Beyond the Binary: Creating LGBTQ-inclusive Classrooms and Workplaces in STEM

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June 8, 2017
Is All Diversity Good?

“[…] I have been rather fascinated by diversity articles in Prism and on the website. […] But is diversity in sexual preference good if:

- The behavior takes 5 to 15 years off a person’s life expectancy?
- The behavior proliferates sexually transmitted diseases?
- The behavior promotes a sexually promiscuous lifestyle?
- The behavior is addictive and abusive?

We would do well to teach the truth about the homosexual/lesbian/bisexual/transgender lifestyle.”

—ASEE Member
### We have a problem

**Anti-LGBTQ bias, discrimination, and hostility in the classroom, workplace, and the world**

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experienced discrimination/harrassment</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Not comfortable in the classroom</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td>Hear homophobic jokes</td>
<td>62%</td>
<td>HRC (2014)</td>
</tr>
<tr>
<td>Hide LGBT identity at work</td>
<td>53%</td>
<td>HRC (2014)</td>
</tr>
<tr>
<td>Countries where homosexuality punishable by death</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Seriously considered leaving</td>
<td>30%</td>
<td>Rankin (2010)</td>
</tr>
<tr>
<td>Not comfortable in the classroom</td>
<td>62%</td>
<td>HRC (2014)</td>
</tr>
<tr>
<td>No workplace antidiscrimination protection (US)</td>
<td>52%</td>
<td>Movement Advancement Project</td>
</tr>
<tr>
<td>Countries where homosexuality is illegal</td>
<td>79</td>
<td>IGLA</td>
</tr>
</tbody>
</table>
Being LGBT Can Be Punishable by Law

The business case

Anti-LGBTQ bias, discrimination, and hostility in the classroom and workplace have harmful business impacts

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
<th>Source / Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruiting &amp; Retention</td>
<td>22%</td>
<td>Look to Leave, Human Rights Campaign (2014 report)</td>
</tr>
<tr>
<td>Performance &amp; Productivity</td>
<td>30%</td>
<td>Lost Employee Engagement, Human Rights Campaign (2014 report)</td>
</tr>
<tr>
<td>Financial</td>
<td>~$9.4 MM</td>
<td>Recruiting Savings, For a US company of 100,000, Out Now Global LGBT 2020 Study</td>
</tr>
<tr>
<td>Non-LGBT Consideration</td>
<td>72%</td>
<td>Non-LGBT Consideration, Williams Institute (2013 report)</td>
</tr>
<tr>
<td>LGBT Out in Workplace</td>
<td>8-51%</td>
<td>LGBT Out in Workplace, Out Now Global LGBT 2020 Study</td>
</tr>
<tr>
<td>Risk-Adjusted Excess Return</td>
<td>~10%</td>
<td>Li &amp; Nagar, Diversity &amp; Performance, MGMT. SCI. 529, 531 (2013)</td>
</tr>
</tbody>
</table>

Anti-LGBTQ bias, discrimination, and hostility in the classroom and workplace have harmful business impacts.
The learning case

1 million additional STEM graduates by 2022

President's Council of Advisors on Science and Technology (2012)

Most viable way to achieve this is to Increase retention

Key reason for leaving STEM is Chilly climate

Creating an inclusive climate benefits ALL students

Diversity is essential to the intellectual and social development of ALL students


Creating an inclusive climate

30%↑

Employee engagement

Human Rights Campaign (2014)

Diversity increases Innovation and productivity

Herring (2009)
It’s the right thing to do

On some positions, Cowardice asks the question, “Is it safe?” Expediency asks the question, “Is it politic?” And Vanity comes along and asks the question, “Is it popular?” But Conscience asks the question “Is it right?” And there comes a time when one must take a position that is neither safe, nor politic, nor popular, but he must do it because Conscience tells him it is right.

Martin Luther King Jr
NSF EAGER AWARD

Promoting LGBTQ Equality in STEM

ASEE’s Virtual Community of Practice: Promoting LGBTQ Equality in STEM

Exploratory • Transformative • Not fundable by any other mechanism
EAGER Grant

- 2 meta-Trainers
- 20 facilitators/advocates increasing inclusion in 20 Colleges
- Safe Zone Workshops on campuses, online, at conferences
- Transformative research to understand STEM culture and identify barriers to inclusion
Engineering Deans*

• 35% are aware of climate issues
• Supportive of inclusion measures
• Perception of faculty support is much lower
• May be untapped allies for LGBTQ inclusion

*47 Engineering and Engineering Technology Deans from US Colleges
LGBTQ Students*

- More likely than women, URM, & non-LGBTQ peers to report a chilly climate
  - Marginalized
  - Not Respected
- Personal consequences
  - Emotional stress
  - Difficulty sleeping
  - Exhaustion

*1,729 students from 8 institutions
“We would do well to teach the truth about LGBTQ people.”
Online Safe Zone workshops

- Launched April 2016
- Level 1, Level 2, Deep Dives
- STEM-oriented Safe Zone training
- Watch parties

**SAFE ZONE ALIY TRAINING**

**An Online Workshop Series**

Safe Zone Training is a two-part, participant-driven workshop for student, faculty, and the professional community during which participants will build knowledge and skills to create a more inclusive and affirming environment for LGBTQ individuals in engineering.

In Spring 2016, ASEE is introducing this workshop series with two Level 1 workshops. In these workshops, speakers and participants will focus on understanding LGBTQ concepts, developing an awareness of cultural bias, and learning how to be an ally to LGBTQ individuals.

**Spring 2016: Level 1 Workshops**

**Workshop 1:** Christopher Carr & Kelly Cross  
**Date/Time:** Monday, April 18, 2-4 PM ET  
**Facilitators:** Christopher Carr (National Society of Black Engineers) and Kelly Cross (University of Illinois at Urbana-Champaign)

[Register today](#)

**Workshop 2:** Donna Riley & Tony Butterfield  
**Date/Time:** Thursday April 28, 2-4 PM ET  
**Facilitators:** Donna Riley (Virginia Tech) and Tony Butterfield (University of Utah)

[Register today](#)
Partnerships

AIChE
The Global Home of Chemical Engineers

Dow

ACS
Chemistry for Life®

IFiEES
International Federation of Engineering Education Societies
Community of Practice
Advocacy in departments

Safe Zone Workshops
oS.T.E.M. Chapters
Endowed scholarship for LGBTQ students
Gender-inclusive restrooms

LGBTQ-STEM speakers
LGBTQ mentoring
Alumni network
Dean’s support for LGBTQ faculty group

Preferred name policy
oS.T.E.M. website
Safe Zone watch parties
Spouse invited to holiday party after 25 years
Stephanie Farrell
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2018-2019 President, American Society for Engineering Education
diversity@asee.org

For more information visit:
http://diversity.asee.org/lgbtq

This work is partially supported by a grant from the National Science Foundation EEC-1539140
References


President’s Council of Advisors on Science and Technology, "Engage to excel: producing one million additional college graduates with degrees in science, technology, engineering and mathematics," 2012.


