Engineering Deans Gender Equity (EDGE) College Self-Assessment Tool: Foundations for Strategic Change—Overview, Model, and Application

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Webinar Goals
- EDGE Initiative Dean “Asks”
- Review of Prior EDGE Showcase Webinar & 2018 EDGE Dean Research
- ADVANCE & APLU Tool foundation for EDGE College Self-Assessment Tool
- APLU Model & Tool research-based foundation
- Lessons learned from APLU Tool Application

Poll 1: How long have you served as dean?

<table>
<thead>
<tr>
<th>Years of Service as College of Engineering Dean</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between 0-5 years</td>
<td>73%</td>
</tr>
<tr>
<td>Between 5-10 years</td>
<td>9%</td>
</tr>
<tr>
<td>Between 10-15 years</td>
<td>9%</td>
</tr>
<tr>
<td>15+ years</td>
<td>37%</td>
</tr>
<tr>
<td>Dean Designee</td>
<td></td>
</tr>
</tbody>
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Poll 2: Have you signed the ASEE Deans’ Diversity Pledge?

<table>
<thead>
<tr>
<th>% of Respondents</th>
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<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Not yet</td>
</tr>
<tr>
<td>I will ask my dean</td>
</tr>
<tr>
<td>I don’t plan on asking my dean</td>
</tr>
</tbody>
</table>

Email Geraldine Goding g.gooding@asee.org to sign the ASEE Deans’ Diversity Pledge.
How long have you engaged in gender equity work?

Poll 3: How long have you engaged in gender equity work?

<table>
<thead>
<tr>
<th>% of Respondents</th>
<th>Just started (&lt;1 year)</th>
<th>Between 1-5 years</th>
<th>Between 5-10 years</th>
<th>10+ years</th>
<th>I am not a CoE Dean</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>31%</td>
<td>31%</td>
<td>13%</td>
<td>25%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Years Engaged in Gender Equity Work

Virginia Valian, PhD

EDG E Showcase Webinar (Nov. 14, 2019)

https://edge.asee.org/webinar-series

(2019) ASEE EDGE Deans Survey

- N = 90 Engineering Deans
- Responses to questions regarding gender equity knowledge, attitudes, and behaviors

Deans say they hold leaders accountable

#1 Key Takeaway

This is especially noteworthy for subtle inequities like teaching and service loads

Aaaah! Something went wrong

Brace yourself till we get the error fixed.
You may also refresh the page or try again later
**92%** of deans say they hold faculty leaders accountable for assigning fair and equitable teaching loads

**Vs**

**32%** of deans say they track teaching loads by gender

**87%** of deans say they hold faculty leaders accountable for assigning fair and equitable service loads

**Vs**

**26%** of deans say they track service loads by gender

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How can you hold people accountable if you don’t collect the data?

Even something as important as salary tracked by gender, only **72%** of deans say they track this data.

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#2 Key Takeaway

To foster a diverse, equitable, and inclusive environment, deans must collect gender equity data and establish benchmarks.

Chat 1: If you were to design a gender equity self-assessment tool, what type of information would you want to know?
Chat Example Response

“If you were to design a gender equity self-assessment tool, what type of information would you want to know?”

What type of tools would you consider using to help inform college-level efforts to address gender diversity, equity, and inclusion?

Poll 4: What type of tools would you consider using to help inform college-level efforts to address gender diversity, equity, and inclusion?

Foundation: Review of ADVANCE Tools

https://www.nsf.gov/crssprgm/advance

NSF ADVANCE Indicators

1. What is the distribution of science and engineering faculty by gender, rank and department?

Number of men and women tenured and tenure-track faculty by department, rank and gender

Number of non-tenured men and women faculty (e.g., Instructional, Research, Clinical, Postdoctoral)
3. What is the gender distribution of science and engineering faculty in leadership positions in the institution?

Number of men and women scientists and engineers in leadership positions

4. What is the allocation of resources for science and engineering faculty by gender at the institution?

- NSF ADVANCE Indicators
- AACU’s Gender Values: [https://www.aacu.org/gendervalues](https://www.aacu.org/gendervalues)
- NSF ADVANCE-funded IDEAL-N Gender Equity Index
  Bilimoria & Jane (2018)

Example Other Tools Explored

- Inform gender equity corrective action
- Provide quality data for external funding requests to help effect change
  - [e.g., NSF ADVANCE funding; Broadening Participation funding, foundation funding],
- Demonstrate Award-Winning Improvement,
  - [e.g., ASEE Diversity Award, SEA Change Award],
- Set College of Engineering deans to be in positions to help lead institutional diversity work, and
- Eventually, provide a means of comparison with college peer institution, and with national benchmarks
Rethinking the “Pipeline” Problem: Centering the Institutional Role in Increasing Faculty Diversity

The pool is very small. In 2011, blacks earned 1,223 S&E doctorates, Hispanics earned 1,326, and American Indians and Alaska Natives earned 113—accounting for 8% of S&E doctoral degrees (excluding doctorates in other health sciences) earned that year* [nct.gov/statistics/...]

Dr. Kimberly Griffin

Increasing faculty diversity is a multidimensional process. Actions must take place at all levels:
- Institution wide
- College
- Department
- With other institutions

What narrative do you hear most often in the college?
Poll 5: What narrative do you hear most often in the college?

- 75%
- Hiring is a problem
- Faculty aren't retained
- None of the above

Goals for our Framework
- Provide an integrated, institutionally focused framework for increasing faculty diversity
- Organize dimensions for change and create a set of criteria against which institutions can assess their efforts to promote faculty diversity
- Offer a way to understand the multiple ways stakeholders in and outside of the institution can promote faculty diversity

Steps in Developing our Framework
- Research & theory
- Practice
- Collective impact

Institutional Context
Backgrounds and Barriers
- Institutional level policy can be an important lever for change
- Contexts within and across campuses are distinct and interconnected
- Includes:
  - Compositional diversity
  - Climate issues
  - Policies and programs in alignment with institutional mission

Strategies
- Chief diversity officers are not panaceas and “best practices” are hard to identify
- Institutional commitment and mission must align with programming
- Strong senior leadership
- Active engagement of deans and department chairs

Recruitment
Outreach - Hiring - Yield
Background and Barriers
- Short term thinking about pool development
- Bias and emphasis on traditional metrics in applicant evaluation
- Lack of intentionality in development of position announcements
- Little strategic outreach
- Lack of formal policy for dual career hiring

Strategies
- Ongoing consistent recruitment
- Intentional relationship development with alumni, scholars, and institutions
- Strategic dissemination of announcements
- Implicit bias training for review of applicants
- Explicit mention of dual career hiring policies
- Community information and resources
Transition

**Background and Barriers**
- Lack of preparation for faculty roles
- Lack of quality mentoring for women and men of color exacerbates this trend

**Strategies**
- Integration of community and skill development
- Effective mentoring policies and programs can address challenges simultaneously

Retention

**Professional Development - Tenure and Promotion**

**Background and Barriers**
- Increased access
- Feedback on research and teaching
- Support balancing responsibilities
- Clarity and structural changes to advancement processes
- Addressing departmental climate directly
- Community building for minoritized scholars
- Visible support and endorsement of family friendly policy

**Strategies**

Questions for Reflection

- What does your unit do well?
- What dimensions has your unit not focused on or really thought about?
- What is your unit not doing well?
- What is one thing you can do differently or think about doing moving forward?

APLU Tool Application

**Lessons Learned:**
- Dean needs to be actively engaged; also encourage engagement of Provost
- Composition of Self-Assessment Team needs to be diverse and representative of all components of the college (include people inside and outside the college: e.g., IR, faculty senate, promotion & tenure, human resources, office of diversity)
- Consider how to engage the white women and women of color
- Highly likely college self-assessment will point to changes needed in the institution
- Self-Assessment Team will evolve when moving to Action Planning

Five APLU Pilot Institutions
- Completed the Self-Assessment and Data Template through Action Planning Stage, and did assessment
- Aspire Alliance NSF INCLUDES: Institutional Change Cohorts
- First cohort of 15 APLU Institutions
  - Cohort completed Self-Assessment and Data Collection phase; now developing their action plans (2019)
- Second Cohort of 20 institutions
  - Currently forming Change Teams to complete the Self-Assessment and Data Collection beginning Spring Term 2020
**Question 1:** What time frame is realistic for this self-assessment process?

**Question 2:** What are your recommendations for translating all of this self-assessment information into an action plan? Do you have any resources or suggestions?

**Question 3:** Can you speak to “Change Management” versus “Project Management” when it comes to developing an action plan?

**ASEE EDG E Initiative “Asks”**

We invite College of Engineering deans to:

1. **Use the state-of-the-art EDGE College Self-Assessment Tool**  
2. **Contribute to the EDGE Deans Pilot Program**
   - Help us identify a subset of questions from the EDGE College Self-Assessment Tool as a basis for ASEE’s National Gender Equity Indicators database
   - Those interested in serving in this “pilot” group, please chat interest or contact Gretal Leibnitz (EDGE.Leibnitz@gmail.com)
3. **Check out the EDGE app** for total engineering faculty counts (working to update URM info & incorporate 20 years of ASEE Profiles data)  
   [https://shinyapps.asee.org/apps/EDGE/](https://shinyapps.asee.org/apps/EDGE/)

**Next Steps**

- Sign the [ASEE Engineering Dean’s Diversity Pledge](mailto:g.gooding@asee.org) (contact Geraldine Gooding)
- Share the fact that you have signed the pledge so with your colleagues
- Join the [EDGE Listserv](mailto:EDGE.Leibnitz@gmail.com) to learn the latest gender equity information
- Review [Dr. Valian’s Roadmap to Gender Equity](https://edge.asee.org/roadmap/) handout for evidence-based recommendations for promoting gender equity (see EDGE Webinar Series), and/or read [An Inclusive Academy: Achieving Diversity and Excellence](https://edge.asee.org/roadmap/)
- Register for the next EDGE Showcase Webinar with Ala Qubbaj, PhD, UTRGV Dean of Engineering, Jan. 2020 TBA (see [EDGE Webinar Series](https://edge.asee.org/roadmap/))

**Next Steps (Continued)**

- Review the resources on the [EDGE Website](https://edge.asee.org/roadmap/), including the:
  - Action Steps Workshop Resources
  - 2 Part EDGE College Self-Assessment Tool
  - Checklist, Tools & Resources to promote gender equity change, especially the Dean Personal Gender Equity Self-Assessment Questionnaire
  - EDGE Webinar Series showcasing deans efforts to promote gender equity
  - EDGE-ELATES Fellows & Travel Grants to promote development of diverse women leaders and dean succession-planning
- Contribute to the [EDGE Deans “Pilot”](https://edge.asee.org/roadmap/) to develop the National Gender Equity Indicators database (contact Gretal Leibnitz, EDGE.Leibnitz@gmail.com)
- Contact Gretal Leibnitz, PhD., EDGE co-PI and Project Director with questions!
PLEASE: Provide Feedback!

https://www.surveymonkey.com/r/EDGEWebinar2

Thank You!