

Committee Name: Diversity, Equity & Inclusion (CDEI)

Committee Chair: Rebecca Bates

Committee Members: Susan E. Walden (Vice Chair), Eric Specking (Past Chair), Emily

Allen (EDC Rep), Christopher Carr (Diversity Organization Rep), Rocio Chavela (Headquarters Rep), Daryl Chubin (Member-at-Large), Kristen Constant (Member-at-Large), Carol Lamb (ETC Rep), Olga Pierrakos (Member-at-Large), Meagan Pollock (Pre-College Rep), Rachelle Reisberg (Women in Engineering Rep), Alice Squires (CMC Rep), Darryl Williams (Minorities in Engineering Rep), Gary Steffen (ex officio, ASEE VP, Member Affairs), Tari Road (ex officio, External Committees)

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Committee Objectives:

In November 2017, the goals of the CDEI were aligned with the mission and goals of ASEE. CDEI responds to three charges per our strategic plan: 1) increase visibility and discussion of DEI issues; 2) develop guidance to foster inclusive environments in which all engineers thrive; and 3) facilitate and encourage adaptation of strategies to promote the empowerment of all.

Internally, we prepare a performance report outlining the activities, progress, and plans of eight CDEI subcommittees. The subcommittees are: Communication, Conference Planning, Conference Programming, Leadership, Partnership, Policy/Letters, Professional Development, and Strategic Plan. An Executive Committee—the authors of this report—consists of the chairs of the subcommittees and other members of the CDEI, including representatives from other ASEE committees and councils. Each subcommittee completed a self-assessment that linked their activities to the committee charges, described the performance of each, and rated them as either making *adequate* progress, falling *short*/too soon to tell, or showing *no evidence* of progress. We regularly address the challenge of successfully executing emerging activities and needs, while balancing making progress toward fulfilling the larger scale objectives articulated in the strategic plan.

Progress (2018-2019):

This report summarizes the scope and impact of all CDEI activities in 2018-2019. The underlying performance matrix (i.e., the raw data) is available for inspection. Highlighted below are the big-picture items that demonstrate efforts to suffuse DEI throughout the workings of ASEE.

Many of the activities reported here relate to the Annual Conference for which final metrics are not available (e.g., Diversity Pavilion, Division Mixer Table, Footprints). Last year, the Pavilion

was consistently staffed by Committee members and delegates and there were many visitors. This year, we plan to try to count Pavilion visits to quantify the visibility of CDEI activities. Similarly, program sessions at the 2018 conference were extremely well attended and required larger rooms in some cases.

Note that whereas many activities extend what was done in 2018, many suggestions from the Roundtable Discussions were implemented (e.g., LBGTQ+ President's reception, highlighting of veterans). Across all subcommittees, 6 of 13 discrete activities are rated adequate. Only one potential action is rated no progress: an ASEE membership survey of climate within ASEE. This is in part due to potential survey fatigue within the society, but it affects our ability to assess the long-term impact of the committee. We instead use indirect measures such as descriptions of activities and counts of participation to measure impact.

Balancing the strategic actions with emerging requests is underscored in the CDEI ad hoc subcommittee evaluation of the STEM Inclusion Study (SIS) report (formed of members from the Policy/Letters subcommittee), which was directed to ASEE as a whole. While many of the recommendations contained in the SIS outline actions that ASEE should be taking, the ad hoc sub-committee found that the suggestions "focused on treating symptoms and not causes." That evaluation is reported separately and included as an addendum to this report.

In response to a request for recommendations for demographic data collection approaches, CDEI proposed an expanded data collection effort for the membership database and for the College Profiles Survey that would encompass gender identity, race/ethnicity, disability, and other issues (e.g., pathways to engineering and childhood socioeconomic status.)

In addition, during the 2018-2019 academic year specific subcommittees did the following:

Communication: The CDEI website is continually updated and is transitioning to Wordpress to allow for easier updates. This update will be rolled out before the 2019 conference and is part of a structural change that makes diversity.asee.org a formal landing page for all ASEE diversity work, with the CDEI website moving to diversity asee.org/deicommittee. From May 2018 to May 2019 the current website garnered more than 2,000 unique visitors and over 4,500 page views. Almost 30% of the visitors were from outside the US.

> The CDEI has two newsletters per year. The Winter 2019, Issue No. 10 ASEE Diversity was distributed Feb. 2019 by ASEE headquarters. Issue No. 11 is planned for early June 2019.

Conference Planning:

The Diversity Pavilion was designed and created in conjunction with ASEE headquarters staff. This year's *Pavilion* highlights the added emphasis on diversity in the classroom and will contain handouts on best practices, resources, and CDEI's paper program. Social media, resource raffles, partnering with the P-12 committee, and enhanced in-person interactions are planned to increase *Pavilion* traffic and visibility. The *Footsteps* project continues as a messaging agent that creates awareness of themes and issues. Pronoun stickers for badges will be available at the Pavilion and ASEE information booths. CDEI worked with headquarters to offer enhanced resources during the 2018 Annual Conference, which included: scooters, childcare, gender neutral restrooms, mother's room, a quiet room, and closed captioning during plenaries. These are continued for 2019 and are highlighted on the conference website under ADA accommodations and on-site services. While these resources have been set up by Headquarters staff, we want to highlight how important it is. We will advertise these resources at the Pavilion to amplify their importance.

Conference Programming:

In 2019, sixteen of 54 divisions (30%) submitted a Best Diversity Paper nomination and they received four reviews each. From that pool, five were selected as finalists. Reviewers note that the quality of submissions in terms of diversity foci and building on appropriate literature has continued to improve. This demonstrates that the ASEE membership is starting to understand the difference between quality DEI research compared with research that tangentially contains or addresses DEI issues. There were also submissions for special sessions which were divided into CDEI Conversations (5 sessions) and CDEI Professional Development (3 sessions). We continue to host Safe Zone sessions (5 sessions) and cosponsoring an additional SZ session with the Student Div. Mel Chua and Ian Smith will lead a Distinguished Lecturer session presenting, "Alternate-Universe ASEE: An Engineering Education Conference Session from a World where the Majority of Engineers are Deaf." This session was accepted and is scheduled in a Wednesday, 9:45-11:15 am, Distinguished Lecturer slot followed by the annual CDEI RoundTable Conversations on Diversity, Equity, & Inclusion.

Because there are no committee-sponsored paper sessions other than the Best Diversity Paper session, there are additional professional development sessions as well as workshops and round table discussions.

The Best Diversity Paper award winner for 2018 was "Effects of Research and Internship Experiences in Engineering Task Self-efficacy on Engineering Students through an Intersectional Lens," by Abisola Kusimo, Marissa Thompson, and Sheri Sheppard (all from Stanford University) and Sara Atwood (Elizabethtown College).

The Committee on Diversity, Equity, and Inclusion selected a Best Paper from those submitted to the committee's technical program to be considered for the Best PIC Paper award. The Committee's best paper honor was awarded to: Dr. Alice L. Pawley (Purdue University, West Lafayette), Dr. Joel Alejandro Mejia (University of San Diego), and Dr. Renata A. Revelo (University of Illinois at Chicago) for their paper, "Translating Theory on Color-blind Racism to an Engineering Education Context: Illustrations from the Field of Engineering Education."

Partnership:

The Partnership subcommittee had a slower start this year. Because funding for awards for the Student Essay/Video Contest was not allocated and because there was limited participation with the Student Division delegates, funding for the contest was not secured. The announcement is ready to go, but has been set on the back burner until it is clear that there is value in the contest for both the participants, the Committee and the broader community. The video contest now has competition with the ASEE contest. We plan to evaluate the impact of the essays as we consider the best approach to moving forward.

The ASEE Corporate Member Council updated their bylaws to include the Corporate Member Council diversity statement. As part of Industry Day at the Annual Conference, CMC is holding a session on Brainstorming Diversity, Equity, and Inclusion Approaches and Challenges to Industry.

Policy & Letters: The Policy and Letters subcommittee has written letters of support to engineering education researchers who have been under attack because their research addresses issues of diversity, equity and inclusion. These letters are then sent by the chair.

> This group has also developed a response to the STEM Inclusion Study that was sent to ASEE earlier this year. The response includes our prioritization of recommendations from the SIS report.

Professional Development:

This is a new subcommittee created in part to formally address the need for non-paper programming at the conference and to address the Committee goal of educating ASEE members about strategies that promote inclusive environments. Two formal sessions will be held at the conference with the expectation that they can become webinars in the future and be made more widely available. The artifacts and resources will be available on the CDEI website.

Strategic
Planning &
Assessment:

Contributions include the development of an assessment matrix for the Committee and creating a form where the subcommittees can record activity and connect it to Committee goals. This has involved planning for assessment across the year with an eye towards updating the strategic plan in the next year or two.

A significant change this year is that there are no Committee paper sessions. We will be evaluating the impact across the society by counting papers related to diversity, equity and inclusion across the annual conference. Early investigations show that there may be a decrease in scholarship published. While this is likely counteracted by publications at CoNECD, this may be shifting scholarly dissemination away from the broader ASEE community.

To-Do List (Present and Future Goals for 2019-2020):

Along with maintaining our activities that support visibility and inclusion across the ASEE membership, including the Best Diversity Paper award, the pavilion in the exhibit hall, conference programming and other professional development activities, we highlight the following goals for the coming year:

- While most of the DEI efforts are led by CDEI (and branded as such), they focus primarily on the Annual Conference. Future discussions need to support year-round engagement as well as strategies outside of CDEI.
- The new website should support cross-council and cross-committee support of DEI efforts; therefore, maintaining the website as a whole should be a priority.
- The quest for metrics that capture the plethora of ASEE activities and impacts continues. Rating of progress this year is a step toward continuous improvement of performance. But tallying outcomes is not a measure of impact, e.g., on different ASEE constituencies.
- A climate survey is recommended as part of the STEM Inclusion Study response and the Partnerships subcommittee recommends a survey to identify partner assets that could

- be leveraged. Establishing a baseline in both of these areas would help inform the new strategic plan.
- There should be an assessment of the impact of both the Committee's paper sessions in the past and the lack of paper sessions in 2019 on diversity scholarship presented at the ASEE National Conference.
- Ways to increase involvement of all divisions are needed (Conference Planning).
 Likewise, the matrix template for reporting activities and progress should include recommended actions for engaging ASEE sections.
- Boosting CDEI's presence at ASEE regional conferences and those of partner organizations (e.g., NSBE, SHPE) would create a reciprocity of commitment to DEI that benefits all.
- The EDC Diversity Recognition Program has garnered submission of DEI plans from 82
 Deans, but this certification process is directed to engineering schools and departments,
 not to the ASEE environment per se. We should be leveraging these practices to
 support DEI within our society and in the constituent home communities.

Many of the recommendations above directly implicate ASEE leadership. Overall, there is a need to raise ASEE's visibility of DEI support and practice. This is echoed by the SIS report recommendations that include ideas for revamping special sessions and the visibility of diverse speakers at the Annual Conference. Moreover, just as the SIS report encouraged ways that ASEE might move beyond its specific recommendations to solidify its leadership in diversity, equity, and inclusion, CDEI urges a strategic plan that embeds DEI throughout the organization (currently, for example, there are ten Divisions/Councils with President-appointed CDEI Representatives.)

Executive Director Fortenberry and President Farrell observed that the SIS study, while not specific to ASEE, documents "perceived harassment, discrimination, and under-valuation in the workplace." This is a reminder that remedies must permeate all corners of the organization in support of our members, top-down and bottom up, in committees, sections, and divisions. That is what a supportive and productive work culture requires. CDEI remains a principal, but should not be the sole driver of such cultural change.

Submitted by: Rebecca Bates, Susan Walden, & Eric Specking (CDEI Leadership Team) and Daryl Chubin & Tasha Zephirin (Subcommittee Chairs on Strategic Planning)