


ENGINEERING DEANS GENDER EQUITY
WEBINAR SHOWCASE SERIES

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

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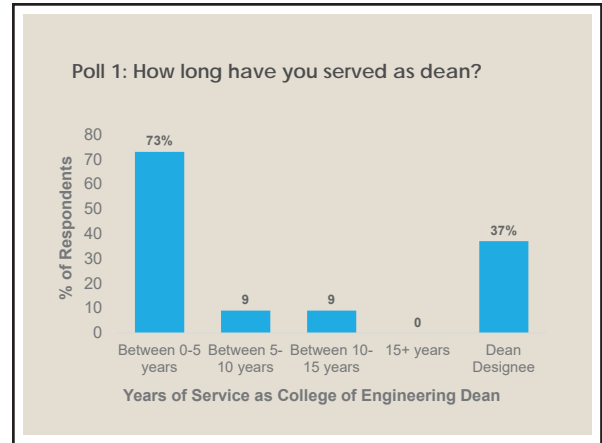
Webinar Goals

- 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

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How long have you served as College of Engineering dean?

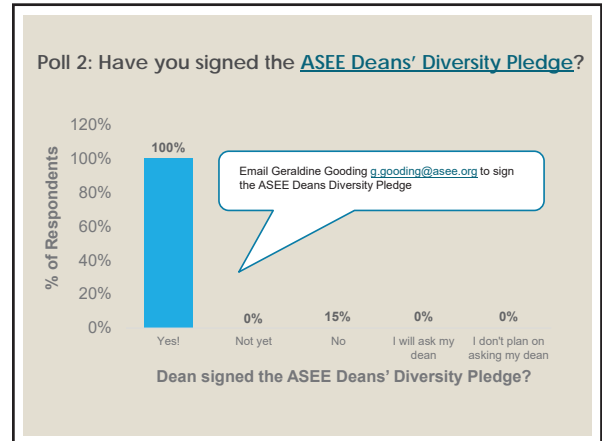
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Have you signed the ASEE Deans Diversity Pledge?

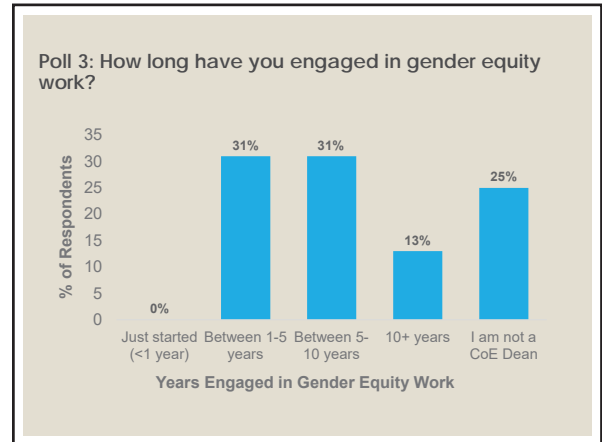
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How long have you engaged in gender equity work?

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EDGE Showcase Webinar (Nov. 14, 2019)
<https://edge.asee.org/webinar-series>

Virginia Valian, PhD

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(2019) ASEE EDGE Deans Survey

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

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Deans say they hold leaders accountable

#1 Key Takeaway

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

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Aaaah! Something went wrong

Brace yourself till we get the error fixed.
You may also refresh the page or try again later

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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

13

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?

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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

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

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- Service and teaching load equity
- Perceptions of equity
- Time allocation/effort distribution
- Gender x race/ethnicity x rank
- Equity in the sense of belonging
- Promotion rates,
- Salary equity
- departmental bylaws - how they may impact equity of experience at a college level
- Start-up packages
- race/ethnicity data
- policies around teaching buy out around leadership roles and for research
- Need for advocacy?

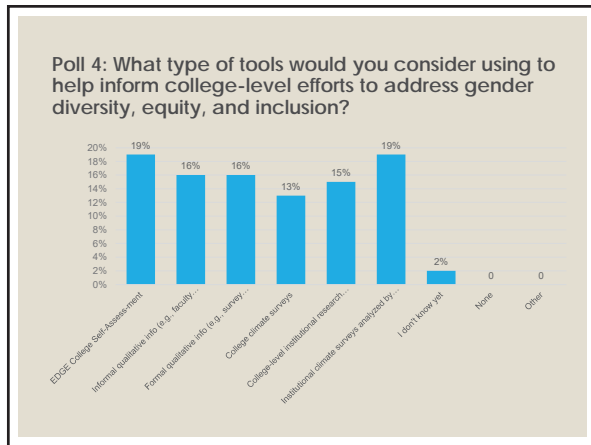
Chat Example Response

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

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

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Foundation: Review of ADVANCE Tools

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

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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)

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NSF ADVANCE Indicators

2. What are the outcomes of the institutional processes of recruitment and advancement for women and men?

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)

Number of faculty who submit tenure packets, and number awarded tenure, by gender and department

Number of faculty who apply for promotion, and number promoted, by gender, department, and promotion transition (assistant to associate; associate to full)

Number of tenured associate professors by department and gender with years-in-rank (in 6, 3-year categories)

Number of faculty who leave their departments, excluding those who died or retired, by rank, gender, and department

Number of faculty hired by rank, gender, and department

Cohort analyses of tenure and promotion, including to full professor

24

NSF ADVANCE Indicators

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<p>2. What are the outcomes of institutional processes of recruitment and advancement for men and women?</p>	<p>Number of faculty who submit tenure packets, and number awarded tenure, by gender and department</p> <p>Number of faculty who apply for promotion, and number promoted, by gender, department, and promotion transition (assistant to associate; associate to full)</p> <p>Number of tenured associate professors by department and gender with years-in-rank (in 6, 3-year categories)</p> <p>Number of faculty who leave their departments, excluding those who died or retired, by rank, gender, and department</p> <p>Number of faculty hired by rank, gender, and department</p> <p>Cohort analyses of tenure and promotion, including to full professor</p>
<p>3. What is the gender distribution of science and engineering faculty in leadership positions in the institution?</p>	<p>Number of men and women scientists and engineers in leadership positions</p>

25

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<p>3. What is the gender distribution of science and engineering faculty in leadership positions in the institution?</p>	<p>Number of men and women scientists and engineers in leadership positions</p>
<p>4. What is the allocation of resources for science and engineering faculty by gender at the institution?</p>	<p>Study of salaries of men and women faculty (with additional controls such as department, rank, years in rank)</p> <p>Study of space allocation of STEM faculty by gender (with additional controls such as department, etc.)</p> <p>Study of start-up packages of newly hired faculty by gender (with additional controls such as field/department, rank, etc.)</p>

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Need Qualitative Information Too

Numbers

+

Contextual Information

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Example Other Tools Explored

- AAC&U's Gender Values: <https://www.aacu.org/gendervalue>
- NSF ADVANCE-funded IDEAL-N Gender Equity Index Bilimoria & Jane' (2018)

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APLU Faculty Diversity Tool

<https://www.aplu.org/projects-and-initiatives/stem-education/aplu-aspire/Inclusive and Diverse STEM Faculty.html>

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- 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

The Utility of the EDGE College Self-Assessment Tool


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EDGE Self-Assessment--Data Template

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EDGE Self-Assessment—Context Questionnaire

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Dr. Kimberly Griffin

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2)The pool is very small: "In 2011, blacks earned 1,233 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" [nsf.gov/statistics/sei...](https://www.nsf.gov/statistics/sei...)

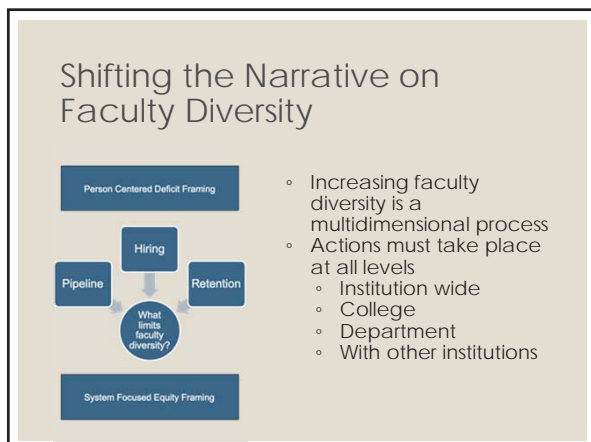
Kenneth Gibbs @KennyGibbsPhD · Dec 5
When I was @Stanford (2005-11), there were more Black Presidents of the United States than tenured black faculty in the basic science departments (1 vs 0). The idea that Black/Latinx/indigenous scientists are there (or peer unis) doesn't comport with data or reality

Gary McDowell @BiophysicalFrog · Dec 5
3) since @KennyGibbsPhD paper came out, faculty have shifted from telling me "the pool is too small" to "all the POCs won't come to us, they get snapped up by Stanford/Harvard/etc". As @_OmQu pointed out to me recently, Stanford is not full of Black faculty 2/3

Rethinking the "Pipeline" Problem:

Centering the Institutional Role in Increasing Faculty Diversity

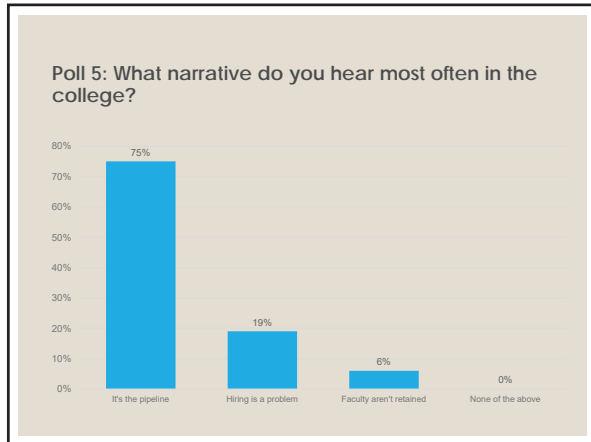
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What narrative do you hear most often in the college?

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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

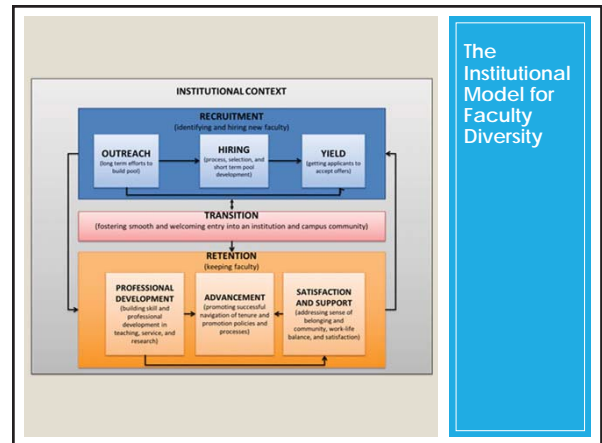
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- Preliminary draft developed based on review of the literature
- Conversations, review, and feedback from
 - APLU INCLUDES leadership team
 - Faculty Diversity Task Force
 - APLU Council of Presidents and Council on Academic Affairs Meetings
 - APLU INCLUDES Summits in 2017 and 2018
- Resulted in
 - Expansion of literature and theory included
 - Integration of "on the ground" knowledge and best practice
 - Outside the box thinking

Steps in Developing our Framework

Research & theory
Practice
Collective impact

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Institutional Context

Backgrounds and Barriers	Strategies
<ul style="list-style-type: none"> Institutional level policy can be important lever for change Contexts within and across campus are distinct and interconnected Includes <ul style="list-style-type: none"> Compositional diversity Climate issues Policies and programs in alignment with institutional mission 	<ul style="list-style-type: none"> 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

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Recruitment Outreach - Hiring - Yield

Background and Barriers	Strategies
<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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

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Transition

Background and Barriers

- Lack of preparation for faculty roles
 - Lack of quality mentoring for women and men of color exacerbates this trend
- Challenges
 - Role clarity
 - Confidence and efficacy
 - Social connections

Strategies


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

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Retention

Professional Development - Tenure and Promotion - Satisfaction and Support

Background and Barriers



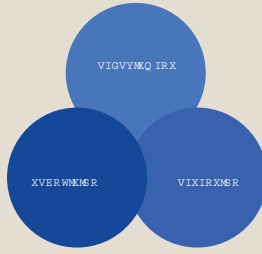
Strategies

- Increased access to
 - 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


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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?



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Dr. Alan Mabe

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- 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

APLU Tool Application Evidence Basis

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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

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Question 1: What time frame is realistic for this self-assessment process?

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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?

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

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ASEE EDGE Initiative "Asks"

We invite College of Engineering deans to:

1. **Use the state-of-the-art EDGE College Self-Assessment Tool** <https://edge.asee.org/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 basis for ASEE's National Gender Equity Indicators data base
 - 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://shinvapps.asee.org/apps/EDGE/>

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Next Steps

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

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Next Steps (Continued)

- Review the resources on the [EDGE Website](#), 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"](#) to develop the *National Gender Equity Indicators database* (contact Gretal Leibnitz, EDGE.Leibnitz@gmail.com)
- Contact [Gretal Leibnitz, Ph.D., EDGE co-PI and Project Director](#) with questions!

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PLEASE: Provide Feedback!

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

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