



ASEE Safe Zone Workshops and Virtual Community of Practice to Promote LGBTQ Equality in Engineering

Stephanie Farrell¹, Erin Cech², Rocio Chavela Guerra³, Adrienne Minerick⁴, Tom Waidzunas⁵

¹Rowan University, ²Rice University, ³ASEE, ⁴Michigan Technological University, ⁵Temple University

This material is based upon work supported by the National Science Foundation under Grant No. EEC 1539140.

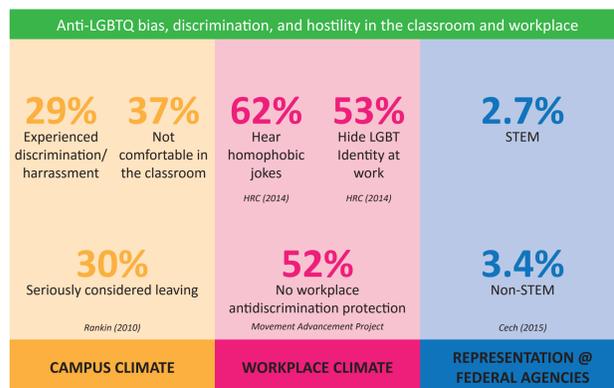


Motivation

This project links diversity research with a faculty development initiative to promote LGBTQ equality in engineering.

Our motivation to improve the climate for LGBTQ engineers in academic departments is based on research that shows:

- evidence of negative campus climate for LGBTQ engineers
- a link between climate and academic/career consequence and
- the importance of diversity in the intellectual and social development of students and in increasing innovation and productivity in business.



LGBTQ faculty in STEM fields reports the highest level of discomfort on campus, in departments and in classrooms; those who were not comfortable were 2.56 times more likely to consider leaving. Representation of LGBTQ professionals in STEM federal agencies is 20% lower than in non-STEM federal agencies.

LGBTQ engineering students are immersed in unwelcoming and often hostile heteronormative environments. Prejudicial cultural norms and perceptions of competence limit opportunities for success, causing stress, social and academic isolation, and anxiety over future job security.

Action

The Leadership Virtual Community of Practice (LVCP) was led by two meta-trainers who trained twenty faculty to facilitate Safe Zone Workshops and to lead an action-oriented VCP for LGBTQ equality in engineering.

The Action-oriented Virtual Community of Practice (AVCP) began with the same twenty members who advocated for LGBTQ inclusion in their engineering departments.

2 Meta Trainers & a Virtual Community of Practice



370 Safe Zones



Safe Zone Workshops are all training programs that create a visible network of LGBTQ-affirming individuals and contribute to creating a positive and inclusive climate.

This project has created a series of research-informed Safe Zone workshops specifically designed for engineering educators, addressing the following outcomes:

- understanding LGBTQ concepts and developing awareness of biases
- understanding LGBTQ issues and recognizing discrimination and heterosexual privilege
- becoming support persons to LGBTQ individuals and
- developing an understanding of the aspects of engineering culture that act as barriers to LGBTQ equality

Methods

Our research plan is based on a mixed methods design using surveys of engineering deans, faculty and students as well as ethnographic participant observations of Safe Zone workshops to answer research questions that include:

- How are engineering faculty and staff disadvantaged by heteronormativity and heterosexism?
- What aspects of engineering culture serve as impediments to LGBTQ equality?
- How can Safe Zone workshops be tailored to promote LGBTQ equality in engineering?

The surveys and ethnographic research will generate knowledge about barriers to and support for LGBTQ inclusion in engineering that will be incorporated into the Safe Zone workshops and advocacy strategies to make them more effective for an engineering environment.

Results

To date, 20 Safe Zone workshops have been conducted at the ASEE 2014 and 2015 Annual Conferences (270 participants) and 2 online workshops were offered in Spring 2016 (100 participants).

The Safe Zone workshops are generating a of a visible network of engineering faculty with the awareness, knowledge and skills to create a more inclusive environment for LGBTQ faculty and students.

Results of the 2015 ASEE Conference Safe Zone workshops evaluation (n=48). Average responses are on a scale of 1 (strongly disagree) to 4 (strongly agree).

	What is your level of agreement with the following statements?	Average
Terminology	I have a better understanding of LGBTQ terminology and concepts.	3.4
Biases	I have an increased awareness of assumptions and biases faced by LGBTQ individuals.	3.4
Climate	I have a better understanding of the challenges of campus climate for LGBTQ individuals.	3.3
Coming Out	I have a better understanding of the coming out process.	3.3
How likely is it that you will use the following strategies and tools?		
LGBTQ Presence	I will assume a lesbian, gay, bisexual or transgender or intersex person might be present in my class.	3.6
Language	I will use inclusive language in my classroom.	3.7
Syllabus	I will ensure that my syllabus has a diversity welcome statement that includes gender, gender expression, gender identity and sexual orientation among the minority groups that are welcomed and respected in my class.	3.6
Pronoun	I will provide a mechanism for students in my class to indicate a preferred name and/or preferred pronoun.	3.5
Sticker	I plan to display my Safe Zone sticker in a visible location in my office on campus.	3.8

For more information visit our website <http://diversity.asee.org/lgbtq/>

