	0.111	0.025	-0.063	-0.081
	(0.05)	(0.076)	(0.077)	(0.128)	(0.061)	(0.093)	(0.098)	(0.234)	(0.069)	(0.128)	(0.041)	(0.065)
Salary	0.052	0.221	0.026	0.166	0.135	-0.095	0.229	-0.188	0.095	0.1	-0.088	-0.218*
	(0.058)	(0.089)	(0.084)	(0.142)	(0.07)	(0.106)	(0.13)	(0.262)	(0.086)	(0.144)	(0.047)	(0.073)
Benefits	0.007	0.000	-0.013	-0.011	0.047	-0.094	0.051	-0.134	0.126	-0.12	-0.038	0.047
	(0.056)	(0.087)	(0.084)	(0.141)	(0.072)	(0.113)	(0.105)	(0.232)	(0.077)	(0.144)	(0.045)	(0.073)
Interest in work: enjoyment of teaching tasks	-0.121	-0.037	0.097	0.122	0.07	-0.031	0.039	0.133	0.042	0.133	0.036	-0.063
	(0.053)	(0.040)	(0.071)	(0.059)	(0.064)	(0.052)	(0.149)	(0.104)	(0.085)	(0.055)	(0.042)	(0.033)
Allows me to share my knowledge with others.	-0.092	-0.018	0.185*	0.091	0.082	-0.069	0.184	0.126	0.098	0.111	-0.04	-0.059
	(0.059)	(0.05)	(0.071)	(0.071)	(0.076)	(0.06)	(0.133)	(0.119)	(0.1)	(0.061)	(0.047)	(0.04)
Involves interpersonal interaction.	-0.096	-0.058	0.179	0.074	0.09	-0.079	0.01	-0.002	0.026	0.151*	-0.002	-0.027
	(0.075)	(0.047)	(0.096)	(0.096)	(0.096)	(0.061)	(0.159)	(0.133)	(0.118)	(0.058)	(0.06)	(0.036)
Requires me to think on my feet.	-0.126	-0.125	0.068	0.044	0.024	-0.058	-0.013	0.135	0.011	0.158	0.062	0.015
	(0.073)	(0.056)	(0.112)	(0.112)	(0.104)	(0.073)	(0.245)	(0.163)	(0.115)	(0.081)	(0.062)	(0.046)
Involves intellectually stimulating work.	-0.171*	0.029	-0.043	0.238*	0.084	0.059	-0.026	0.255	0.033	0.169	0.125	-0.168*
	(0.064)	(0.065)	(0.086)	(0.086)	(0.072)	(0.085)	(0.195)	(0.201)	(0.102)	(0.094)	(0.05)	(0.055)
Interest in work: work with children/adolescents	0.074	-0.047	0.471*	0.02	0.209	0.028	0.331	0.124	-0.1	-0.09	-0.21	0.039
	(0.099)	(0.05)	(0.145)	(0.065)	(0.138)	(0.062)	(0.239)	(0.108)	(0.171)	(0.11)	(0.084)	(0.041)
Work schedule	-0.016	-0.187*	0.123	-0.037	0.272**	-0.129	0.383*	-0.406	0.156	0.088	-0.103	0.151*
	(0.061)	(0.071)	(0.083)	(0.103)	(0.07)	(0.101)	(0.129)	(0.206)	(0.086)	(0.111)	(0.049)	(0.058)
Offers generous holiday and vacation time.	-0.02	-0.19	0.148	-0.077	0.026**	-0.12	0.431*	-0.527	0.186	-0.62	-0.121	0.216*
	(0.068)	(0.080)	(0.099)	(0.099)	(0.09)	(0.113)	(0.147)	(0.265)	(0.098)	(0.129)	(0.056)	(0.066)
Has work hours that align with my other interests and commitments.	-0.012	-0.185	0.097	0.034	0.283**	-0.116	0.336	-0.202	0.125	0.226	-0.85	0.075
	(0.066)	(0.086)	(0.086)	(0.086)	(0.065)	(0.115)	(0.157)	(0.213)	(0.092)	(0.128)	(0.052)	(0.069)
Job availability/security	0.055	-0.036	-0.017	0.137	0.035	-0.146	0.195	-0.044	0.123	0.095	-0.081	-0.039
	(0.045)	(0.066)	(0.07)	(0.097)	(0.062)	(0.092)	(0.122)	(0.204)	(0.053)	(0.108)	(0.038)	(0.055)
Has widely available jobs.	0.076	-0.067	-0.044	0.167	0.056	-0.167	.319	0.056	0.123	.286	096	-0.083
	(0.057)	(0.075)	(0.085)	(0.114)	(0.073)	(0.104)	(0.13)	(0.196)	(0.065)	(0.122)	(0.047)	(0.063)
Offers job security.	0.035	0.011	0.01	0.166	0.014	-0.128	0.071	-0.076	.123	0.002	-0.066	-0.056
	(0.047)	(0.078)	(0.066)	(0.11)	(0.061)	(0.109)	(0.139)	(0.238)	(0.055)	(0.126)	(0.038)	(0.065)

Appendix C. T-test Results for Career Benefits and Perceptions of Teaching by Race/Ethnicity (continued)

	Asi	an	Bla	ack	Hisp	anic	Indig	enous	2+ r	aces	W	hite
	Importance	Perception										
Professional growth	-0.015	0.024	0.147*	0.378**	0.06	0.046	0.13	0.317	-0.19	0.039	-0.045	-0.183*
	(0.045)	(0.07)	(0.057)	(0.089)	(0.056)	(0.086)	(0.128)	(0.152)	(0.078)	(0.119)	(0.037)	(0.056)
Offers opportunities for promotion.	0.005	0.104	0.133	.377*	0.08	0.038	0.169	0.447	-0.043	0.034	-0.05	-0.246*
	(0.055)	(0.055)	(0.082)	(0.123)	(0.069)	(0.11)	(0.166)	(0.214)	(0.094)	(0.133)	(0.047)	(0.071)
Offers opportunities to develop more knowledge and skills.	-0.034	-0.056	.161*	.372**	0.039	0.096	0.092	0.313	0.004	0.03	-0.039	-0.121
	(0.049)	(0.074)	(0.054)	(0.088)	(0.062)	(0.093)	(0.154)	(0.157)	(0.084)	(0.128)	(0.04)	(0.06)
Identity alignment	-0.052	0.043	0.09	0.251	0.039	0.175	-0.006	0.363	0.056	0.02	-0.009	-0.15
	(0.040)	(0.076)	(0.046)	(0.106)	(0.05)	(0.098)	(0.141)	(0.193)	(0.053)	(0.127)	(0.032)	(0.062)
Aligns with how I see myself as a professional.	-0.065	0.048	.154	.413*	0.036	0.131	0.035	0.444	0.105	0.049	-0.038	-0.219*
	(0.057)	(0.086)	(0.063)	(0.12)	(0.073)	(0.116)	(0.188)	(0.228)	(0.071)	(0.142)	(0.045)	(0.071)
Is likely to be fulfilling for me.	-0.040	0.088	0.025	0.116	0.042	0.191	-0.047	0.371	0.007	-0.008	0.021	-0.126
	(0.036)	(0.081)	(0.047)	(0.116)	(0.04)	(0.103)	(0.148)	(0.206)	(0.053)	(0.133)	(0.03)	(0.067)
Social contribution	-0.114	-0.022	.295**	.107	0.093	-0.013	-0.012	0.072	0.105	0.059	-0.047	-0.043
	(0.061)	(0.042)	(0.061)	(0.048)	(0.073)	(0.056)	(0.148)	(0.109)	(0.085)	(0.059)	(0.047)	(0.033)
Offers opportunities to help people.	-0.134	0.024	0.184*	0.027	0.094	-0.019	0.179	0.077	0.059	0.117	0	-0.063
	(0.061)	(0.043)	(0.06)	(0.06)	(0.072)	(0.057)	(0.109)	(0.104)	(0.086)	(0.067)	(0.046)	(0.035)
Offers opportunities to combat social inequality and promote social justice.	-0.11	-0.029	0.495**	0.198	0.112	-0.011	0.108	-0.016	0.145	0.008	-0.138	-0.049
	(0.081)	(0.070)	(0.073)	(0.073)	(0.104)	(0.092)	(0.219)	-0.238	(0.132)	(0.094)	(0.065)	(0.054)
Provides a service to society.	-0.099	-0.053	0.205*	0.105	0.075	-0.027	-0.322	0.121	0.11	0.037	-0.003	-0.018
	(0.067)	(0.041)	(0.073)	(0.073)	(0.077)	(0.058)	(0.208)	(0.087)	(0.088)	(0.058)	(0.052)	(0.033)

Appendix D. T-test Results for Career Costs and Perceptions of Teaching by Race/Ethnicity

	Asi	an	Bla	ack	Hisp	anic	Indige	enous	2+ ra	aces	WI	hite
	Importance	Perception										
Cost to earn a teaching credential	0.005	0.272*	0.393**	0.099	0.133	0.004	0.602**	0.134	0.099	0.08	-0.211**	-0.249**
	(0.072)	(0.087)	(0.087)	(0.128)	(0.103)	(0.113)	(0.152)	(0.266)	(0.097)	(0.127)	(0.058)	(0.071)
Would not require me to take out student loans.	0.026	0.306*	0.365**	0.113	0.242*	0.01	0.584*	0.174	0.109	0.04	-0.217*	-0.268*
	(0.081)	(0.101)	-0.103	(0.151)	(0.116)	(0.133)	(0.207)	(0.348)	(0.118)	(0.144)	(0.066)	(0.083)
Would not require me to give up a job while I'm completing coursework and degree requirements.	-0.017	0.225	0.421**	0.212	0.024	-0.014	0.621*	-0.036	0.09	0.077	-0.204*	-0.239*
	(0.081)	(0.096)	(0.098)	(0.143)	(0.12)	(0.13)	(0.198)	(0.294)	(0.114)	(0.148)	(0.066)	(0.079)
Workload	0.069	0.123	0.115	0.178	0.084	-0.025	0.172	0.231	0.09	0.001	-0.124*	-0.164*
	(0.045)	(0.06)	(0.061)	(0.082)	(0.061)	(0.081)	(0.096)	(0.176)	(0.066)	(0.09)	(0.037)	(0.05)
Requires a manageable volume of work.	0.084	0.197	0.011	0.38**	0.025	-0.034	0.082	0.336	0.002	-0.037	-0.069	-0.285**
	(0.055)	(0.079)	(0.08)	(0.106)	(0.084)	(0.109)	(0.177)	(0.236)	(0.101)	(0.126)	(0.048)	(0.066)
Requires a reasonable amount of effort.	-0.007	0.098	0.032	0.396**	0.055	-0.061	0.241	0.267	0.032	0.012	-0.034	-0.228**
	(0.059)	(0.066)	(0.083)	(0.08)	(0.075)	(0.093)	(0.119)	(0.173)	(0.098)	(0.109)	(0.048)	(0.055)
Allows sufficient time for other activities that are important to me.	-0.057	0.041	0.157	-0.048	0.088	-0.054	0.228	-0.128	0.102	-0.064	-0.059	0.015
	(0.055)	(0.085)	(0.066)	(0.12)	(0.069)	(0.108)	(0.112)	(0.252)	(0.071)	(0.13)	(0.044)	(0.069)
Does not involve work that would leave me drained after a typical day at work.	0.18	0.195	0.325*	0.121	0.181	-0.088	0.272	0.198	0.142	-0.013	-0.293**	-0.188*
	(0.075)	(0.091)	(0.01)	(0.125)	(0.105)	(0.112)	(0.207)	(0.26)	(0.112)	(0.142)	(0.063)	(0.073)
Allows me to disconnect from work at the end of the work day.	0.143	0.082	0.051	0.056	0.07	0.073	0.036	0.61	0.173	0.179	-0.164*	-0.176
	(0.072)	(0.093)	(0.101)	(0.136)	(0.1)	(0.112)	(0.23)	(0.239)	(0.105)	(0.133)	(0.061)	(0.075)
Salary opportunity cost	0.065	0.059	0.171	0.322	-0.012	0.119	-0.02	0.331	-0.108	0.131	-0.072	-0.212*
	(0.053)	(0.088)	(0.073)	(0.136)	(0.077)	(0.112)	(0.192)	(0.295)	(0.091)	(0.149)	(0.046)	(0.073)
Offers a salary competitive with my other career options.	0.111	0.059	0.133	0.291	-0.099	0.012	-0.178	0.35	-0.106	0.118	-0.078	-0.199*
	(0.059)	(0.088)	(0.086)	(0.145)	(0.088)	(0.117)	(0.23)	(0.315)	(0.103)	(0.155)	(0.051)	(0.075)
Offers salary growth opportunities similar to my other career options.	0.019	0.052	0.208*	0.446*	0.075	0.156	0.138	0.229	-0.11	0.139	-0.065	-0.246*
	(0.058)	(0.099)	(0.072)	(0.146)	(0.077)	(0.123)	(0.187)	(0.306)	(0.093)	(0.163)	(0.048)	(0.081)

Appendix D. T-test Results for Career Costs and Perceptions of Teaching by Race/Ethnicity (continued)

	Asi	ian	Bla	ıck	Hisp	anic	Indigenous		2+ races		White	
	Importance	Perception										
Social status	0.140	0.124	0.21	0.063	-0.173	0.004	0.176	0.284	0.057	-0.013	-0.196*	-0.126
	(0.072)	(0.063)	(0.087)	(0.1)	(0.106)	(0.083)	(0.216)	(0.22)	(0.131)	(0.102)	(0.06)	(0.052)
Is a well-respected profession in society.	0.117	0.127	0.072	-0.04	-0.204	-0.011	0.333	0.159	0.067	0.042	-0.15	-0.098
	(0.083)	(0.074)	(0.117)	(0.118)	(0.129)	(0.104)	(0.249)	(0.254)	(0.147)	(0.132)	(0.07)	(0.064)
Is valued for its contributions to society.	0.042	0.087	0.258*	0.049	-0.101	-0.055	0.116	0.111	-0.025	0.014	-0.118	-0.089
	(0.077)	(0.077)	(0.087)	(0.122)	(0.111)	(0.104)	(0.225)	(0.262)	(0.142)	(0.137)	(0.063)	(0.067)
Is a high-status occupation.	0.261*	0.172	0.299	0.179	-0.213	0.06	0.08	0.608	0.13	-0.053	-0.321**	-0.214*
	(0.093)	(0.078)	(0.126)	(0.126)	(0.131)	(0.1)	(0.289)	(0.258)	(0.153)	(0.114)	(0.077)	(0.064)
Safety	-0.026	0.079	0.183*	0.007	0.052	0.033	0.328**	0.028	0.13	-0.036	-0.105*	-0.049
	(0.054)	-0.064	(0.055)	(0.111)	(0.062)	(0.087)	(0.059)	(0.19)	(0.052)	(0.102)	(0.04)	(0.055)
Allows for employees to maintain their mental well- being.	-0.075	0.106	0.149	0.14	-0.011	0.102	0.284**	0.401*	0.141	-0.013	-0.059	-0.15
	(0.057)	(0.078)	(0.06)	(0.118)	(0.073)	(0.1)	(0.071)	(0.151)	(0.059)	(0.128)	(0.043)	(0.065)
Occurs in a physically safe environment.	0.024	0.053	0.217*	-0.088	0.115	-0.029	0.372**	-0.206	0.12	-0.106	151*	0.039
	(0.063)	(0.075)	(0.067)	(0.12)	(0.077)	(0.103)	(0.099)	(0.252)	(0.068)	(0.118)	(0.049)	(0.063)
Coursework	0.056	0.145	0.175*	0.458**	-0.095	0.08	0.05	0.449	0.074	0.014	-0.121*	-0.294**
	(0.047)	(0.067)	(0.066)	(0.108)	(0.068)	(0.087)	(0.134)	(0.184)	(0.074)	(0.11)	(0.039)	(0.056)
Would not extend my graduation timeline.	0.121	0.298*	0.216	0.369	-0.07	-0.034	-0.25	0.552	0.194	-0.086	-0.186*	-0.349**
	(0.078)	(0.11)	(0.101)	(0.152)	(0.118)	(0.145)	(0.257)	(0.331)	(0.114)	(0.17)	(0.065)	(0.088)
Are aligned with the effort I want to invest.	0.053	0.069	0.196*	0.445**	-0.036	0.137	0.208	0.265	-0.002	0.081	-0.119*	-0.24*
	(0.054)	(0.082)	(0.071)	(0.126)	(0.072)	(0.11)	(0.131)	(0.214)	(0.09)	(0.133)	(0.044)	(0.07)
Would prepare me for multiple career options.	-0.045	0.079	0.122	0.734**	-0.023	0.218	0.236	0.722**	0.068	0.113	-0.047	-0.387**
	(0.061)	(0.084)	(0.088)	(0.122)	(0.089)	(0.11)	(0.156)	(0.173)	(0.093)	(0.143)	(0.05)	(0.072)
Would allow time in my academic plan to take other courses that I want to take.	0.095	0.203	0.166	0.471*	-0.25*	-0.036	0.008	0.474	0.036	-0.027	-0.131	-0.326**
	(0.073)	(0.097)	(0.105)	(0.158)	(0.119)	(0.13)	(0.189)	(0.267)	(0.119)	(0.154)	(0.062)	(0.082)

Appendix E. T-test Results for Perceptions of Teacher Policies by Race/Ethnicity

	Asian	Black	Hispanic	Indigenous	2+ races	White
Financial Incentives						
Salary-based						
Higher starting salaries	-0.019	0.043	0.074	0.041	-0.051	0.009
	(0.038)	(0.049)	(0.04)	(0.086)	(0.066)	(0.031)
Performance-based salaries or bonuses	0.053	-0.018	0.086	0.022	0.023	-0.038
	(0.041)	(0.062)	(0.051)	(0.131)	(0.063)	(0.035)
Increased salaries or bonuses for work in high-needs schools	0.016	0.059	0.074	-0.001	0.022	-0.037
	(0.044)	(0.064)	(0.058)	(0.159)	(0.072)	(0.037)
Increased salaries or bonuses for hard-to-staff content areas	0.093*	-0.12	0.12	0.108	0.013	-0.036
	(0.046)	(0.076)	(0.063)	(0.158)	(0.079)	(0.04)
Other financial support						
Stipend for student teaching	0.052	0.035	0.11*	0.015	0.053	-0.063
	(0.042)	(0.064)	(0.054)	(0.134)	(0.067)	(0.035)
Reduced or free tuition for undergraduate teacher certification courses	0.069	0.08	0.094	0.185	-0.022	-0.083*
	(0.045)	(0.066)	(0.056)	(0.097)	(0.079)	(0.038)
Scholarship for a master's degree in teaching	-0.024	-0.017	0.138*	0.031	0.021	0.014
	(0.049)	(0.071)	(0.057)	(0.148)	(0.073)	(0.04)
Student loan forgiveness programs for teachers	-0.015	0.292**	0.082	0.04	0.054	-0.105*
	(0.052)	(0.063)	(0.061)	(0.136)	(0.076)	(0.042)
Undergraduate scholarship to earn teacher certification	0.042	0.114	0.161*	0.264	-0.03	-0.081*
	(0.048)	(0.072)	(0.062)	(0.135)	(0.082)	(0.041)
Non-Financial Initiatives						
Less emphasis on student test scores	-0.054	0.109	0.143*	0.18	0.043	-0.025
	(0.048)	(0.063)	(0.059)	(0.117)	(0.073)	(0.039)
Increased presence of support staff (e.g. school counselors, psychologists, social works, and others)	-0.034	0.148*	0.099	0.111	0.127	-0.069
	(0.049)	(0.063)	(0.061)	(0.121)	(0.073)	(0.04)
More opportunities for professional advancement	0.136**	0.108	0.098	0.312**	0.066	-0.173**
	(0.044)	(0.064)	(0.061)	(0.11)	(0.073)	(0.037)
Increased access to high-quality professional development	0.177**	0.242**	0.123	0.28	0.101	-0.253**
	(0.045)	(0.062)	(0.064)	(0.146)	(0.073)	(0.038)
Increased safety and security in schools	0.048	0.062	0.148*	0.372**	0.068	-0.102*
	(0.054)	(0.071)	(0.066)	(0.114)	(0.075)	(0.043)
Increased teacher autonomy	0.011	0.134	0.045	0.094	0.062	-0.076
	(0.049)	(0.068)	(0.062)	(0.148)	(0.068)	(0.04)
Smaller class sizes	0.021	0.138*	0.089	0.357*	0.104	-0.117**
	(0.051)	(0.069)	(0.063)	(0.136)	(0.08)	(0.041)