# Attention to Equity in Teacher Education Admissions Processes

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# **Contents**

Co	ntents	i
Ac	knowledgments	ii
Ab	stract	iii
1.	Introduction	1
2.	Purpose and Research Question	2
3.	A Framework to Explore How MSTPPs Attend to DEIJ in the Admissions Process	2
4.	Theoretical Perspectives	8
5.	Methods	9
6.	Findings	16
7.	Discussion and Implications	26
Rei	ferences	31
Fig	gures and Tables	34

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#### Attention to Equity in Teacher Education Admissions Processes

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#### **Abstract**

This study investigated the underexplored topic of teacher preparation program admissions processes by interviewing faculty and analyzing program documents. We investigated how 31 K-12 *mathematics and science* teacher preparation programs (MSTPPs) and faculty attend to diversity, equity, inclusion, and social and racial justice (DEIJ). Specific foci included applicant recruitment and selection, components of applications (e.g., forms, essays, interviews), and how applicants' DEIJ-related information and orientations factor into admissions. We found that all MSTPPs participating in the study collected information related to DEIJ (e.g., applicants' ethnoracial backgrounds, citizenship), and all interviewed faculty expressed an interest in increasing the diversity of applicants and admitted students. Faculty expressed preferences for applicants who evidenced positive DEIJ orientations, such as recognizing social and ethnoracial injustices, but at the same time, differences were evident in how MSTPPs and faculty attended to DEIJ. Considerations, implication, and dilemmas for teacher preparation programs and faculty are discussed.

#### 1. Introduction

Between slavery and settler colonialism and ... the structures that have followed since then, obviously, there's a moral imperative for teacher education programs to prepare teachers ... to address issues of racial injustice. ... If we're only focusing on ... what's the best way to teach ... exponential functions and ... the structure of a cell, [then] we're really missing the point on what's going on in the world. (Faculty Participant)

Diversity, equity, inclusion, and social and racial justice (DEIJ) are a matter of considerable discussion and concern for teacher education practice and policy, regarding both diversifying the teacher workforce and preparing teacher candidates to enact culturally responsive teaching (Goldhaber et al., 2019; Carter Andrews, Brown, et al., 2019; Carter Andrews, Castro, et al. 2019; Gay, 2018; Goldhaber et al., 2019). Teacher preparation programs (TPPs) are key gatekeepers on the path to becoming a teacher and hence play an important role in influencing the diversity of the teacher workforce. Unfortunately, current research shows that college students of color are considerably less likely than white students to become K-12 teachers, and correspondingly, the diversity of the teacher workforce fails to reflect the diversity of K-12 students (Goldhaber et al., 2015; National Academy of Science [NAS], 2020).

Teachers with diverse backgrounds positively influence students' learning, identity, and access to education (Carter Andrews, Castro, et al., 2019; Carver-Thomas, 2018; Childs et al., 2011; Sleeter & Millner, 2011). These teachers can serve as role models for students and often have experiences that support their understanding and respect for cultural knowledge that students bring to learning situations, supporting both students and their colleagues in broadening worldviews (Carver-Thomas, 2018; Childs et al., 2011; Sleeter & Milner, 2011). Moreover, a growing body of evidence shows that students of color benefit from same-race teachers, with outcomes that include improved test scores, grades, high school graduation rates, and college

enrollment rates, as well as reduced absenteeism (Blazer, 2022; Gershenson et al., 2021; NAS, 2020). However, these benefits may not be solely attributable to the ethnoracial commonalities exclusively; they are also supported by the orientations and practices of teachers (Edmonds, 2022). Given the role of TPPs in influencing who becomes a teacher, understanding how TPPs attend to diversity is important.

#### 2. Purpose and Research Question

This study investigated a critical part of the pathway to teaching in mathematics and science – the admissions process for mathematics and/or science teacher preparation programs (MSTPP¹). The purpose of this study was to examine how K-12 MSTPPs attended to DEIJ in admissions.² We consider DEIJ to include a full range of factors including, but not limited to, identities related to ethnicity, race, gender, language, sexual orientation, disability, and faith. However, as will become apparent, the data and correspondingly our findings focused most on ethnoracial diversity. Our guiding research question was: How do participating MSTPPs and faculty attend to DEIJ in admissions processes?

#### 3. A Framework to Explore How MSTPPs Attend to DEIJ in the Admissions Process

For this exploratory study, we conceptualized a framework for the admissions process based on research, theory, and policy in teacher education. We began with Childs and Ferguson's (2015) definition of the *admissions process* as, "The process by which a program decides which of the individuals who apply may attend... involving well-defined steps and numerous individuals in formal roles" (p. 421). We built on this definition in two ways. First, we expanded

<sup>&</sup>lt;sup>1</sup>When referring to teacher preparation programs generally, we use the acronym "TPP." When focusing on *mathematics and science* teacher preparation programs, we use "MSTPP." We included elementary programs given that elementary programs focus on mathematics and science teaching and learning.

<sup>&</sup>lt;sup>2</sup>This study was part of a larger mixed methods research project that explores connections between the attributes of MSTPP applicants, their admittance and enrollment in MSTPPs, and their later retention and effectiveness as mathematics and/or science teachers.

admissions to include recruitment, as we found that MSTPPs often viewed recruiting as part of admissions. Second, as shown with nested circles in Figure 1, we framed admissions as including three related aspects: (1) practices (e.g., applicant recruitment and selection); (2) application components (e.g., forms, essays, interviews. transcripts) and applicant information garnered from these components (e.g., GPA, test scores, prior coursework), and (3) information specific to applicant orientations (i.e., attitudes, beliefs, dispositions, knowledge, experiences, and values that could contribute to an applicant's future teaching). Consistent with other research on orientations in teacher education, we consider orientations<sup>3</sup> to encompass applicants' attitudes, beliefs, dispositions, and values that preservice teachers (PSTs) and teachers develop and use in teaching (Foote, et al. 2013; Suh & Park, 2017). Applicant orientations represent one of several forms of applicant information we considered. However, given the importance of orientations for DEIJ, we highlight this aspect with its own circle in the framework. Below we first describe factors that potentially influence admissions processes, and then we discuss key aspects of the admissions process, drawing on relevant research and theory.

#### 3.1 Factors that Influence Admissions

We identified factors that potentially influence admissions processes, represented as rectangles in Figure 1, and discuss each of these factors below.

#### State and National Policies and Recommendations

Throughout the U.S., states have requirements for individuals to become certified to teach in K-12 public schools, and the state in which this study occurred required a bachelor's degree and passing basic skills and content area tests.<sup>4</sup> As is typical, these tests were based on

<sup>&</sup>lt;sup>3</sup>TPPs often use the terms "dispositions," "attitudes," "beliefs" in ways similar to "orientations" (see Childs & Fergusson, 2015; Helm, 2006; Klassen & Kim, 2021). We found the construct of "orientations" to be more complete in encompassing the ideas of this framework.

<sup>&</sup>lt;sup>4</sup>Citations for state requirements are not provided to protect confidentiality for participants and universities.

national-level professional standards for MSTPPs, and these standards include attention to DEIJ in teacher preparation (Association of Mathematics Teacher Educators [AMTE], 2017; Morrell et al., 2020). Consistent with most universities, the participating MSTPPs admission and/or certification requirements incorporated these standards.

#### **University Policies**

Universities usually serve as initial screeners for MSTPP applicants. In our early work for this study, we found that applicants may be required to meet a minimum test score and/or GPA to be admitted to the university prior to applying to an MSTPP. Universities may also collect information related to an applicant's background and social markers (e.g., ethnoracial identifiers, gender, income, parents' education level), and this information may be available to MSTPPs. Notably, in some states, universities must follow legislative mandates supporting or barring affirmative action. Indeed, in the state where this study occurred, universities were barred from considering race, ethnicity, or gender as part of admissions. Collectively, this information indicated that we needed to investigate admissions requirements at the university level, in addition to MSTPPs' admissions processes, to understand how university policies may influence who is able to apply to MSTPPs.

#### Faculty Perspectives and Values and MSTPP Policies

Teacher educators shape and provide direction for TPPs, and TPPs embody faculty perspectives to varying degrees. As Feinman-Nemser (1990) explained, TPPs have "conceptual orientations," as follows,

A conceptual orientation reflects a coherent perspective on teaching, learning, and learning to teach that gives direction to the practical activities of education teachers. In reality, conceptual orientations in teacher education do not have

uniform or explicit positions or well-developed practices. Still, it is possible to summarize...and to illustrate how these ideas have been expressed in programs and components. (p. 2)

Feinman-Nemser (1990) described four primary (not mutually exclusive) forms of conceptual orientations: academic, personal, critical, and technological. Of these orientations, academic and critical orientations are particularly relevant to admissions processes. An academic orientation focuses on disciplinary and pedagogical knowledge for teaching. A critical orientation "combines a progressive social vision with a radical critique of schooling" (p. 6) and focuses on the role of teachers and schools in creating a more just society.

In a study related to a critical orientation, Chang-Bacon (2022) studied teacher educators' discursive practices as they participated in interviews focused on topics of race and racism in TPP courses. They found that participants' discourses ranged from "race-evasive" to "race-intentional" (Chang-Bacon, 2022, p. 15). Race-evasive discourses omit race from course discussions and material or use "racial proxies," such as "language" and/or "culture," without naming race (Chang-Bacon, 2022, p. 15). In contrast, participants who used race-intentional discourses "nam[ed] the topics of race and racism as relevant" (p. 16). Together, this research indicates that faculty perspectives and values can shape and influence MSTTP admissions practices and policies related to DEIJ.

#### 3.2 The Admissions Process and Opportunities to Attend to DEIJ

Although we considered the above factors that influence admissions, the focus of this study was primarily on the nested circles in Figure 1. Next, we provide a review of literature relating to each circle in Figure 1.

#### Admissions Practices

In reviewing TPP selection processes, Klassen and Kim (2021) found that countries that performed well in education tended to focus on recruitment and selection processes in order to encourage the most promising applicants to enroll in teacher preparation. They argued that understanding and improving TPP selection processes, using theory and research-based approaches, is promising for improving teaching, but also concluded that little research has been conducted in this area.

In addition to improving TPP admissions processes, Childs and Ferguson (2015) identified a set of problems that TPP admissions processes are meant to solve. Key problems were: filtering out applicants with inadequate knowledge and skills, filtering out potentially problematic attitudes (i.e., orientations), and utilizing TPPs as gateways to improve the diversity of the teaching workforce (Childs & Ferguson, 2015). However, the empirical evidence is limited as to whether admissions processes attend to these espoused goals for recruiting and identifying effective prospective teachers, with even less research on how DEIJ is a focus of admissions (Klassen et al., 2020; Klassen & Kim, 2021).

#### Application Components and Applicant Information Collected

Admissions processes typically collect information about applicants in three primary areas: background (e.g., degrees, grades, relevant experiences), cognitive domains (e.g., subject area and pedagogical knowledge), and non-cognitive domains (e.g., personality, interpersonal communication skills, and orientations) (Childs & Ferguson, 2015; Klassen & Kim, 2021). In discussing licensure tests as a measure of knowledge, Carter Andrews, Castro, and colleagues (2019) stated, "A number of historical and contemporary features of teacher education programs have had a screen-out effect on prospective [teachers of color]" (p. 8). Focusing on non-cognitive

domains, Helm (2006) identified dispositions that might be included in admissions including several related to DEIJ such as: a sense of community, high expectations for students, and appreciating cultural diversity and social justice. Our study focused on orientations to DEIJ, part of the non-cognitive domain, is discussed next.

#### Applicant Orientations to DEIJ

Within this larger body of research on orientations, emerging research has focused on PSTs' and teachers' orientations toward DEIJ. In a survey conducted in Finland designed to evaluate PSTs' and teachers' preparedness to enact culturally and linguistically responsive practices, Kinamen and colleagues (2019) found that in general, PSTs and teachers held positive orientations (i.e., they aligned with culturally and linguistically responsive practices). They identified three orientations: "orientation to culture, orientation to language, and orientation to affirming identities" (p. 44). Teachers' orientation to identity had the highest mean (significantly higher than orientations to culture and language), viewing identity as the most relevant for teaching. Kinamen and colleagues (2019) argued that TPPs should attend to culturally and linguistically responsive pedagogy to support teachers in improving a commitment to all three orientations. Their description of positive orientations aligns with current U.S. recommendations for MSTPPs, such as valuing diversity and recognizing social and ethnoracial privileges and injustices (AMTE, 2017; Morrell et al., 2020). Hereafter, we use *positive DEIJ orientations* to represent these values and practices.

In the U.S., Battey and Franke (2013) described how deficit views of students of color in urban settings was associated with instruction that focused on fact acquisition, contributing to lower achievement in mathematics. They argued that shifting teachers' deficit views and directly addressing race and racism contributes to improving instruction. Similarly, in a study of PSTs

preparing to become K-8 teachers, Foote and colleagues (2013) studied PSTs' orientations towards students' families and communities with diverse cultural, racial, and linguistic backgrounds. They found that PSTs recognized the importance of understanding home and community practices to support students' mathematical learning; however, these PSTs also evidenced perspectives reflecting a deficit orientation about students and families, with most demonstrating a mix of contradictory views. Teacher educators are in the position of supporting PSTs in becoming aware of their orientations, reorienting deficit perspectives, and reconsidering resources and experiences diverse students bring to school (Foote et al., 2013).

The framework shown in Figure 1 is not necessarily comprehensive and each element may not be present in every MSTPP admissions process. Rather, based on our review of research, we contend that this framing will help to research and understand TPPs' admissions processes.

#### 4. Theoretical Perspectives

A significant body of research focuses on the importance of sociocultural and situated perspectives in teacher preparation (Darling-Hammond et al., 2005; Grossman et al., 2005; Lave & Wenger, 1991). We view PST development as a sociocultural activity that should be situated in the problems and authentic contexts of schools, classrooms, and interactions with students and educators. PSTs become members of "social learning spaces" (Wenger-Trayner & Wenger-Trayner, 2020, p. 13) in their courses and as interns in K-12 classrooms.

Related to these perspectives is a focus on culturally responsive teaching, teaching that builds on students' ethnoracial and cultural practices, languages, and lived experiences (Carter Andrews, Brown, et al., 2019; Gay, 2018; Ladson-Billings, 1994). Carter Andrews, Brown, and colleagues (2019) conceptualized a "humanizing pedagogy for teacher education... committed to cultivating the development of asset-, equity-, and social justice-oriented preservice teachers" (p.

2). Yet, they contend that PSTs often enter programs with deficit views on students and families and long-held biases. In addition, they question whether a single course can affect change and call for teacher education programs to critically reflect on program structures, curriculum, and instruction (Carter Andrews, Brown, et al., 2019).

These theoretical perspectives underlie our framework (Figure 1) and informed our study. These perspectives are also embodied in U.S. national standards for teaching (AMTE, 2017; Morrell et al., 2020), standards influencing most TPPs in the U.S. (shown in the top rectangle in Figure 1). We see sociocultural, situated, and culturally responsive perspectives as complementary and overlapping, and these perspectives are important to the design of MSTPPs. As we studied admissions processes (circles in Figure 1), while focusing on attention to DEIJ, we also considered ways MSTPPs and faculty embodied these perspectives in order to understand the overall contexts of the MSTPPs. For example, when MSTPPs espoused views related to culturally responsive teaching, we investigated how this focus was represented in the admissions practices (e.g., evaluating applicants' strength- and/or deficit-based orientations, the smallest circle in Figure 1). A detailed description of how these perspectives informed our analytic methods follows.

#### 5. Methods

We focused on MSTPPs at five universities in a northwestern region of the United States. Each university had multiple MSTPPs aimed at preparing mathematics and science teachers for different grade bands for teaching (e.g., elementary, secondary) and undergraduate or graduate levels. Some universities had multiple campuses, with campus-based differences in admissions. Given differences in contexts among programs, we decided to analyze data for each MSTPP at each campus for each of the five universities. In total, 31 MSTPPs participated in this study. We

applied qualitative methods to understand patterns and complexities of practices in MSTPPs' admissions processes and social systems (Miles et al., 2020; Saldaña, 2021).

#### 5.1 Data collection

This study included two primary data sources: (1) documents associated with the program descriptions and admissions process for each MSTPP; and (2) interviews with selected mathematics and science faculty associated with MSTPPs. College-level leaders at each university (e.g., deans, department chairs, program directors), along with additional MSTPP faculty and staff, provided admissions documents. Document-based data sources included: program information (in print and/or from university websites), application forms, admissions records sheets (e.g., spreadsheets to compile applicant information), applicant essay and interview prompts, and scoring rubrics. We considered an essay to be an admissions component with one or more open-ended prompts and a narrative response. Applicants had to be admitted to the MSTPP's university (either prior to or concurrent with MSTPP admissions), so we also collected relevant documents and information at the university level.

We conducted semi-structured interviews with 20 professors. We selected four professors from each of the five universities who taught MSTPP content courses in mathematics or science and/or education courses in mathematics or science pedagogy. These 45- to 60-minute interviews provided information on professors' backgrounds and roles in MSTPP(s) at their universities, their admissions process, their role in the admissions process, and their perceptions and values regarding admissions. Specific to DEIJ, we asked faculty to describe their perspectives and values regarding diverse applicants, applicants' experiences working with diverse students and/or in diverse communities, and applicants' orientations related to DEIJ. Although we included prompts eliciting their perspectives on DEIJ, and therefore we focused their attention on

DEIJ, we developed these prompts based on research on teacher preparation and our initial analysis of MSTPP documents, as described below.

#### 5.2 Data Analysis

We analyzed admissions documents and faculty interviews through multiple cycles. We used data matrices (Miles et al., 2020), analytic memos, and multiple forms of coding (e.g., open coding, in vivo coding, axial coding) (Saldaña, 2021). We conducted data collection and preliminary analysis concurrently, so that document review informed prompts for interviews. We began with hand-coding to gain a sense of the data, and later used qualitative data analysis software. Below we describe three key phases of analysis.

#### Phase 1: Overviewing Application Processes and Influencing Factors

To gain a broad understanding of the admissions process and factors influencing the process, we conducted a preliminary analysis of both data sources. For the document-based data, we conducted content analysis (Boreus & Bergstrom, 2017), creating a series of content analytic summary tables (Miles et al., 2020). These displays brought together related data about admissions for exploratory analysis. We distilled this information in Table 1, which displays components and information by type of MSTPP (the inner circles in Figure 1).

Concurrent with document-based analyses, we began preliminary analysis of the interviews. Following each interview, interviewers wrote analytic memos (Corbin & Strauss, 2015) describing information professors provided about their MSTPP admissions process (including information not revealed in documents), as well as professors' perspectives and values. Next, we compiled all memos from interviews into "summary memos" for each university (Corbin & Strauss, 2015, p. 122). We named these memos *Program Summaries*. In these Program Summaries, we described each MSTPP's admissions process. We focused on how (or whether) MSTPPs attended to DEIJ in information collected (i.e., information about social

markers such as citizenship status, parents' level of education, home language), and DEIJ-related prompts for essays and interviews. In the process of reviewing DEIJ-related information, we recognized a pattern: MSTPPs explicitly attended to DEIJ in their admissions processes. We decided that this pattern merited a focused and systematic analysis in Phase 2. Slavit and colleagues (in review) provide additional details about Phase 1 analysis.

#### Phase 2: Exploring Attention to DEIJ in Interview Transcripts

In Phase 2, three researchers independently coded faculty interview transcripts. Each read and hand-coded transcripts, using preliminary *a priori* codes based from prior research, our content analysis of documents, analytic memos, and Program Summaries (see Table 2). We also used open coding to highlight topics and perspectives not identified in the *a priori* codes (e.g., see the "Flags" section of Table 2). After independently coding each transcript, we met to continue drafting the codebook, discussing code definitions and decision rules for the coding process (described below). While establishing our codes, we agreed on decision rules to support a consistent process for coding. We decided that a *stanza*, a unit of text for coding (Saldaña, 2021), consisted of an interview prompt, the corresponding faculty response, and follow-up probes and responses on the same topic, in a conversational style. After repeating this process until the codebook was stable, we shifted to coding with qualitative data analysis software (Atlas TI).

Using Atlas TI, we engaged in a consensus coding process, with a pair of researchers independently coding each transcript in sets of two to three transcripts and then meeting to compare codes and reconcile differences. This iterative process of coding, meeting to reconcile coding, and coding another set of transcripts allowed researchers to share questions and interpretations of the data while coding. The meetings supported consistent use of the codes and

helped us to avoid drift (i.e., codes taking on different meaning over time). Through this process, we established an intercoder agreement of 92%. We found that consensus coding with discussions about our interpretations was critical in identifying themes and nuanced ideas.

#### Phase 3: Identifying Ways MSTPPs and Faculty Attended to DEIJ

During Phase 3, we focused on *how* participating MSTPPs and faculty attended to DEIJ in admissions processes. We analyzed DEIJ- related text in units of: a prompt for applicant essays or interviews, a component of a rubric for essays or interviews, or a stanza from a faculty interview (Saldaña, 2021),

**Document Analysis**. We conducted finer-grained content analyses (Boreus & Bergstrom, 2017) of essay and interview prompts that related to DEIJ. Informed by Chang-Bacon's (2022) findings on *race-intentional* and *race-evasive* discourses and extending their analysis to text in documents (as a form of discourse), we created a coding scheme to classify each DEIJ-related prompt or component of a rubric as one of the following:

- A. Explicit: An explicit, race-intentional (Chang-Bacon, 2022) reference to one or more DEIJ-related words (i.e., diversity, equity, inclusion, justice, race, ethnicity) or topics listed in the code description for DEIJ (see Table 2). If an explicit prompt was part of a list of options (i.e., a response was not required), then we coded it as "Potential."
- B. Potential: DEIJ was not explicitly mentioned; however, a prompt or rubric included one or more references to DEIJ-related topics with terms that could be racial proxies (Chang-Bacon, 2022) such as: families, communities, language, attention to "all" learners, etc.

- C. No Evidence: Prompts or rubrics did not offer the potential for an applicant to respond with a DEIJ-related topics, aligning with a race-evasive discourse (Chang-Bacon, 2022).
- D. Not Used: An essay, interview, or rubric was not used in the application process.

We created an analytic summary table with each MSTPP represented in a row of the table. The columns included: essay, interview, rubric, and notes, and we recorded one of the above codes in each cell. Although we considered "No Evidence" as a possible classification, no data fit this code. Next, we distilled the data in the analytic table by type of MSTPP, as shown at the bottom of Table 1. Given that the prompts and rubrics were used together by interviewers, we reported the data in each of the possible pairs (e.g., "Explicit-Potential" represents an explicit prompt paired with a rubric coded as potential). Although more than six combinations of codes were possible, Table 1 shows only the pairs that existed in the data.

**Faculty Interview Analysis**. We explored the range of faculty perspectives and values relating to DEIJ in admissions, focusing on three primary themes:

- A. Valuing diversity in applicants' backgrounds.
- B. Considering applicants' DEIJ orientations.
- C. Attending to diversity in their MSTPP admission process.

To investigate these themes, we ran a series of queries and reports in Atlas TI for relevant codes (see Table 2) and text searches (e.g., "diverse," "application") to ensure that we considered all relevant stanzas. We then examined data from one professor at a time with the goal of classifying their perspectives and values for each of these three themes. To gain a full sense of the context and meaning, we re-examined relevant stanzas within each full transcript.

For the first theme, we analyzed professors' responses related to recruiting and/or selecting diverse applicants for admission. We used binary codes of "yes" if a professor expressed a value for or "no" if a professor did not value diverse applicants. Informed by Chang-Bacon's (2022) findings that teacher educators' discourse provides a window into their perspectives on racism, we also noted whether professors used race-intentional discourse or race-evasive discourse (Chang-Bacon, 2022).

For the second theme, we investigated how faculty discussed applicants' orientations related to DEIJ. Faculty often expressed a connection between an applicants' DEIJ orientation and their MSTPP's orientation, reflecting the role of DEIJ in their MSTPP's admissions practices and policies. To analyze both faculty discourse and MSTPPs' orientations, we continued to apply Chang-Bacon's (2022) constructs for race-intentional and race-evasive discourses, and we also drew on Feinman-Nemser's (1990) academic and critical orientations for TPPs. For each of the following three categories, the alignment with Chang-Bacon's (2022) discourses and Feinman-Nemser's (1990) TPP orientations is indicated in parentheses, respectively.

- 1. Red flag: Professor stated that they *did not want to admit* applicants who evidenced deficit or uniformed DEIJ orientations (race-intentional, critical).
- 2. Yellow flag: Professor stated they *had concerns about admitting* applicants who evidenced deficit or uniformed DEIJ orientations, but they did not link these concerns to admissions decisions (race-intentional, critical).
- 3. Positive orientations: Professor *desired positive and informed orientations*, but they did not view applicants' orientations as an important factor in admissions (race-evasive, academic).

For the third theme, faculty perspectives on their MSTPPs' attention to DEIJ in their admissions process involved both how professors discussed DEIJ *and* implications for their MSTPPs' DEIJ-related policies. So again, we drew on Chang-Bacon's (2022) discourses and Feinman-Nemser's (1990) orientations, as indicated in parentheses for each of the following four categories.

- 1. MSTPP needs more focus on DEIJ: Professor stated that their MSTPP needed more focus on DEIJ in recruiting and/or selecting applicants (race-intentional, critical).
- 2. MSTPP focuses on DEIJ: Professor appreciated their program's focus on DEIJ and described specific efforts of their MSTPP (race-intentional, critical).
- 3. Mixed views for importance of DEIJ: Professor expressed mixed views in that they valued DEIJ, but they did not want it to overshadow academics in the admissions process (race-intentional, mix of academic and critical).
- 4. No opinion: Professor did not express an opinion about their MSTPP's attention to DEIJ or was unaware (race-evasive, academic).

Note that for Categories 1 and 2, professors might also have valued academic background, but when responding to prompts about DEIJ, they did not compare a focus on DEIJ to academics, as will be shown with examples later. Throughout the process, we remained open to different perspectives emerging, but in all 20 cases, we found that each professor aligned with one of the above categories.

#### 6. Findings

We found that all participating MSTPPs attended to DEIJ in their application processes, but there were key differences in the components and DEIJ-related information collected. All MSTPPs and all faculty indicated that they valued diverse applicants. In different ways, professors expressed preferences for applicants who evidenced positive DEIJ orientations. We

discuss examples to illustrate commonalities and differences in how MSTPPs and faculty positioned and prioritized DEIJ.

#### 6.1 Attention to DEIJ in Application Forms and Related Influential Factors

As shown in Table 1, all 31 MSTPPs collected the following documents and information: GPA, high school and/or college transcripts, test scores, ethnoracial identities, and citizenship. Most MSTPPs collected additional documents including: essays (29), documentation of teaching experience and/or work with students (28), and letters of recommendation (27). A majority of MSTPPs asked about parents' education level (28), immigrant status (25), and applicant multilingualism (18). Twelve MSTPPs asked about an applicant's status as a first-generation college student. Most MSTPPs conducted interviews (21).

#### 6.2 Attention to DEIJ in Essays, Interviews, and Rubrics

Essays and interview prompts often attended to DEIJ by asking applicants to share information involving diverse aspects about their: identities, personal histories, experiences, perspectives, interactions with students, and/or work in communities. All MSTPPs that conducted interviews used interview prompts. Applicants participated in individual and/or in small-group interviews, with groups of three to four applicants. Applicant interviews were conducted by admissions staff, faculty, graduate students who taught in the program, field supervisors, and/or advisors to the MSTPP. Some MSTPPs maintained an explicit focus on DEIJ in both their prompts and rubrics, other MSTPPs used prompts with an explicit focus on DEIJ but did not focus on DEIJ within their rubric, while other MSTPPs did not use a rubric at all. Table 1 lists the combinations found in the data, and examples are discussed next.

#### Explicit-Explicit Example

Seventeen MSTPPs, representing all types of programs, had an interview or essay with the explicit-explicit combination (i.e., explicit prompts and rubric). For example, University C conducted small group interviews and used the same process for both their undergraduate elementary and secondary MSTPPs. Two professors and/or graduate students conducted the interview, and three to four students from the elementary and/or secondary MSTPPs discussed a prompt. Admissions staff selected one prompt for each group from a list of several prompts. All prompts included a focus on some aspect of DEIJ (e.g., race/ethnicity, gender identity, diverse family structures). Ten minutes prior to the group discussion, applicants received the selected prompt and wrote notes to prepare for the discussion. The interviewers asked the group to discuss the prompt and then asked follow-up questions (e.g., asking for elaboration). Two prompts were:

- 1. You walk into your high school classroom as students are settling in. These students are surrounding a Mexican American student and chanting, "Build the wall!" How would you handle this situation?
- 2. Recent research has found that white teachers are more likely to reprimand or chastise Black students than are non-white teachers. In addition, black students who receive negative feedback from their teacher tend to show steeper declines in academic performance than do their white counterparts. As a future teacher, how do you think this information should influence the classroom?

Both prompts explicitly described racial injustices and reflected race intentionality (Chang-Bacon, 2022), thereby soliciting applicants' orientations to racial injustices. The rubric also focused on applicants' orientations toward DEIJ (Figure 2). For two indicators, "Assets/Strength-based approach" and "Stance towards equity," raters could score applicants higher if applicants demonstrated "assets/strengths-based thinking" and "knowledge and thoughtfulness" about equity. Alternatively, applicants could be scored as "Unacceptable" for

referring to "deficits of learner, children, and/or communities" or for not demonstrating awareness to "issues related to education and equity."

Other MSTPPs in this category explicitly named "racial equity" and "educational justice," as exemplified in the below prompt from an alternative route MSTPP at University D:

[The MSTPP is] committed to racial equity. What does racial equity mean to you? What racial equity work have you done (and/or do you know you need)? How has your experience and background prepared you to be successful working with students furthest from educational justice? What challenges do you anticipate?

#### Explicit-Potential Example

Nine MSTPPs, representing most types of programs, provided essay prompts with an explicit focus on DEIJ, but their corresponding rubrics did not focus on DEIJ; no interviews reflected this combination (see Table 1). The explicit prompts in this category reflected race intentionality to some extent in that they specifically referenced scenarios involving ethnoracial injustices and/or named associated constructs (Chang-Bacon, 2022). Two of three required essay prompts for an undergraduate secondary program at University E illustrate this combination:

- 1. How might an educator's unacknowledged biases or taken-for-granted assumptions affect their ability to create a safe, inclusive, and culturally responsive learning environment?
- 2. Describe your experiences with academic courses that have provided you knowledge of multicultural and social justice issues and challenges. How does this knowledge and experiences prepare you to be an effective teacher?

The rubric included a row for each essay and a column for scorers to indicate their rating from 0 to 4, but it did not include descriptions for rating the essays. We categorized this rubric as

potentially focusing on DEIJ in that scorers may comment on the applicants' orientations to DEIJ. However, given that the rubric did not provide specific indicators for DEIJ, we did not interpret this rubric as having an explicit focus on DEIJ.

#### Potential-Explicit Example

Three MSTPPs, one Masters-Elementary program and two Alternate Route-Elementary programs, had an interview or essay with the potential-explicit combination (see Table 1). For example, each applicant to University A's Masters-Elementary MSTPP met with each member of the MSTPP's admissions committee (one at a time) for approximately one hour. Prior to the interview, the MSTPP mailed applicants a letter that described the interview process and included the "Question Pool" of possible questions, as well as a rubric (see Figures 3 and 4). In this question pool, some prompts provided an opportunity for applicants to discuss DEIJ but did not explicitly prompt them to do so. For instance, Item 8 asked about a "relationship between a teacher and student" and Item 9 asked applicants to describe an "extraordinary teacher." For both items, an applicant may focus on DEIJ; however, applicants could also respond without attention to DEIJ. Item 15 in the question pool included an explicit DEIJ focus: "Define diversity and describe your experiences working with diverse populations" (Figure 3). However, as one item in a pool of possible questions, an applicant might not be asked to respond to this prompt.

Unlike the prompts, the rubric included an explicit focus on DEIJ (see Figure 4). Interviewers rated applicants on as scale for "Respect for Diversity and Individual Worth" that ranged from "Professional" to "Unacceptable." Applicants received the rubric prior to the interview. Hence, although applicants might not receive a DEIJ-related prompt, the rubric encouraged applicants to prepare a DEIJ-related response. In addition, prompts and rubrics in this category used racial proxies Chang-Bacon's (2022), such as "culture" and/or "all learners"

(Figure 4, second row). These terms contrast with race-intentional phrasing (Chang-Bacon, 2022) used in the initial two categories.

#### 6.3 Faculty Perspectives about Applicants' DEIJ-related Backgrounds and Orientations

Next, we present findings from faculty interviews with a focus on applicants' backgrounds and DEIJ-orientations. We provide examples of the range of professors' perspectives and responses.

#### Faculty Perspectives and Values about Applicants' Backgrounds

We asked faculty about their MSTPP's application process and their own values regarding applicants' backgrounds. All 20 professors interviewed indicated that they value diverse applicants. Our intent was to compare faculty perspectives with characteristics commonly requested on applications. The interview question was:

I am going to list several *background characteristics* that applicants might indicate they have on an application. Please tell me which characteristics are highly important to consider in recruiting and/or selecting applicants, and why you feel they are important.

- A. Has a military background.
- B. Is a first-generation college student.
- C. Is or has been an English language learner.
- D. Is bilingual or multi-lingual.
- E. Is from an underrepresented/minoritized background.
- F. Other characteristics you are free to describe. (Faculty Interview protocol)

All professors except one explicitly mentioned one or more of the options C, D, or E, characteristics related to DEIJ, and they used race-intentional discourse in explaining why these characteristics are important. The below example is representative of the 19 race-intentional responses:

I think the most important ones from that list for me are underrepresented or minoritized background and English language learners....Education [and] science often privileges perspectives from the dominant culture, white people, and the only way that we're going to change that is to have more people in the profession from other backgrounds. I can reflect and read and learn all I want to, ..., but I will never have the knowledge and experience that somebody from an underrepresented group does. And I'll never be able to model being a scientist or a teacher... from one of those groups for my students, so I think that is really important. (Professor E-Science<sup>5</sup>)

The professor who was an exception said "all" were important, indicating that diversity is among several important characteristics for admissions and evidencing race-evasive discourse (Change-Bacon, 2022). Thus, all faculty valued applicants with diverse backgrounds, and all but one expressed these values with race-intentional discourse (Chang-Bacon, 2022).

#### Faculty Perspectives and Values Regarding Applicants' DEIJ Orientations

To varying degrees, faculty indicated that they thought it was important to focus on applicants' orientations to DEIJ in admissions. DEIJ orientations aligned with one of three perspectives: "red flag", "yellow flag", or "desires positive orientations" (see Table 3).

Red Flag Perspective. Three professors felt so strongly about applicants' DEIJ orientations that they did not want to admit applicants who expressed deficit views or prejudice (e.g., racism, anti-gay rhetoric) or who were uninformed (e.g., unaware of racial inequities, white supremacy). These professors' responses aligned with Chang-Bacon's (2022) race-intentional discourse, as well as Feinman-Nemser's (1990) critical orientation for TPPs, emphasizing the role of teachers and TPPs in creating a just society. To illustrate, when asked to describe criteria

<sup>&</sup>lt;sup>5</sup> We created pseudonyms to reflect the professor's university (A through E) and professional identity (math, math education, science, science education).

that are important for selecting applicants, Professor C-MathEd explained that they did not expect applicants to have well-developed orientations to DEIJ; however, they were "not interested in" admitting applicants who demonstrate a lack of knowledge about racism in society:

It's on questions of social justice..., people aren't going to come fully formed... around certain... kinds of ideologies and practices...The whole point is we're going to ...teach them – right? ...On the other hand, ... I'm not interested in [admitting] people who just don't even recognize that white supremacy is a problem.

**Yellow Flag Perspective.** Six faculty expressed concern about applicants' who do not have positive DEIJ orientations. Professor B-MathEd's response represented this perspective:

I think teachers of color would have a much better understanding ... of students' backgrounds. So...it's really important, central for me....If we're going to talk about antiracist education as something that's reachable, I think having a more diverse teaching force is probably top priority. ... If [applicants] don't think [diversity is] important, if they haven't thought about it, if it's not their concern, I really worry about them to be teachers in the first place.

Professor B-MathEd's statement reflected common views regarding both valuing applicants with diverse backgrounds (as discussed previously) and a concern about applicants who do not demonstrate positive DEIJ orientations. Similar to the red flag perspective, professors expressing a yellow flag view used race-intentional discourse (Chang-Bacon, 2022) and aligned with a critical orientation for TPPs (Feinman-Nemser, 1990). However, they differed from the red flag perspective in that these professors did not indicate that a positive DEIJ orientation was necessary for admissions.

**Positive Orientations Perspective**. The remaining 11 professors (a slight majority) expressed views indicating that they valued positive orientations to DEIJ, but a focus on DEIJ is one among several characteristics considered, and it is not necessarily a priority over other considerations. For example, Professor B-ScienceEd explained:

At the end of the interview process...we're looking [at] things like how you participated, how you communicated with each other, the content connections that you were able to make about the case study, or the guiding principles [of our program], your professionalism. Those are some of the things on our rubric. There isn't anything on the rubric specifically about diversity. I think [diversity is] important to consider, [but] I don't want it to be the prime reason that you admit or don't admit a candidate.

Faculty holding these views often used racial proxies (e.g., "diversity" without naming race; Chang-Bacon, 2022) and aligned primarily with Feinman-Nemser's (1990) description of an academic orientation in that they prioritized disciplinary and pedagogical knowledge for teaching when considering applicants.

#### 6.4 Faculty Perspectives on Their MSTPP's Attention to Diversity

In interviews with faculty, we asked professors about their perspectives on their MSTPP's orientation to DEIJ to understand both faculty perspectives and the extent to which MSTPP's aligned with critical orientations (Feinman-Nemser, 1990). We found that faculty expressed a range of views including: calling for their MSTPP to focus more on DEIJ, appreciating their MSTPP's focus on DEIJ, expressing mixed views, or not being aware. Each of these perspectives are discussed below.

#### Calling for MSTPP to Focus More on Diversity

We found that 10 of the 20 professors wanted their program(s) to focus more on diversity in recruiting and/or selecting applicants. For example, Professor B-Science contended that their

program needed to focus more on increasing the number of students of color in the MSTPP and critiqued the admissions process as perpetuating racism.

I think we've been failing by not developing a more racially diverse [group of applicants and PSTs]. ... It's a disservice to our schools, to the teachers that work in them, and to the students. ... It just continues to promote white supremacy, which is sort of embedded in our systems already. Where's the racism in the college admissions process? ... I think there are huge access issues, there are probably biases built into the interview process and the essay process as well that perpetuate white supremacy.... I think there are a lot of really good people trying to do good as a part of a system that is still pretty racist.

Professors sharing this perspective used race-intentional discourse (Chang-Bacon, 2022) and aligned with a critical orientation for TPPs (Feinman-Nemser, 1990).

#### Appreciating MSTPP's Focus on Diversity

Five professors demonstrated appreciation for their program's focus on diversity. They described specific MSTPP efforts including hiring recruiters focused on diversity, faculty outreach activities, and scholarships for diverse applicants. Similar to the previous group, professors holding this perspective used race-intentional discourse (Chang-Bacon, 2022) and aligned with a critical orientation (Feinman-Nemser, 1990). However, between these two groups, their perspectives on whether their MSTPPs held a critical orientation differed, with the previous group calling for change.

#### Holding Mixed Views for the Importance of DEIJ

Two professors held mixed views in that they agreed with the MSTPP's focus on DEIJ in admissions, but they wondered if their MSTPP placed too much emphasis on it. For example, when asked, "Do you see your own values, priorities, and perspectives represented in the process

your teacher education program uses to select future teachers," Professor E-ScienceEd responded,

Yes and no. We put a high commitment on critical race theory and some theoretical frameworks that many of our science and math candidates have not encountered....Some of those conceptual frameworks are brand new to them, and we really privilege those frameworks over, let's say, having a profound understanding of evolution, as a theoretical understanding. So, I think, I would like to think that we could have both.

Professor E-ScienceEd expressed a view that DEIJ should be a focus and used race-intentional discourse (e.g., "critical race theory"; Chang-Bacon, 2022), but they also contended that disciplinary frameworks and understandings should be valued more, reflecting an academic orientation, or perhaps a mix of academic and critical orientations for TPPs (Feinman-Nemser, 1990).

#### Not Being Aware of MSTPP's Orientation to DEIJ

The remaining three professors did not share clear views on whether their MSTPP should focus more or less on DEIJ. They taught mathematics or science content courses and were not as involved in teacher education admissions. All three indicated that DEIJ was important in general. However, they were not aware of whether DEIJ was a focus of admissions. Their responses aligned with race-evasive discourse (Chang-Bacon, 2022), as well as an academic orientation to TPPs (Feinman-Nemser, 1990).

#### 7. Discussion and Implications

This study provides a conceptual framing of the admission process with a specific focus on the role of DEIJ in TPP admissions, as represented by circles in Figure 1. We found that all participating MSTPPs and faculty saw a need for diverse applicants and attention to DEIJ in their admissions processes and practices (the outer two circles of Figure 1), indicating that their values

aligned with a critical orientation (Feinman-Nemser, 1990). However, the extent to which MSTPPs and faculty acted on these values depended on *what* application components and information MSTPPs collected and *how* MSTPPs and faculty attended to applicants' DEIJ orientations in admissions (the inner two circles of Figure 1). Moreover, we also uncovered cases where MSTPPs' admissions processes do not represent the DEIJ-related perspectives of some faculty. Professor B-Science's statement illustrated this when they said their MSTPP was, "failing by not developing a more racially divers[ity]," presented previously. Additionally, not all faculty were aware of the role of DEIJ in admissions. Thus, not all faculty were influencing their MSTPP's admissions processes (represented in the bottom rectangle in Figure 1).

Below we highlight key findings from the participating MSTPPs and discuss related considerations for TPPs in their efforts to actualize their values for DEIJ in recruiting, selecting, and preparing mathematics and science teachers, as called for in professional standards (e.g., AMTE, 2017; Morrell et al., 2020). We end with two dilemmas facing TPPs that surfaced from this study. When discussing considerations and dilemmas, we refer to TPPs because we view these considerations as applicable to TPPs more generally, extending beyond MSTPPs.

#### 7.1 Considerations for Attention to DEIJ in Application Forms

Participating MSTPPs collected substantial information from application forms related to social markers, even though some applicant background information collected seemed superfluous to the admissions process, including information not required by the state for these universities (e.g., citizenship, immigrant status). This information might have been collected because all faculty expressed a desire to recruit and/or select more diverse applicants, consistent with research on the benefits of a diverse teaching workforce (Blazer, 2022; Edmonds, 2022), and perhaps universities or MSTPPs collected it to track progress towards increasing diversity. In addition, this information might be important to identify applicant eligibility for financial aid.

Despite reasonable intentions, collecting these data might have unintended consequences, such as discouraging applicants who are ethnoracially marginalized or who lack documentation of citizenship from applying. These applicants might wonder if providing this information would be disadvantageous or make them vulnerable to deportation. Further research on applicant perceptions and reactions to questions about social markers would inform the field of the costs and benefits of asking about applicants' social markers and background.

#### 7.2 Considerations for Attention to DEIJ in Applicant Orientations

Despite faculty stating that they value diversity and desire applicants with positive DEIJ orientations (Kineman et al., 2019), MSTPP documents and professors' responses did not consistently reflect a critical orientation in admissions processes (Feinman-Nemser, 1990). For MSTPPs who included application components of essays and/or interviews, these components provide the *potential* to learn about applicants' DEIJ orientations. Even when these essays and interviews were used, we found differences ranging from not attending to applicants' DEIJ orientations (limiting the potential of these components) to using race-intentional discourse (Chang-Bacon, 2022) that explicitly solicited applicants' DEIJ orientations.

These findings highlight ways TPPs can make applicants' DEIJ orientations visible in admissions processes. Primarily, TPPs should not only consider including essay and interviews as a way to learn more about applicants regarding DEIJ-related experiences and orientations, but TPPs and their faculty should examine the language used in their prompts and rubrics.

Specifically, if TPPs use race-intentional language (Chang-Bacon, 2022) in essay and interview prompts and rubrics, applicants will be prompted to share specific experiences and orientations related to DEIJ. An additional benefit is that these interview and essay prompts can communicate a TPP's critical orientations (Feinman-Nemser, 1990), informing applicants early in the application process that DEIJ is a focus of a program. Similarly, if TPPs' rubrics use race-

intentional language, scorers will be prompted to focus on DEIJ. Our findings indicate that TPPs should use and create explicit-explicit combinations of prompts and rubrics to achieve goals related to DEIJ. Future research could further examine specific prompts and rubrics, along with applicants' responses and scorers' use of rubrics, to gain more insights into characteristics of prompts and rubrics that support TPPs in learning about applicants' DEIJ orientations.

#### 7.3 Dilemmas for TPPs

This study surfaced two vexing dilemmas for TPPs:

- 1. Should TPPs' admissions processes screen out applicants who evidence deficit or unaware views regarding DEIJ, as a way to promote anti-racist and culturally responsive teaching?
- 2. In what ways might TPPs admissions (unintentionally) reproduce structural inequities and racism by screening out applicants of color?

These dilemmas relate to two problems that Childs and Ferguson (2015) identified for TPPs to address for the teaching workforce: filtering out applicants with potentially problematic attitudes and preparing more PSTs of color to diversify the teaching workforce.

For the first dilemma, we found three professors whose responses suggested that TPPs should not admit applicants with deficit views or who were uniformed about racial injustices. In efforts to develop a culturally responsive teacher workforce, should TPPs deliberately screen out applicants who do not evidence positive DEIJ dispositions, as these professors suggest? An alternative strategy might be to identify concerns about applicants during admissions, and then provide support for developing positive DEIJ orientations, consistent with recommendations from Carter Andrews, Brown and colleagues (2019) and Kimanen and colleagues (2019). One factor in a TPP's approach to this dilemma might be the duration of their program. For example, alternative route programs in this study often were shorter in duration and/or primarily based in

school settings, with reduced coursework and opportunities for professors to create experiences to shift orientations. Whereas other programs might find that they have time for PSTs to develop positive DEIJ orientations through carefully designed courses and experiences. Future research might explore whether, in what contexts, and how TPPs can support PSTs in developing positive DEIJ orientations. These findings could inform TPPs in deciding whether to focus on screening out applicants or supporting PSTs to develop positive DEIJ orientations.

For the second dilemma, we found that participating MSTPPs required applicants to submit test scores and GPAs, and they collected information about social markers. Testing requirements can screen out teachers of color (Carter Andrews, Castro, et al., 2019), and we wonder whether social markers discourage students from applying to programs, as discussed above. These findings suggest that TPPs should carefully examine the information they and their universities collect from applicants. Specifically, for information collected in admissions, TPPs should ask: What is important to know about applicants in relation to becoming a teacher? How might specific requests or requirements inadvertently screen out students from applying or being selected. To inform what we collect from applicants, future research might explore connections between characteristics of applicants who are selected and their later success in teaching, as well as investigating who might be interested in teaching but not apply to TPPs due to admissions requirements (e.g., GPA, test scores).

The framework (Figure 1), findings, considerations, and dilemmas provide opportunities for TPPs and faculty to reflect on their own practices, orientations, and programs regarding attention to DEIJ in admissions. As we develop more intentional admissions processes focused on DEIJ, future research can explore the effects of specific aspects of these processes on enrollment, on TPPs' orientations, and on supporting the development of PSTs.

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# Figures and Tables

Figure 1. An Exploratory Framework to Examine How MSTPPs Attend to DEIJ in the Admissions Process

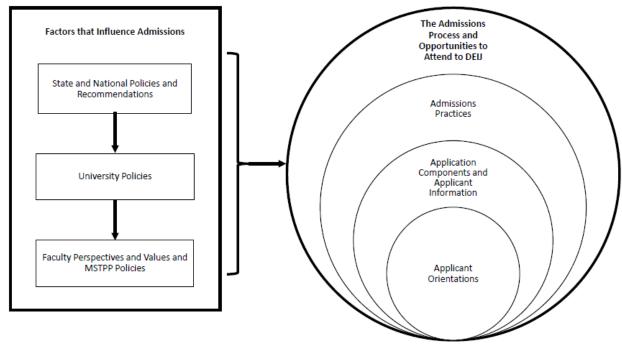


Figure 2. University C's Undergraduate Elementary and Secondary Interview Rubric

	Exceptional = 5	4	Acceptable = 3	2	Unacceptable = 1
	Actively participates in the		Is somewhat engaged in the		Does not engage substantively in the
Engagement	conversation. Makes substantive,		conversation. Makes some		conversation. Does not demonstrate
Engagement	thoughtful contributions.		contributions and demonstrates some		evidence of interest in issues of
	Demonstrates clear interest in issues of		interest in issues of teaching,		teaching, learning, and equity.
	teaching, learning, and equity.		learning, and equity.		
	Participates equitably in the		Participates mostly equitably in the		Speaks over others, takes the
	conversation. Makes clear and		conversation, but sometimes overly		majority of turns at talk, or,
Equitable	consistent effort to include all peers in		dominates the conversation or		alternately, participates very little.
Participation and	the conversation. Shows consistent		appears to disengage. Is generally		Does not attend to or devalues
Collaboration	evidence of listening to and valuing		welcoming of and attentive to others'		others' contributions. Fails to listen
	others' contributions. Consistently		contributions. Sometimes builds on		carefully to others. Does not build on
	builds on or elaborates others' ideas.		others' ideas.		others' ideas.
	Consistently demonstrates		Sometimes demonstrates		Rarely demonstrates assets/strengths-
Assets/Strengths-	assets/strengths-based thinking about		assets/strengths-based thinking about		based thinking about learners,
based approach	learners, teachers, and peers.		learners, teachers, and peers.		teachers, and peers. Frequently refers
based approach					to the deficits of learners, children,
					and/or communities.
	Consistently demonstrates knowledge		Demonstrates some knowledge and		Demonstrates little knowledge of or
	and thoughtfulness about issues		thoughtfulness about issues related to		thoughtfulness about issues related to
Stance towards	related to education and equity. Makes		education and equity. Makes		education and equity.
Equity	explicit connections to education		occasional or vague connections to		
	policy, principles, experiences, and/or		education policy, principles,		
	coursework.		experiences, or coursework.		
	Consistently presents ideas clearly,		Communication of ideas is		Communication of ideas is almost
	completely, and thoughtfully, using		sometimes incomplete or unclear. Is		always incomplete or unclear. Is not
	multiple communicative modalities as		mostly respectful of others' ideas or		respectful of others' ideas or
	appropriate (i.e. multiple languages,		contributions, sometimes considers		contributions or different
Communication	gesture, talk). Respectfully questions		and invites different perspectives.		perspectives. Does not appear to
	others' ideas or contributions,		Occasionally checks to see if ideas		attend to whether others have
	considers and invites more than one		are understood by all.		understood.
	perspective. Consistently checks to see				
	if ideas are understood by all.				

#### Figure 3. University A's Masters Interview Question Pool

#### QUESTION POOL

While you may be asked other questions, the following is a list of possible interview questions

- 1. What would you like us to know about you? Endorsement?
- 2. What are your experiences with working with children and adolescents?
- 3. What do you find most appealing about a teaching career?
- 4. Describe "professionalism." What does it mean to you?
- 5. What does it mean to be a teacher?
- 6. What part of teaching do youlook forward to most? Explain your answer.
- 7. What part of teaching do you look forward to least? Explain your answer.
- What is the ideal relationship between a teacher and student? Provide an example.
- 9. Describe an extraordinary teacher.
- 10. What are the three most important characteristics of an effective educator/teacher? Explain your answer.
- Classroom management is considered the weakest area for most new teachers; provide specific examples of how you would deal with common misbehaviors.
- 12. Describe a situation where you submitted a work project and did not receive the feedback you desired? How did you respond?
- 13. What experience do you have taking on-line courses?
- Provide an example of when you demonstrated initiative with a work assignment that was open-ended, vague or abstract.
- How do you define diversity, and describe your experience working with diverse populations.
- 16. Illustrate an experience in which you had to prioritize a work deadline with a personal challenge. How did you choose? How did you communicate with stakeholders?

# Figure 4. University A's Masters Interview Rubric

# INTERVIEW RUBRIC

	Professional	Target	Developing	Unacceptable
Communication: Candidate displays effective verbal and nonverbal skills: clarity of expression, eye contact, body language, voice, grammar, word usage and pronunciation, friendly, confident poised, and personable. Honest in communications. Positive attitude.				
Respect for Diversity and Individual Worth Candidate acknowledges the impact of diverse cultures on the world b. can discuss a learning environment that is caring and respectful of all learners c. articulates the need to treat students as individuals.				
Professional Appearance Candidate dressed appropriately, exhibits good posture, makes eye contact, demonstrates confidence and poise.				
<b>Non-Verbal Communication</b> There was a distracting non-verbal issue.				
<b>Verbal Communication</b> There was a distracting verbal issue.				
Response to Evaluators' Questions Candidate provides clear and concise answers to evaluators' interview questions. Responses to questions were appropriate and given without hesitation				

Table 1. Application Components, Information Collected, and Focus on DEIJ by Program Type

Number of Programs with Selected Application Components, Social

Markers, and DEIJ Prompts by MSTPP Type

					1		J 1	
Application Component	UG Elem (of 6)	UG Sec (of 3)	M Elem (of 6)	M Sec (of 8)	Alt Elem (of 6)	Alt Sec (of 2)	Total (of 31)	%
GPA	6	3	6	8	6	2	31	100
Transcripts	6	3	6	8	6	2	31	100
Tests	6	3	6	8	6	2	31	100
Essay/Statement	5	2	6	8	6	2	29	93.6
Teaching Experience	4	2	6	8	6	2	28	90.3
Letters of Recommendation	3	3	6	8	5	2	27	87.1
Interview	2	2	4	6	5	2	21	67.7
Resume	0	0	6	7	5	2	20	64.5
Average # of Components (of 8)								
	5.33	6.00	7.67	7.63	7.50	8.00	6.81	
Inform	ation Co	ollected R	Celated to	Social M	larkers			
Race/Ethnicity	6	3	6	8	6	2	31	100
Citizenship	6	3	6	8	6	2	31	100
Parents' Education Level	6	3	6	6	5	2	28	90.2
Immigrant Status	3	2	6	7	5	2	25	80.7
Home Language/ Multilingual	5	2	2	3	4	2	18	58.1
First Generation	3	2	2	2	2	1	12	38.7
Average # of Social Markers (of 6)	4.83	5.00	4.67	4.25	4.67	5.50	4.53	

Essay Prompt(s), Interviews Prompt(s), and Corresponding Rubrics <sup>a</sup> that Focused on DEIJ																	
Prompt(s)	Rubric	Ess	Int	Ess	Int												
Explicit	Explicit	2	1		1	2	1	3		3	2	1	1	11	6	35.5	19.4
Explicit	Potential	1		1		2		3		2				9	0	29.0	0
Potential	Explicit					1			2					1	2	3.2	6.5
Potential	Potential		1		1		1		2		1		1	0	7	0	22.6
Potential	Not Used	2		1		1	2	2	2	1	2	1		8	6	25.8	19.4
Not Used	Not Used	1	4	1	1		2		2		1			2	10	6.5	27.0

<sup>&</sup>lt;sup>a</sup> "Essay" and "Interview," are abbreviated as "Ess" and "Int," respectively. Values reported represent the number of MSTPPs for each type. If one or more prompts or rubric criteria included an explicit focus on DEIJ, the MSTPP was counted as "explicit" in the associated cell.

Table 2. Categories and Codes Focused on DEIJ Used with Interview Transcripts

Category	Code	Focus of Faculty Response or Comment
Applicant	Ethnicity, race,	An aspect of ethnicity, culture, and/or race, or other mentions of "diversity" in an applicant's background.
Background	culture	
	Multi-lingual	An applicant's home language, knowledge or use of languages other than English, and/or experience with
		multilingual environments.
	Other	Age, gender, citizenship, first generation, transfer, military, socio-economic status, disability, etc.
Applicant	Orientations	An applicant's conceptions about families and students. Examples: asset/deficit-based perspectives,
Orientations	toward teaching,	inclusion/exclusion, growth/fixed mindset, solidarity/savior stance.
	learning,	An applicant's conceptions about teaching and learning. Examples: attention to individual student needs
	students, and	and contexts, role of social justice and anti-racism, reproducing inequities and canonical curriculum.
	families	
Applicant	Teaching	An applicant's experiences with students, diverse populations, or content that have potentially shaped
Experiences	experiences	professional identity/orientations.
	Non-teaching	An applicant's experiences in life or in school (as a K-12 student) that might influence
	experiences	identity/orientations including experiences with: poverty/privilege, political groups, babysitting.

TPP Program-	Program- level	A MSTPP's existing or desired goals, priorities and/or approaches, including those that promote DEIJ-
Level Goals,	Goals	specific dispositions and/or practices. Examples: constructivist approach, anti-racist pedagogy, culturally
Priorities, and		responsive pedagogy, asset-based perspectives, and core practices.
Components	Program-level	A MSTPP's program-level policies, and/or activities (e.g., recruiting, scholarships), including those that
	Processes,	promote DEIJ-specific dispositions and/or practices. Examples: program curriculum, faculty/department
	Policies,	responsibilities, support for future teachers, recruitment and/or retention, enrollment data, diverse student
	Initiatives	data, communication among faculty, and gatekeepers (people or policies).
Diversity,	DEIJ-related	Any mention of DEIJ-related topics including: anti-racist pedagogy, culturally responsive pedagogy,
Equity,	ideas	asset/deficit-based perspectives, educational/social/racial justice, recruiting and/or admitting applicants
Inclusion, and		with diverse identities/backgrounds (e.g., race, ethnicity, language, gender, sexual orientations, disability,
Inclusion, and  Justice (DEIJ)		with diverse identities/backgrounds (e.g., race, ethnicity, language, gender, sexual orientations, disability, faith, first-generation students).
	Red Flag	
Justice (DEIJ)	Red Flag Yellow Flag	faith, first-generation students).

Table 3. Faculty Perspectives Related to Applicants' DEIJ-Orientations
Faculty Affiliation

Faculty Perspectives	Math Math Ed		Science Science		Total	
	(n=3)	(n=6)	(n=5)	Ed (n=6)	(n=20)	%
Red Flag	1	2	0	0	3	15.0
Yellow Flag	1	3	0	2	6	30.0
Desires Positive Orientations	1	1	5	4	11	55.0