The WSCOE Diversity Plan supports the realization of the campus vision that “CSU will be the best place to learn, work, and discover.” This Plan is intended to give renewed impetus to diversity and inclusion efforts in the College by focusing on specific goals and identifying a set of tangible actions the College will undertake in 2018-2019.

The first step in developing this plan was a survey of WSCOE faculty and staff to prioritize goals. Based on survey responses, the WSCOE diversity plan for 2018-2019 will focus on taking tangible actions that support advancing the following goals from the CSU strategic plan:

- improve retention and promotion of marginalized and excluded faculty, staff and students; and
- develop cultural competency of all faculty, staff and students.

**WSCOE Goal 1: Improve the success and retention of all undergraduate students, with emphasis on students of color, women, and first-generation students.**

Goal summary: Students of color, women, and first generation students are historically underrepresented in the field of engineering. It is important for the college to continue efforts to support these students. For this reason, in the first year of this diversity plan the college will place particular emphasis on supporting students of color and first-generation students where gaps in persistence and graduation do exist. Analysis of the activities within the college indicates that we already have a number of programs in existence through the Engineering Success Center, various student organizations, and within individual departments that are intended to provide support and community to students who are underrepresented in engineering. However, these programs have not always been specifically designed to move the needle on persistence and graduation and a more intentional approach is needed.

**Analysis**

- Explore and analyze achievement gaps between student populations (first generation, students of color, gender, etc.).
- Retention and persistence trends for WSCOE undergraduates from 2008-2017 are shown in Figure 1. Women retain and persist at essentially the same rates as all students. However, underrepresented students and first-generation students retention rates after their first year are 5% lower, and persistence rates to graduation in engineering are 8% lower.
CSU recently released *Access to Excellence: Eliminating Graduation Gaps at Colorado State University*. This report has five strategic actions that are intended to close graduation gaps for students of color, first-generation college students, and Pell eligible students. The WSCOE will use these actions that have been established by groups of experts from around CSU to guide our college efforts to close persistence and graduation gaps in our college.

**Implementation**

- The WSCOE will take specific steps within the college on 4 of the 5 strategic actions identified by the *Access to Excellence* report during the next year.

1. **Promoting Engaged Learning in the First Four Weeks (FFW)**
   - The college will send a representative to each of the four undergraduate department’s pre-semester retreat/meetings to inform faculty of the FFW initiative before the start of the Fall 2018 semester. (Becki Atadero and Dan Baker coordinate the Master Teacher Initiative (MTI) for the WSCOE, Karan Venayagamoorthy is a member of the sub-committee that helped develop this initiative for the SSI-2)
   - The MTI coordinators will send out teaching tips to all instructors in the college before the start of the fall 2018 semester and will remind faculty again before the start of the Spring 2019 semester.

2. **Developing Readiness in Foundational Skills**
   - Based on the *Access to Excellence* report this strategy is comparatively less developed at the University level. Math has been identified as a particular barrier for many underrepresented students. As the math department is
working to achieve this strategy the WSCOE will provide support in appropriate ways (Anthony Marchese, Associate Dean for Academic Affairs).

3. Scaling Up Proven, Targeted Approaches and Extending Support through Degree Completion
   - The CSU strategy includes extending the reach of the Community for Excellence and the Key Academic Communities. The WSCOE will incorporate more activities within the Engineering Learning Communities and increase the number of cohorts of our students participating in Key Communities to build community.
   - In addition, the WSCOE will extend/enhance two existing support and community building activities in the college:
     i. The Peer Mentoring Program run through the Engineering Student Success Center will be enhanced by including formal training of peer mentors, increased participation of students as mentors, and formal meet-ups with faculty and industry mentors. This will be led by the Associate Dean for Academic Affairs and Staff of the Engineering Success Center.
     ii. The college will provide targeted support for Engineering student organizations that support students of color (NSBE, SHPE, AISES, etc.) to help these organizations grow their membership. We will need to work with the student organizations to understand what they want to do, but a successful model used by SWE is to invite incoming students to a networking reception at the very beginning of the semester. (Resources for this activity will be provided by the dean, including funds to pay for food and space as well as administrative assistance to coordinate the function and invite potential students)

4. Promoting Identity and Inclusion in the Majors
   - Prof. Becki Atadero is the CSU PI of a collaborative NSF Improving Undergraduate STEM Education grant aimed at developing inclusive professional identities in engineering and computer science students. To date this project has introduced several activities into all of the first-year engineering courses that are intended to teach students about the importance of diversity in engineering and inclusive behaviors. In the next four years this grant will continue to support the integration of diversity and inclusion activities relevant to engineering into sophomore, junior, and senior level engineering courses. (Becki and her project team will lead development of activities, the college will support this effort by encouraging faculty to participate in the project and providing logistical support when needed.)
   - We will also hold at least one session with our graduate teaching fellows (GTFs) who work with faculty to enhance early engineering courses to talk
about the value and importance of diversity in engineering and inclusive behaviors. (WSCOE Diversity Manager Melissa Burt and GTF coordinator)

5. Empowering and Equipping Faculty and Staff through Professional Development
   - The Master Teacher Initiative will hold at least one lunch meeting per semester devoted to inclusive teaching practices. (Becki Atadero and Dan Baker)
   - Incorporate listing participation in professional development training to Faculty Activity Reports.

Evaluation

The impact of activities under strategies 1-5 will be evaluated as follows:

1. All faculty teaching undergraduate courses will be asked to report on any changes to their course based on the first-four weeks emphasis at the end of the Fall 2018 semester.
2. Strategy 2 will not be evaluated as it is unclear at this time what role the WSCOE will play in this initiative.
3. Focus groups or interviews will be conducted with students who participate in the peer mentoring program and the targeted student organizations. The College will hire consultants during late spring 2019 to conduct these focus groups and to analyze the resulting data.
4. The NSF project has a strong research component (including education researchers as collaborators) and each of the new activities will be evaluated when they are piloted in the courses. The project is also working to collect longitudinal data to see the cumulative impact of the curriculum changes as students move through their degree programs.
5. Faculty will be asked to report any diversity, equity, inclusion related professional development or participation in College diversity, equity, and inclusion activities on their FAR.

Finally, we will continue to track the persistence, graduation, and other measures of success of all students and monitor gaps for students of color and first-generation students.
WSCOE Goal 2. Develop cultural competency of all faculty, staff, and students (with an emphasis on graduate students) to promote and support an inclusive College climate.

Goal Summary: The development of cultural competency of all faculty, staff, and students is imperative for an inclusive climate within the College. To promote faculty, staff and graduate student participation the college will use a bottom-up strategy for building community and establishing engaging and useful professional development opportunities. A Diversity, Equity, and Inclusion committee will be formed representing the various departments and units of the WSCOE. The Dean’s office and upper administration will provide strong support for the efforts and findings of this committee.

Analysis

- Utilize Campus Climate surveys (e.g. University Climate Survey, Standing Committee for Women Faculty, Graduate Climate Survey, and the Dean’s re-appointment survey) results to provide information on the experiences relative to inclusion of all stakeholders in the College.
  - Specifically, from the SCSWF report the following topics were recommended as areas of focus:
    - Greater consistency and transparency in application of university (or college) policies.
    - Parental leave and FMLA
    - Grievance processes
    - Evaluation protocols
    - Hiring (are all departments following a similar process, what techniques can be shared to produce more diverse pools?)
    - Distribution of service work and credit given
  - From the 2016 Climate Survey report
    - “Among the focal areas Executive Leadership and Accountability Standards emerged as having the least favorable perceptions among employees. For example, less than a quarter of respondents agree CSU leadership is transparent in their decision-making and less than a third of employees agree university leaders adequately address negative or inappropriate behavior in the workplace.”

Given these responses, although they are representatives of the University community, we feel that these are important areas for the focus of WSCOE’s activity.

Design

- Establish WSCOE Diversity, Equity, and Inclusion committee with representation of faculty, staff and students (both undergraduate and graduate) from all WSCOE units and departments. Staff support and other needed resources to support the work will be provided by the College.
Implementation

The WSCOE Diversity, Equity, and Inclusion committee will focus on the diversity goals of the WSCOE strategic implementation plan. During year 1 this committee will be charged with:

1. Summarizing the results of the various climate surveys as they relate to WSCOE.
2. Establishing the type of professional development faculty and staff should participate in, and determine incentives to encourage faculty and staff participation in the professional development opportunities.
3. Organizing two WSCOE specific professional development opportunities for College employees (one per semester). This will be led by the WSCOE Diversity Manager.
4. Identifying activities to encourage community building within the college (based on the Principles of Community)
5. Establishing a Responsible Conduct for Research course for graduate students within WSCOE where diversity and inclusion can be explicitly addressed (e.g. model this after the course in Atmospheric Science).

Evaluation

- Collect baseline data from past climate surveys that will be used to form strategies for on-going efforts to build community and improve the culture of the College. Future climate surveys will be used to measure progress on improving our climate.

- Work with Institutional Research to develop questions for WSCOE in the upcoming CSU climate survey.