Advancing Equity in Faculty Hiring with Diversity Statements

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Hiring diverse candidates and creating an inclusive and equitable climate has emerged as a top priority for the scientific community. Diversity statements are a common but unexamined tool for recruiting a more diverse workforce. We surveyed more than 200 experts in diversity, equity, and inclusion (DEI) from US academic institutions to synthesize strengths and limitations of diversity statements and to develop guidelines for using such statements in faculty hiring. We found overwhelming agreement that diversity statements are a valuable tool for the advantages they offer the institution and applicant, but the experts indicated that diversity statements should be supported by other evidence. We further found that few institutions provide guidance on how to effectively use diversity statements in the hiring process. We address this need by providing an expert-derived evaluation framework for recognizing and rewarding DEI in the recruitment process that can be flexibly adapted to fit the unique requirements of diverse institutions and positions.

Keywords: equitable hiring practices, evaluation rubric, faculty search committees, JEDI, DEI

Faculty at academic institutions must reflect and understand the unique perspectives and challenges experienced by an increasingly diverse student population. The need to hire faculty that can foster institutional diversity, equity, and inclusion (DEI) is especially critical in the STEM (science, technology, engineering, and math) fields, such as the biological sciences, where many identity groups are still underrepresented (Koenig 2009). For example, Black and Hispanic students make up 5.9% and 8.8% of biology trainees but only 2.6% and 4.8% of faculty, respectively (NSF 2019). To close this substantial hiring gap and to meet the demand for culturally competent faculty, institutions often request statements of DEI (henceforth, diversity statements) from applicants to tenure-track and non-tenure-track faculty positions (henceforth, faculty positions). Diversity statements provide candidates with an opportunity to demonstrate their contributions to DEI and provide search committees with a method for explicitly considering diversity activities in the hiring process.

Despite this potential, there has been some questioning of whether these statements are appropriate and effective. Opinion pieces have stirred debate about whether diversity statements represent a litmus test of political ideologies and a threat to free speech (Flier 2019). Others have suggested these statements could be damaging if an organization has biased hiring practices and applicants reveal cues about their identities that make them subject to discrimination (Kang et al. 2016). In contrast, advocates of diversity statements emphasize their usefulness in highlighting and rewarding DEI qualifications and in raising awareness of the need for DEI skills among faculty (Canning and Reddick 2019).

In this debate, the key advantages and shortcomings of using diversity statements to evaluate faculty candidates have yet to be articulated by experts that actively work in DEI roles across multiple institutions. Furthermore, little guidance exists on how search committees should evaluate such statements to ensure they achieve desired DEI objectives, nor how other elements of the application process could complement diversity statements and help search committees more fully evaluate candidates’ contributions to DEI. In the present article, we use a nationwide survey of professionals working in diversity and inclusion roles at academic institutions in the United States to understand the advantages and challenges of using diversity statements to evaluate commitments to DEI by applicants for faculty positions. We then use this expert-derived guidance to develop a structural framework for assessing diversity statements and highlight additional methods that can be used in tandem with these statements to holistically gauge an applicant’s potential to advance DEI.

Data collection and analysis
Our survey population included diversity and inclusion professionals (e.g., DEI directors or officers) from 209 STEM degree-granting institutions, including public and private universities; 4-year colleges; 2-year colleges; professional schools; technical, vocational, or trade schools; Hispanic-serving institutions; historically Black colleges...
and universities; and women's colleges (supplemental table S1). We compiled contact information for all diversity and inclusion professionals that were listed at each university's diversity office website, which we found using an Internet search of the terms *diversity, equity, and inclusion* and the university name.

**Expert survey.** We administered our survey online using Qualtrics from 10 September to 9 October 2020 (supplemental appendix A). To access the survey, the respondents were required to consent to participate in our study. The respondents were assured that their responses would remain completely anonymous. We sent an initial request to 1536 valid email addresses, followed by two reminders sent approximately 1 week apart to the respondents who had not completed the survey. We received responses from 205 individuals, for a response rate of 13.3%. Although this rate is relatively low, it is within the 4.7%–21% range common to email or internet surveys (Kaplowitz et al. 2004, Nulty 2008, Pocewicz et al. 2012, Sinclair et al. 2012). Internet survey distributions are often negatively affected by a host of email features (e.g., institutional spam filters; Dobrow et al. 2008), which likely reduced the number of experts who received the survey link. Colorado State University’s Institutional Review Board approved all survey and administration procedures before implementation (protocol no. 20-10071H).

The individuals that responded to our survey held a diversity of roles related to DEI (supplemental table S2) and 76% agreed that the label *expert in DEI* described them moderately to extremely well (supplemental table S3). We retained responses from the 21% of the respondents that felt that the *expert* label only described them slightly well because nearly all these individuals held roles related to DEI (table S2), and, therefore, they likely held relevant DEI experience. Prior to analysis we removed three respondents that answered “Does not describe me” to the survey question “Would you consider yourself to be an expert in diversity, equity, and inclusion?” We did not remove five other respondents that answered similarly, but whose role suggested that they had expertise in DEI (i.e., whose roles included diversity officers, chief advancement officer for inclusion and diversity, and president or vice president of diversity). Our final sample size was therefore 202 experts in DEI.

**Quantitative analysis.** We calculated summary statistics to characterize our survey population, and to complement qualitative responses to our research questions. Specifically, we compared the percentage of the survey population that responded to our questions pertaining to their professional position, DEI expertise, the number of years they'd been in positions related to DEI, their institutional type, and whether their institution had written guidance on best practices for diversity statements. We also compared the percentage of the respondents that agreed or disagreed (along a five-point Likert scale) that diversity statements should be required for all applicants to faculty positions, as well as the percentage of the respondents that felt that it was very important, somewhat important or not important that various metrics should be used to assess contributions to DEI. Sample sizes vary because not all of the respondents answered every question in the survey.

**Qualitative analysis.** For the open-ended question asking what elements (list up to five) applicants should address in a diversity statement to demonstrate their DEI competency or a commitment to advancing DEI in the past, present, and future, the first author used NVivo Pro 12 (version 12.6.0.959) to inductively (i.e., without predetermined categories) code responses into themes, which were grouped into broader categories. After the initial coding, both authors reexamined, refined, and integrated codes, when necessary, based on our research objectives (Glesne 2006, Creswell and Creswell 2017). We validated our theme analysis through peer review by a cultural anthropologist, who was not part of the research team but has expertise in sociocultural qualitative research. After the first author generated a codebook of themes, the outside expert reviewed the survey responses and independently coded all responses. We assessed intercoder reliability using NVivo Pro 12 (version 12.6.0.959) to calculate a Kappa coefficient of agreement among coders for each code. Kappa values indicated perfect agreement for 24 out of 28 codes and substantial agreement for 4 out of 28 codes (Landis and Koch 1977), and percentage intercoder agreement for all codes was above 98.1% (supplemental table S4). After peer review, the authors developed a final set of codes, definitions, and interpretations for each theme (table S4). We quantified themes by calculating the percentage coverage for each theme or code in a theme (frequency of code divided by frequency of all codes in codebook).

The first author also used NVivo Pro 12 (version 12.6.0.959) to inductively code responses to the open-ended question about why the respondents agreed or disagreed that diversity statements should be required, and to the open-ended question about whether there are methods other than diversity statements for assessing an applicant’s potential contributions to DEI. We deemed these responses to be less open to variable interpretation and not critical for evaluating candidate’s diversity statements. Therefore, we did not require a second reviewer for responses to either of these questions. Coded responses to these questions were reevaluated by both authors, and adjustments were made where necessary (Glesne 2006, Creswell and Creswell 2017). We quantified themes by calculating the percentage coverage for each theme or code in a theme (count of references to code divided by count of all references in codebook).

**Diversity statement strengths and limitations**

A majority (91%) of the experts (*n* = 196) somewhat or strongly agree that diversity statements should be required for applicants to faculty positions (supplemental figure S1; see tables S1–S3 for the characteristics of the respondents). However, most (85%) of the experts indicated that they
lacked guidance from their institution on evaluating diversity statements. The experts identified several advantages that diversity statements offer to both the institution and the applicant, including demonstrating how the applicant will interact with diverse students and colleagues, signaling institutional commitment to DEI, engendering commitment to DEI in the applicant, raising awareness of the need for DEI work broadly, and rewarding and recognizing an applicant’s work in DEI (figure 1).

The advantages highlighted above were often mirrored by concerns that statements would not guarantee a genuine commitment to DEI in candidates and therefore must be supported by evidence from other materials (figure 1). Similarly, the experts were concerned that requesting diversity statements might send the wrong signal to the candidate if the institution’s DEI aims are unsupported by intentional efforts to address bias and inequity. The experts also noted that statements may be ineffective if the institution lacks the ability to evaluate candidates successfully.

A small number of the respondents (4%) raised concerns about diversity statements being “unfair” to applicants that have not prioritized DEI or have not had past opportunities to engage in DEI, a much larger percentage of the experts (91%) indicated that diversity statements should be required, and 23% explicitly stated that they were necessary because DEI is integral to faculty teaching, mentoring, and service roles.

**Diversity statement evaluation criteria.** The DEI experts listed numerous activities that can be used to evaluate a candidate’s demonstrated and potential contributions to DEI (table 1). These activities aligned with six broad themes including demonstrating cultural or DEI competency (38% coverage), actions, plans, and accountability to advance DEI (17% coverage), DEI in teaching (12% coverage), DEI service (11% coverage), promoting underrepresented scholars (8% coverage), and DEI in research (5% coverage; table S4). The top reported theme emphasizes evaluation criteria focused on improving DEI awareness, including building cultural and emotional competency; DEI training and professional development; reflecting on one’s positionality, privilege, and learning edges; and competency in DEI concepts and terms (table 1, table S4). Another often-cited theme was having an established track record or accountability for the candidate’s DEI work (table 1, table S4). Finally, the majority of the respondents (n = 146) felt that local or institutional impact (79%), frequent involvement (74%), and engaging with many individuals (57%) were the most valuable metrics for assessing the impact of efforts to promote DEI (supplemental figure S2).

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**Figure 1.** Advantages and challenges of using diversity statements to evaluate applicants to faculty positions. The sample sizes and percentages reflect the number of coded responses from the experts in diversity, equity, and inclusion (DEI), not the number of respondents, because the respondents may have identified multiple themes in their answers to our open-ended prompt “Briefly explain why you agree or disagree that DEI statements should be required for applicants to faculty positions.”

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**Advantages of Diversity Statements (n = 131)**

- Demonstrates candidate’s genuine interest, awareness, and commitment to DEI (49, 37%)
- Demonstrates how candidate will interact with colleagues and students (31, 24%)
- Signals institutional commitment to DEI (28, 21%)
- Engenders commitment to DEI in candidate (10, 8%)
- Raises awareness of need for DEI work (7, 5%)
- Broadens qualifications to include/recognize DEI work (6, 5%)

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**Challenges of Diversity Statements (n = 54)**

- Does not ensure candidate’s sincerity or future commitment (19, 36%)
- Should also be demonstrated through other materials (16, 30%)
- Less useful if institution lacks DEI core values/unable to evaluate candidates effectively (15, 28%)
- Puts unfair burden on non-minoritized individuals/those that don’t prioritize DEI (4, 7%)

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### Table 1. Structural framework for evaluating diversity statements for faculty position applications.

<table>
<thead>
<tr>
<th>Evaluation category</th>
<th>Evaluation criteria</th>
<th>Definition of excellence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actions, plans, and accountability</td>
<td>Accountability and metrics</td>
<td>Provides numerous measures of success quantifying the impact of their DEI work</td>
</tr>
<tr>
<td></td>
<td>Actions committed to DEI</td>
<td>Sustained record of actions that show intentional commitment to DEI, e.g., grants to advance DEI, anti-racism advocacy, decolonizing in practice</td>
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<tr>
<td></td>
<td>Alignment with institutional DEI</td>
<td>Demonstrated awareness of institutional’s DEI climate and goals</td>
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<td></td>
<td>Future contributions to DEI</td>
<td>Provides numerous goals or future vision that suggests strong potential for the candidate to prioritize DEI in future roles</td>
</tr>
<tr>
<td>Cultural or DEI competency</td>
<td>Awareness of causes and consequences of systemic inequities</td>
<td>Demonstrates clear awareness of bias, privilege, colonialism, systemic racism, and other barriers or inequities faced by marginalized groups in society and academia</td>
</tr>
<tr>
<td></td>
<td>Competency in DEI concepts and terms</td>
<td>Clear understanding of DEI concepts and terms (e.g., equity versus equality, diversity versus inclusion, intersectionality)</td>
</tr>
<tr>
<td></td>
<td>Cultural and emotional competency</td>
<td>Can communicate across difference, listen, use inclusive language and pronouns, solicits feedback, learns from mistakes, is open-minded and fair to others</td>
</tr>
<tr>
<td></td>
<td>DEI training and professional development</td>
<td>Has strong record of training, certifications, or education in DEI</td>
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<td></td>
<td>Lived experience as member of marginalized group</td>
<td>Can articulate their own lived experience as a person with a marginalized identity/identities</td>
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<td></td>
<td>Personal DEI philosophy</td>
<td>Can clearly describe what a diverse and inclusive institution means to them</td>
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<td></td>
<td>Recognizes value of DEI</td>
<td>Can accurately describe the benefits of advancing DEI for society and their profession</td>
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<tr>
<td></td>
<td>Reflect on own positionality, privilege, and learning edges</td>
<td>Demonstrates humility and recognizes how their own privilege, bias, and learning edges affect DEI in their roles</td>
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<tr>
<td></td>
<td>Collaborating with diverse groups</td>
<td>Demonstrated evidence of collaborating with diverse groups in research or other activities</td>
</tr>
<tr>
<td>Promoting underrepresented scholars and allyship</td>
<td>Promoting, recruiting, and retaining diverse colleagues and students</td>
<td>Strong track record of promoting, recruiting, mentoring, and retaining diverse colleagues and students</td>
</tr>
<tr>
<td></td>
<td>Incorporating DEI in research activities</td>
<td>Conducts research on DEI, infuses DEI into other research foci, or has considered how their research affects DEI</td>
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<tr>
<td>DEI in teaching</td>
<td>Inclusive teaching practices</td>
<td>Demonstrated use of inclusive pedagogy, e.g., creating welcoming and accessible class environments, infusing DEI in course materials, and increasing student DEI competency</td>
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<td></td>
<td>Teaching diverse students</td>
<td>Strong history of teaching diverse students</td>
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<tr>
<td>DEI in service</td>
<td>DEI service, general</td>
<td>Strong record of integrating DEI into service activities or participating in DEI service generally</td>
</tr>
<tr>
<td></td>
<td>Involvement in DEI committees and organizations</td>
<td>Active participation or leadership in DEI committees and organizations</td>
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<tr>
<td></td>
<td>Involvement in DEI initiatives and programs</td>
<td>Active engagement or leadership in DEI initiatives and programs</td>
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<tr>
<td></td>
<td>Outreach</td>
<td>Active engagement in community outreach, especially outreach to marginalized communities</td>
</tr>
</tbody>
</table>

Note: Evaluation criteria are organized into six broader evaluation levels. Evaluation criteria are derived from responses provided by experts in diversity, equity, and inclusion (DEI) coded into themes using an open-coding approach. Definitions of what excellence in each category might look like are provided. Strong examples may include frequent involvement, affecting many individuals, playing a leadership role, or activities that have significant institutional impact, where applicable. Criteria can be modified and scores can be weighted as needed to fit the position and DEI goals or values of the institution.

Although most of the experts agreed that diversity statements should be required of applicants to faculty positions, 77% ($n = 155)$ indicated that there were other complementary methods useful for assessing an applicant’s potential to contribute to DEI. Such approaches included assessing DEI potential and commitment during interviews, job talks, and meetings with students, faculty, and staff; evaluating whether a track record of DEI is demonstrated in other written application materials (e.g., cover letter, research and teaching statements); recommendation letters that attest to the candidate’s DEI commitment; using surveys, behavioral statements, and screening questions to vet DEI knowledge and behavior in application packets; and asking for specific evidence of engagement with DEI work (figure 2). The experts also shared other approaches that are not directly relevant to evaluating DEI potential in candidates but are part of a broader suite of tools that can be used to make the hiring process more equitable and
inclusive. Such approaches included building diverse hiring committees, clarifying that DEI is part of job expectations in the application process, incorporating DEI training in the onboarding process, and intentionally hiring diverse candidates.

Using diversity statements to hire and reward faculty that foster DEI. We surveyed DEI experts from academic institutions across the United States to synthesize strengths and limitations of diversity statements and to develop an expert-informed framework for evaluating these statements. We found overwhelming support among the DEI experts for diversity statements because of the advantages they offer both the institution and the applicant (figure 1) and because the experts considered efforts to advance DEI as central to faculty teaching, mentoring, service, and research roles. Among the advantages diversity statements offer candidates is recognition of the disproportionate labor done to improve diversity performed by underrepresented academics (Jimenez et al. 2019), known as invisible labor or a race or culture tax (Padilla 1994, Joseph and Hirshfield 2011, Crain et al. 2016). If DEI is an institutional priority, then this work should be explicitly rewarded in hiring, tenure, and promotion (Jimenez et al. 2019). Other advantages include demonstrating how the applicant will interact with diverse students and colleagues, signaling an institutional commitment to DEI, engendering a commitment to DEI among applicants, and raising awareness of the need for DEI work broadly (figure 1). Therefore, the experts largely perceived diversity statements as a tool to elevate and reinforce DEI principles.

Despite the advantages that diversity statements offer and the strong support for their use, the experts raised concerns that diversity statements would send the wrong signal if the candidate or institution lacked a genuine commitment to DEI or lacked evidence of effectiveness in past DEI practices (figure 1). These limitations reflect common pitfalls identified when developing diversity statements—namely, that institutions and applicants should avoid suggesting that their diversity efforts have achieved equity but, instead, emphasize ongoing efforts to overcome bias and injustice (Carnes et al. 2019). Both candidates and institutions should highlight intentional progress on DEI, while acknowledging that much remains to be done to remediate past and present injustices. Some of the limitations of using diversity statements shown in our study could be addressed with complementary methods for assessing an applicant’s potential to contribute to DEI, including evaluating DEI contributions and commitment through interviews, other written application materials, recommendation letters, or surveys, behavioral statements, and screening questions (figure 2).

Previous criticisms of diversity statements (Kang et al. 2016, Flier 2019) were seldom cited as limitations to their use among the DEI experts; none of our respondents indicated that such statements would limit free speech, and only one respondent mentioned that diversity statements may make applicants subject to increased discrimination.
We found that few institutions to date provide guidance on how to effectively use diversity statements in the hiring process. Therefore, the burden of evaluating candidates' DEI qualifications is largely falling on search committees that have little assistance or expertise to assess candidates' DEI qualifications effectively. We address this need by providing an expert-derived framework (table 1) for evaluating a candidate’s DEI skills that can be flexibly adapted to fit the unique requirements of diverse institutions and both tenure-track and non-tenure-track faculty positions. The experts considered assessing a candidate's DEI competency to be among the most important evaluation criteria in our framework (table 1, table S4), which is consistent with the need to reflect on one's own identity and privilege and gain cultural competency skills to make true progress toward inclusion (Asai 2019).

Another key evaluation priority was assessing a candidate's track record and accountability in their DEI work (table 1). Similar calls to hold individuals and institutions accountable to DEI progress have been made in academia and beyond (Quaye and Harper 2007, McDowell and Hernández 2010, Beba and Church 2020), suggesting this is a widespread priority across diverse professions. Other important criteria was incorporating DEI in teaching, service, and research, and promoting underrepresented scholars. These evaluation criteria largely align with other best practices in advancing DEI in higher education, including acknowledging systemic racism and historical legacies of exclusion; improving behaviors and attitudes through DEI training and professional development; infusing marginalized perspectives into the curriculum and creating inclusive classroom climates; promoting marginalized scholars through research, recruitment, advocacy, and inclusive lab environments; recognizing the need for accountability; understanding how one's privilege, bias, and learning edges show up in the classroom, research, and mentoring; and explicitly considering bias across all stages of the hiring process (Hurtado et al. 1998, National Academies of Sciences, Engineering, and Medicine 2016, Estrada et al. 2017, Sensoy and DiAngelo 2017, Phillips et al. 2019, Chaudhary et al. 2020).

Our evaluation framework also aligns with and builds on existing scholarship and practice on this topic. For example, a previous review of 39 diversity statements from assistant professor applicants referenced DEI competency, understanding how personal identities influenced DEI approaches and outcomes, DEI training and professional development, inclusive teaching practices, mentoring and supporting diverse students, infusing DEI into research, and engaging in DEI service (Sylvester et al. 2019). The University of California system is one of a few innovative institutions that have developed a diversity statement rubric. This rubric contains similar elements such as assessing candidate's DEI competencies, evaluating a track record of performance in DEI, and outlining plans to advance DEI in the future position. Our framework expands on these evaluation criteria to include a broader list of ways that a candidate may demonstrate their DEI understanding, experience, and commitment. We acknowledge that many individuals hold expertise in DEI, including those that are not DEI professionals. Therefore, testing the efficacy of this framework for advancing equity in hiring is a critical priority for future research.

Our survey findings and expert-derived framework provide timely insights on the advantages and limitations associated with using diversity statements for evaluating faculty candidates and illustrate the need for guidance on using such statements to recognize and reward DEI in the recruitment process. Although not designed for this purpose, our framework may also provide insights on how institutional leadership might evaluate faculty contributions to DEI during annual evaluations, tenure, and promotion. With heightened calls to increase diversity and make intentional progress toward inclusion in STEM (Swartz et al. 2019, Carey et al. 2020, Forrester 2020), it will be critical to have criteria to evaluate what exceptional performance on DEI looks like. If institutional priorities include a diverse workforce and an inclusive and equitable climate, universities and colleges will need to hire and reward faculty that are qualified to foster a multicultural and diverse community of scholars.

Acknowledgments
We are grateful to Tawni Riepe for compiling the DEI experts’ contact information, Brendan Bombaci for conducting an outside peer review of our coding themes, and to Rickey Frierson, Shannon Archibeque-Engle, RiaVigil, Monique Rocca, and Ruth Hulbauer for providing feedback on our pilot survey. Two anonymous reviewers provided helpful comments that improved an earlier version of the article. Funding for data collection was provided by the Warner College of Natural Resources at Colorado State University.

Supplemental material
Supplemental data are available at BIOSCI online.

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