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A Critical Examination of ASEE's Diversity Recognition Program to Promote Changed Practices at PostSecondary Institutions

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A Critical Examination of ASEE's Diversity Recognition Program to Promote Changed Practices at PostSecondary Institutions

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Abstract

In order to inform a discussion of silenced communities within systemic processes, we examine the ASEE Diversity Recognition Program (ADRP) as a step towards amplifying reflexive and critical activities already occurring within ASEE. In light of recent concern over the ADRP as a means of disrupting minority marginalization in Engineering Education¹, we reflect on the origins of the program as well as how to proactively shift the program's cultural context to one of greater criticality about Diversity, Equity and Inclusion (DEI) in engineering, broadly. To investigate this more deeply, our research questions for this study were: What have other organizations used to anoint² member organizations that meet specific thresholds within engineering? What have other organizations used to anoint member institutions that meet a DEI threshold in particular and how else might institutions signal or confirm reaching that bar? How does the ADRP engage with and/or obscure the deepest currents of inequity operating in engineering education?

This investigation is important to understand avenues for promoting DEI within postsecondary engineering institutions of all kinds, to help ensure that these institutions think critically about what their own campus can/should commit to and how their pledges/plans can disrupt stubborn systems of oppression. It further provides a basis for considering when and if it is appropriate for existing entities such as the ASEE to provide stamps of approval for DEI work, while also probing the natural tension between institutions wanting earnestly to earn a "badge of approval" regarding equity and the degree to which transformative practices are actually embraced to alter and reverberate throughout these institutions.

¹We chose to capitalize Engineering Education throughout the paper and not to capitalize engineering as a standalone word merely to help distinguish the two.

²We chose to use the word anoint here to reflect, in part, the power dynamics of one organization bestowing recognition to another organization.

1 Introduction

In 2020, the gut-wrenching murder of George Floyd at the hands of police officers, one of many such episodes in U.S. history, was broadcast on media throughout our country. The Movement for Black Lives [1] and many community groups in many localities spoke out and demonstrated for the end of such state-sanctioned violence and all other historic forms of racism in the U.S. That response and Floyd's murder itself provoked an onslaught of organizations and institutions coming forth with calls and commitments to change their practices to be more inclusive. Many had not previously issued statements about race relations in the U.S. in response to any single event, but had maintained some form of "Diversity, Equity and Inclusion" programming over recent decades. The American Society for Engineering Education (ASEE) joined these calls in 2020, releasing their *Policy Statement by the American Society for Engineering Education on the Implications of the Death of Mr. George Floyd Approved by the ASEE Board of Directors* on June 2, 2020 [2]. The Policy Statement recognized the need to counter and reverse societal harms, noting that "[c]ircumstances or actions that impede diversity, equity, and inclusion are inimical to good engineering practice."

In Holly Jr and Quigley's article on reckoning with the harm of anti-blackness in engineering education, the authors note that their position is to "...engage the discipline of engineering education in a difficult but needed conversation about repairing the harm experienced by Black Americans as they study and practice engineering."[3] To address the issue of anti-blackness in engineering education, as highlighted by the author's position, it is necessary to consciously center this concern across all extant and new systems and programs. This approach is necessary to mitigate the damage caused by discriminatory systems that have impacted Black Americans in engineering education, who presently have fewer options than the majority group, White males. At the same time, the widely shared goal of *inclusion* in existing institutions and epistemics of engineering without critical reflection on those existing forms is problematic; authentically reparative conducts must embrace the possibility that the prevailing pedagogy and practices of engineering might themselves require change in order to be more equitable and just. Put differently: equity and justice aims enacted within the context of engineering require critical interrogation as they would within any societal sector.

We consider here how ASEE, as a uniquely influential organization in U.S. Engineering Education and one primarily made up of non-minority communities (that is, historically comprising both a leadership and membership primarily of majority racial identity) engages these urgent societal matters. Since 2021, ASEE has embarked on an explicit goal of enabling systemic change for broadening participation in engineering through its new Diversity Recognition Program (ADRP), a program that supplies various stamps of approval for institutions that engage in societal changemaking. We are guided to this analysis of ASEE's activity in part by James Holly, Jr. and Brooke Coley's writing on the ADRP, an instigation following the 2022 ASEE Annual Meeting in Minneapolis to consider with deep criticality all national and sectoral claims of progress on racial reform and reconciliation [4].

The ADRP initiative built on a themed year of activity in 2014-2015 by the organization: a "Year of Action in Diversity." With the inauguration of the ADRP, ASEE established itself as both a supporter and an arbiter of effectual DEI programming in U.S. higher Engineering Education. As one of many such programmatic efforts among STEM education institutions in this period, the ADRP

can be helpfully considered in light of practices that mitigate anti-blackness and promote equity in the current period. These practices derive from efforts well beyond engineering and beyond education, of course, and, as described by critical scholarship, suggest a spectrum of reformist intention ranging from ameliorative or symbolic programming to radical anti-racist social transformations [5]. We ask here: In what ways is the organization seeking to undertake its leadership of reformist activity (that is, with what intentions, precisely); and conversely, what form does such activity assume when undertaken by an organization such as ASEE (that is, what intentions are seen as necessary and reasonable by leadership)?

Broadly, the role of sectoral oversight organizations in engineering fields is not a new one ("badging" or certification for say, environmental commitments or "innovation" among engineering degree programs or firms, is now common) but the deployment of such certification in matters of equity and justice calls for focused interrogation, as the social conditions of commendation are themselves racially configured. As we have studied the new ADRP, we wanted to learn more about what other organizations have constructed recognition programs for incentivizing institutions to make changes (in matters of equity and otherwise), as well as how changes at the institutional levels are captured by such programs. Our line of inquiry for this work was directed by the following questions:

- What criteria and expressions of approval have other organizations used to anoint member organizations that meet specific thresholds within engineering?
- What have other organizations used to anoint member institutions that meet a DEI threshold in particular, and how else might institutions signal or confirm reaching that bar?
- How does the ADRP engage with and/or obscure the deepest currents of inequity operating in engineering education?

2 Background

The ADRP program was developed in 2017 as part of ASEE Engineering Deans Council's Diversity Pledge as a mechanism to identify and recognize institutions of "inclusive excellence" [6]. The ADRP's program's "inclusive excellence" positions organizations as those who are achieving competitive advantage through demographic diversity while achieving social justice goals. To identify institutions exemplifying diversity, equity, and inclusion, the program utilizes a fee-based application process where engineering colleges outline their commitments to four core activities of the Deans Council's Diversity Pledge:

1. Develop a Diversity Plan for our engineering programs with the help and input of national organizations such as NSBE, SHPE, NACME, GEM, SWE, AISES, WEPAN, NAMEPA, Campus Pride, Do-IT too and the ASEE³ that would: articulate the definition and the vision of diversity and inclusiveness for the institution; assess its need or justification; provide a statement of priorities and goals; commit to equity, implicit bias and inclusion training across the school; define accountability; and the means of

³National Society of Black Engineers (NSBE), Society of Hispanic Professional Engineers (SHPE), National Action Council for Minorities in Engineering (NACME), The National GEM Consortium (GEM), Society of Women Engineers (SWE), American Indian Science and Engineering Society (AISES), Women in Engineering ProActive Network (WEPAN), National Association of MultiCultural Engineering Program Advocates (NAMEPA).

assessing the plan through various means including surveys.

- 2. Commit to at least one K-12 or community college pipeline activity with explicit targeted goals and measures of accountability aimed at increasing the diversity and inclusiveness of the engineering student body in our institution.
- 3. Commit to developing strong partnerships between research-intensive engineering schools and non-PhD granting engineering schools serving diverse populations in engineering.
- 4. Commit to developing and implementing proactive strategies to increase the representation of diverse groups in our faculty.[6]

The program utilizes a hierarchical "badging" (recognition) system (e.g., bronze and silver) to recognize degrees of dedication toward increasing diversity in engineering. These badges are intended to acknowledge institutions that pledge themselves to ADRP's goals of *continuous improvement* in engineering diversity and inclusion projects. The purpose of ADRP is to promote DEI by reviewing DEI commitments from engineering colleges as well as their goals and progress over time. Reviews are conducted by Deans who are active in ASEE and all institutions accepted into the program. The program utilizes "badges" to recognize degrees of dedication toward increasing diversity in engineering. These badges are intended to acknowledge institutions that pledge themselves to ADRP's goals of "continuous improvement" in engineering diversity and inclusion projects. The program has given these badges to over 130 public and private engineering schools and continues to accept applications for Bronze, Silver, and Direct to Silver Badges with plans for a Gold tier in the future. The Bronze badge requires that:

- The institution is a member of the ASEE
- The Dean has signed the Diversity Pledge and is a member of the Engineering Deans Council (EDC) or Engineering Technology Council (ETC)
- There are academic support programs for underrepresented students in engineering.
- The institution has at least one pipeline activity with a community college (or equivalent) or high school.

Furthermore, the application must be submitted with a cover letter, a DEI plan, and a narrative including at least three years of demographic information from the institution as well as how the institution intends to implement its DEI plan. As stated on the ADRP website, the application for the Silver badge requires, in addition to everything from the Bronze application,

- Achievements to date and progress towards achieving the goals identified in the diversity plan; include actions undertaken, metrics used to measure progress, and the current status of initiatives and metrics.
- Update on the college culture and how improvements in inclusivity are being measured and progress in culture since the bronze award.
- Sustainability plan: Clear 3-year plan for future progress including actions taken to make sure the progress is sustainable, embedded in college systems and structures, and further enhances diversity

• The Narrative must include three years of demographics for your College since the original recognition at the Bronze-Level

Direct to Silver is an application option for institutions that had not previously been awarded the bronze badge but are capable of meeting the criteria of both bronze and silver. Standards are as listed:

- The engineering program must demonstrate that they already fulfill the basic requirements of Bronze-level criteria...
- The engineering program must also meet the minimum graduation requirements:
- Graduation of a minimum of 200 undergraduate and graduate engineering students over a 6-year period. Graduates of computer science programs can be included in this total if the degree is conferred from the engineering college or equivalent academic unit.
- nd one of the following two criteria:
- Graduation of 55% or more underrepresented minorities[1] in engineering over a continuous 6-year period, as measured by the number of degrees conferred to underrepresented students as a total of the degrees conferred[2].
- Graduation of 40% or more female students in engineering over a continuous 6-year period, as measured by the number of degrees conferred to females as a total of the degrees conferred[3].

To date, the program has given these badges to over 130 public and private engineering schools at the Bronze level. With the increasing institutional commitments to DEIs, the ADRP programming has expanded to include silver levels that quantifies the outcomes of participating institution's DEI initiatives through demographic shifts. In time, the goal is to expand to a three-tiered recognition system with increasing accountability to DEI outcomes.

Over the last five years, the ADRP programming has operated in the background of ASEE's broadening participation efforts with limited critique from the engineering education community of scholars. However, more recently scholars, like Holly Jr and Quigley (2022), have called attention to the idealization and aspirational nature of certification programs that reinforce the silencing of the harmful impact of institutional conditions, societal context, and epistemic commitments across Engineering Education. Although Holly, Jr. and Coley's (2022) critique was situated in engineering education, similar critiques about the unfilled promises of higher education institutions resonate in social movements like #BlackintheIvory [7] and books like Allen and Stewarts (2022), We're Not OK: Black Faculty Experiences and Higher Education Strategies [8]. We imagine through the examination of ADRP, we can support engineering institutions to move from aspirational commitments to action that intentionally disrupt oppressive systems like racism, sexism, heteronormativity, ableism, among others that are counterproductive to promoting "inclusive excellence".

3 Characteristics/Functions Existing Recognition Systems

Formal certification or badging systems have a long history in U.S educational and commercial realms. From the first licensing of individual practitioners or businesses in manufacturing and construction sectors commencing in the mid-nineteenth century, the role of professional and trade

organizations in overseeing technical practice has been firmly established by the private sector. Systems of training, licensing and certification by private entities for the purposes of meeting safety or other standards in engineering date from at least the turn of the twentieth century, and whether structured as individual or organizational credentialing, such programs necessarily reflect prevailing societal concerns. For example, in the early twentieth-century U.S., fear of fire and associated property risks inspired urban fire safety certification efforts; in the 1990s, the widely celebrated LEED certification system (Leadership in Energy and Environmental Design) captured growing concerns about environmental sustainability in building and infrastructure [9, 10]. The LEED certification program models the tiered system of "bronze, silver and gold" commendation that ADRP shares, and conveys a possibility of virtually infinite, continuous improvement among committed participants, a point to which we will return below.

Racial, gender, ethnic and other forms of *diversity* are today an established concern in engineering schooling and employment, and the ADRP like other historical systems of commendation seeks to answer stakeholder concerns regarding these matters. As the history of sectoral standards, codes of ethics and other self-regulating instruments in engineering fields suggests, the adoption of certification systems by private actors raises questions of how deeply, and with what focus, the organization seeks to enact its reforms and enforce its oversight [11]. Trade organizations in the U.S. famously undertook the creation of materials standards to forestall government regulation after the National Bureaus of Standards came into being around 1900. We do not suggest here any lack of authentic concern for public welfare in any private regulatory work, but at the same time, the sociocultural and economic aims of private organizations (whether for-profit or non-profit) invariably condition any such efforts. Rather than seek a metric by which the outcomes of such efforts can be gauged on the terms of their own creators, we suggest that all such self-surveillance might be historicized; that is, understood in the sociopolitical context in which stakeholders seek to enact such incentives and rewards. "Diversity" is no exception.

For this reason, we outline in this paper questions regarding the specific formulations of diversity, or of equity or inclusion (and regarding the purported need for any of these) in Engineering Education, to which the ADRP (both in its design and members' participation) avowedly constitutes a response. In a landscape of widely shared concern regarding DEI but of limited impactful programming, how does the approval offered by elite arbiters or authoritative organizations for DEI efforts potentially constrain and support transformative change? Such approval is, in a general sense, easy to come by for individuals able to pay the associated costs: many such options, ranging in price from a few hundred to many thousands of dollars, exist at this writing for individual "Diversity and Inclusion Certification" in human resources and other fields of employment, including education. We do not have the space here to analyze the contents of these various options, but we note that the value ascribed to such preparation is typically market-based:

Here's a thing about diversity in the 21st-century workplace: it's not just a nice-to-have, but it's critical for your organization to thrive and stay ahead of your competitors. [12]

The reputational benefits for the individual certificate holder and employer are patent here. Similarly, the efforts of Diversity, Inc. a private enterprise inaugurated in the 1990s as a news source on diversity hiring developments and subsequently expanded to provide "data, products and services" to fee-paying major corporations interested in DEI (i.e., software packages, workforce man-

agement tools), positions its constituents advantageously in the open market; however, members companies' hiring or related activities may actually proceed.

For example, Diversity, Inc. operates an annual "top 50" competition to identify outstanding member organizations dedicated to diversity: this, we are told by Diversity, Inc., "...is a metrics driven evaluation that is independent of the business done with our company." In operation, the program uses a 200-question survey that collects "numerical, categorical or Likert-type questions" across several categories; results standardized on a 100-point scale and all participating companies are ranked to find the top 50. Issues of self-reporting aside, we might point out that the identification of a "top 50" set of DEI businesses predicates effectual diversity-related conduct on the part of these businesses; this is a relative ranking and among other choices made by its creators, we find no engagement in Diversity, Inc's self-description with, say, the concerns of such groups as the Black Lives Matter movement; organizations committed to abolitionist or reparation efforts; to groups advocating for the reform of immigration and educational policies; or others representing the heterogenous concerns of BIPOC and other minoritized communities in the US.

We do not denigrate the positive societal impacts deriving from reputational incentives for corporate DEI exertions (or those of public institutions) or for that matter, those arising from any market-, legal- or other ultimately financial sources of authentic social change. However, the foundational notion of diversity as financially desirable is diametrically opposed to any deep challenge of the racial- capitalist structures on which racism (and other historically durable forms of majority dominance in the U.S.) are based. Ongoing U.S. commitments to the concentrations of wealth, systematic deskilling of labor, and deindustrialization are naturalized (in fact, invisibilized) despite their proven role in the preservation of racial inequity [13–15]. We see in these operations of corporate DEI initiatives such as Diversity, Inc. important questions to be raised about the transformative possibilities of ADRP.

4 Implications for the ADRP

It is important to note that the ADRP creates the possibility of multiple impacts within each participating institution; some welcome, and others more likely to discourage reform or repair to race relations in the academy. First, a school's participation in ADRP can very directly provide personnel with a rationale for dedicating new resources to DEI activities. But as well, joining the ADRP might help advocates justify the resourcing of DEI efforts that might otherwise not find support in a given institution, including at smaller schools that feel generally unable to allot funding to DEI activities; conservative venues largely disinclined to take up such efforts; and in politically threatening settings where race-focused educational programming might be discouraged by officials (such as Florida).

In these instances, school membership in ADRP may provide evidence that DEI activities offer a valuable form of parity with other member schools. That is, a school at which DEI is an underresourced commitment may see the value in a certification because it brings an association with prestigious institutions. Because many Engineering programs sited in Ivy League and other elite private universities and at large land grant schools hold Bronze status, other schools might wish to share that certified status, either as a way to be seen as DEI advocates, or simply to appear more like prestigious institutions in their allocation of resources.

At the same time, in schools where personnel are held responsible for applying for ADRP Bronze

status, but given little time or resources to carry out planned DEI activities, ADRP membership may become a stand-in for wide-ranging or authentic institutional change. Similarly, if an ADRP institution does not actively structure its formal DEI efforts with input from all faculty, from staff, and from students, it may silence the voices of those community member, even as it appears in a certain light to move towards new and commendable inclusive programming. That is: ADRP membership does not represent a singular set of changes or even a singular concept of what equitable Engineering Education might be. In particular, more radical conceptualizations of reparative or redistributive change in higher education and STEM fields, which engage with historical conditions of racial or gender subordination, may be marginalized.

Of major significance here is the new "Direct-to-Silver" element of the ADRP. Intended by ASEE to commend historically Black colleges and universities and other minority-serving engineering institutions. The Direct-to-Silver option highlights the successes of these schools in graduating BIPOC engineers, the demographic aim of DEI programs broadly. However, this badging option, in lending parity to historically minority- and majority-serving institutions, effectively silences all historical patterns of racial enslavement, segregation, under-resourcing by government, and occupational stigmatization with which those schools have contended. As well, the ADRP Direct-to-Silver badging system elides the role of MSI's in creating pro-Black or other transformative sociabilities in engineering and other occupational fields as part of their educational impact. In short, the history and politics that have produced institutions of different racial demographics in the U.S. disappear with the singular badging system and with them, possibilities for the authentic address by the majority-led sector of causes of both past harms and future repair in Engineering Education.

5 Conclusion and Future Work

The framing of this research project has centered on the understanding that any efforts directed at creating more equitable conditions of learning and work in the United States must contend with deep and broad historical commitments in the nation to maintaining current distributions of opportunity. These conditions are complex and often ambiguous, involving discourses of democracy and meritocracy, but also stubborn structural impediments to equity at local, state, national and cultural levels; all require deeply critical address. Engineering education, even as it is unquestionably directed towards the equipping of individuals with the skills and knowledge needed for secure and remunerative life work, is no exception. Put simply: The inclusive and even generous intentions of programs such as the ADRP, meant to scale up positive developments in the field, must engage with tremendous cultural and institutional obstacles to this projected scale-up. Such unalloyed positive intentions, when experienced as an unquestioned part of the solution to racial discrimination, can sometimes turn our attention from those obstacles. Both the good and harm potentially enacted by institutional projects like the ADRP need to be addressed in a critical and ongoing way if higher education in the U.S. is to change.

This project acknowledges that the ASEE is a by and large community of liberal sensibilities, in the sense that few members of this community are anything other than fully supportive of change in a system that almost all accept is not yet one of equity and inclusion. But again, intention does not automate reflection. If the ADRP is to enact its considerable promise of transformative social impact, to use, in other words, its clout among educators, administrators and policy makers, the landscape of inequity and conservativism in which it operates must be interrogated. Going

forward, the historical, pedagogical and institutional features of that landscape are the objects of our inquiry.

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