Making Diversity, Equity and Inclusion in STEMM the Norm

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Figure 23
Science and engineering degrees earned by underrepresented minority women and men, as a percentage of all S&E degrees awarded of each degree, by degree type: 2008–18

U.S. college students still more likely than faculty to be racial or ethnic minorities

% of undergraduates and postsecondary faculty who are nonwhite

Note: “Nonwhite” includes blacks, Hispanics, Asians, Pacific Islanders, American Indians or Alaska Natives, and those of two or more races. Those categorized as “non-resident alien” and “race/ethnicity unknown” are not included in this analysis. Source: National Center for Education Statistics.

PEW RESEARCH CENTER
The Problem

- Representation in STEMM workforce doesn’t match the US population
- Gender, race, and ethnicity intersect


<table>
<thead>
<tr>
<th>Resident Population (ages 18-64)</th>
<th>Science and Engineering Workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>White women 32.3%</td>
<td>White men 47.5%</td>
</tr>
<tr>
<td>White men 32.2%</td>
<td>White women 17.5%</td>
</tr>
<tr>
<td>Latino men 8.1%</td>
<td>Asian men 13.8%</td>
</tr>
<tr>
<td>Latina women 7.7%</td>
<td>Asian women 6.0%</td>
</tr>
<tr>
<td>Black women 6.5%</td>
<td>Latino men 5.2%</td>
</tr>
<tr>
<td>Black men 5.9%</td>
<td>Black men 3.1%</td>
</tr>
<tr>
<td>Asian women 2.7%</td>
<td>Black women 2.5%</td>
</tr>
<tr>
<td>Asian men 2.4%</td>
<td>Latina women 2.3%</td>
</tr>
<tr>
<td>Other women 1.2%</td>
<td>Other men 1.4%</td>
</tr>
<tr>
<td>Other men 1.1%</td>
<td>Other women 0.7%</td>
</tr>
</tbody>
</table>

Prepared by Lindsey Malcom-Piqueux

Adapted from Guterl (2014).
Data Source: NSF (2019).
Model for the evolution of intervention programs

Why hasn’t the needle moved?
When Our Students and Faculty Are Ready for Our Colleges and Universities, Will Our Colleges and Universities Be Ready for Them?

seachange.aaas.org
Real Change Requires a Long-Term Commitment

- Leaders far too often jump from awareness of a problem to implementing a strategy or initiative without deep understanding of the issue, or set of issues, they’re facing.

- This creates a “Change Trap”, in this case jumping from awareness to implementation without understanding.

- This has been seen by other researchers too! Laursen & Austin (2014) study of 19 ADVANCE institutions – found there are no “best practices” for increasing the gender equity of faculty across all campuses.
Welcome to Port of Call, AI!
This is your one-stop-shop for knowledge, community, and recognition as your organization pursues DEI in STEM/Higher education.

Getting Started
Follow these five ideas where you can get started within Port of Call.

Institute
- Repository of resources
- Trainings
- Webinars

Community
- Moderated Conversations
- Communities of Learning & Practice
- Convenings

Awards
- Bronze Award
  - A thorough self-assessment using qualitative and quantitative analyses
- Silver Award
  - Identifies key issues
- Gold Award
  - Actions in place to address key issues and carry the institution forward
  - Demonstrates impact of previous activity and expands action plan to continue progress
  - Serves as a beacon in the sector and beyond
Institutional Awards
- Open to Member Institutions
- Recommend ≥ 13 months for self-assessment

Departmental Awards
- Co-created with committees of disciplinary societies
- Launching within the next 1-5 years, starting with Physics & Astronomy

Biomedicine Awards
- Work with leadership of medical schools and academic health centers to co-create framework and metrics
- Pilot Bronze Awards in 2022
SEA Change—see change

SEA Change provides the scaffolding to guide and support context-specific, voluntary change within institutions, in alignment with their own mission, that will result in systemic transformation in STEMM.

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Gratitude for Our Supporters