Educational Environment in Engineering Survey

Undergraduate and graduate students
E3 Educational Environment in Engineering Survey

• E3 survey was sent to all enrolled graduate and undergraduate students in Spring 2019
• E3 Survey asked students about:
  • Students’ attitudes and satisfaction with all aspects of the College
  • Positive and negative experiences with faculty, staff and other students
  • One goal is to understand the experiences of underrepresented students
    - Women, students of color, international students or LGBTQ+ students
• Previous College “climate” surveys in 2008 and 2016
  • In 2019 we added questions specific to graduate students and research labs
E3 Educational Environment in Engineering Survey

About 1100 Undergraduates and 300 Graduate students responded to the survey

UG Student Participants
- Male: 66%
- Female: 34%

LGBTQ+: About 7% of respondents (undergraduate and graduate students)

UG Student Participants
- International: 10%
- Domestic Minority: 6%
- Domestic Majority or Not Specified: 84%

Graduate Student Participants
- Male: 64%
- Female: 36%

Domestic Minority:
- African American
- Latinx
- Native American
- Pacific Islander
- Biracial

Graduate Student Participants
- International: 7%
- Domestic Minority or Not Specified: 51%
E3 Educational Environment in Engineering Survey

- Survey asked students about...
  - Professors and Teaching Assistants
  - Peer and student group interactions
  - Confidence in engineering coursework and lab work
  - Experiences of stereotyping and harassment
  - "Feeling welcomed" – by faculty, staff, departments & other students
  - Commitment to engineering degree completion
  - Future post-degree plans
E3 Survey: Professor and Teaching Asst. Ratings

Professor Ratings: Graduate and Undergraduate

- Excellent
- Very Good
- Good
- Poor
- Very Poor

Teaching Asst. Ratings: Graduate and Undergraduate

- Excellent
- Very Good
- Good
- Poor
- Very Poor

Percent Grad | Percent UG
E3 Survey: Feeling Welcomed & Student Interactions

Feeling Welcomed
- Very Welcome
- Welcome
- Neutral
- Barely Welcome
- Not Welcome

Student Interactions
- Excellent
- Very Good
- Good
- Poor
- Very Poor

[Graphs showing percentage distribution for each category, with bars for percent Grad and percent UG]
E3 Survey: Environment in Research Groups & Relationship with PI

[Graphs showing the distribution of responses for environment in research groups and the relationship with the PI for research grad students.]
# E3 Results: Stereotyping and Harassment

<table>
<thead>
<tr>
<th>Item</th>
<th>Percent responding “YES”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UG Female</td>
</tr>
<tr>
<td>In class, faculty singled out unfairly because of gender.</td>
<td>9%</td>
</tr>
<tr>
<td>In class, engineering faculty express stereotypes about men and women.</td>
<td>33%</td>
</tr>
<tr>
<td>In class, engineering students express stereotypes about men and women.</td>
<td>61%</td>
</tr>
<tr>
<td>I have been sexually harassed by an engineering faculty member.</td>
<td>1%</td>
</tr>
<tr>
<td>I have been sexually harassed by an engineering student.</td>
<td>7%</td>
</tr>
</tbody>
</table>
## E3 Results: Stereotyping and Harassment

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<thead>
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<tr>
<td></td>
<td>UG Maj</td>
</tr>
<tr>
<td>In class, (faculty or TA) singled out unfairly because of my race.</td>
<td>2%</td>
</tr>
<tr>
<td>In class, engineering faculty express stereotypes about racial groups.</td>
<td>8%</td>
</tr>
<tr>
<td>In class, engineering students express stereotypes about racial groups.</td>
<td>35%</td>
</tr>
<tr>
<td>I have been harassed by an engineering faculty member because of race.</td>
<td>0.1%</td>
</tr>
<tr>
<td>I have been harassed by engineering student because of my race.</td>
<td>0.2%</td>
</tr>
</tbody>
</table>
## E3 Results: Stereotyping and Harassment

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<tr>
<td></td>
<td>UG LGBTQ+</td>
</tr>
<tr>
<td>In class, (faculty or TA) singled out unfairly because of my sexual orientation.</td>
<td>16%</td>
</tr>
<tr>
<td>In class, engineering faculty express stereotypes about LGBTQ+ people.</td>
<td>9%</td>
</tr>
<tr>
<td>In class, engineering students express stereotypes about LGBTQ+ people.</td>
<td>38%</td>
</tr>
<tr>
<td>I have been harassed by an engineering faculty member because of sexual orientation.</td>
<td>1%</td>
</tr>
<tr>
<td>I have been harassed by engineering student because of my sexual orientation.</td>
<td>5%</td>
</tr>
</tbody>
</table>