

Adventures in Collaborative Grassroots Undergraduate STEM Inclusion Work

Ms. Tricia S. Berry, University of Texas at Austin

Tricia Berry, Director of the Women in Engineering Program (WEP) at The University of Texas at Austin, is responsible for leading the efforts on recruitment and retention of women in the Cockrell School of Engineering. She concurrently serves as Director of the Texas Girls Collaborative Project, connecting Texas organizations, companies and individuals working to advance gender equity in science, technology, engineering and math fields. Berry received her B.S. Chemical Engineering degree from the University of Texas, Austin in May 1993 and her M.B.A. from the University of Houston, Clear Lake in May 1999. She has been a member of the Women in Engineering ProActive Network (WEPAN) since 2001, most recently serving on the WEPAN Board as President Elect, President and Past President from 2007 - 2010.

Mrs. Ana M Dison, Women in Engineering Program

Ana Dison is the Assistant Director in the Women in Engineering Program in the Cockrell School of Engineering at The University of Texas at Austin, and coordinates all current student programming including the Kinsolving Living Learning Community, the Graduates Linked with Undergraduates in Engineering (GLUE) research program, the Peer Assistance Leader (PAL) Mentor program and the Women In the Second year of Engineering (WISE) program. She typically teaches 3 classes a semester and is co-leading the Bias Busting efforts. Ana supervises full and part-time staff and oversees the business and personnel operations of the office. She has been with WEP since 2006.

Mr. Efren Enrique Dominguez, University of Texas at Austin

Mr. Enrique Dominguez is the Director of the Equal Opportunity in Engineering Program at the Cockrell School of Engineering at the University of Texas at Austin. He has been Director for over 7 years and is currently the National Membership Chair for the National Association for Multicultural Engineering Program Advocates (NAMEPA). Enrique graduated from the Cockrell School of Engineering with a Civil Engineering degree and pursued industry experience for seven years where he held positions such as Project Engineer, Lead University Recruiter, Logistics Engineer, Cost Engineer and Project Manager.

YOU BELONG HERE

Adventures in Collaborative Grassroots
Undergraduate STEM Inclusion Work

PRESENTERS:

Ana Dison, Enrique Dominguez, Tricia Berry

  
@UTEOE @UTWEP

Overview:

The **Adventures in Collaborative Grassroots Undergraduate STEM Inclusion Work** presentation tells the story of a grassroots collaboration to advance equity and inclusion throughout engineering and natural sciences. The presentation will provide a history of the You Belong Here Campaign, the messy collaborative effort across two colleges that includes The Bias Busters cross-college and cross-campus team, branding and marketing, and the You Belong Here Workshop Series. The presentation will explore the evolution of the grassroots collaboration, provide an overview of the You Belong Here Workshop Series, and share impact data and lessons learned. The presentation will also include next steps and future directions for the You Belong Here Campaign.

Agenda

- History of You Belong Here
- Evolution of Bias Busting
- Workshop Series
- Reach and Impact Data
- Lessons Learned
- Future Directions



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History of You Belong Here



- Started because of a November 2015 meeting with 3 African American and Black Students telling their story
- Subsequent meeting led to approval of You Belong Here campaign
- You Belong Here campaign has grown within itself and across campus
- The campaign is the overarching brand name for the workshop series

Enrique

History of the You Belong Here Campaign:

In November of 2015, three African American and Black students met with the Dean of Engineering to discuss the challenges they faced as underrepresented students in engineering. The You Belong Here Campaign was presented and approved in a subsequent meeting with school of engineering leadership including the Dean, Assistant Dean of Engineering Student Services and the Equal Opportunity in Engineering (EOE) Program director.

The You Belong Here Campaign started as an idea to affirm current students of their place in the school of engineering. The campaign has grown to reach broader audiences including both undergraduate and graduate students, faculty and staff. Through collaborations with the College of Natural Sciences and a parallel You Belong Here Campaign for natural sciences students, faculty and staff, the combined efforts have expanded across the broader STEM community. The campaign includes logos and branding, posters, stickers, magnets, presentation templates and banners to create visible messaging throughout visible student spaces including adviser and faculty offices, campus events, and college presentations.

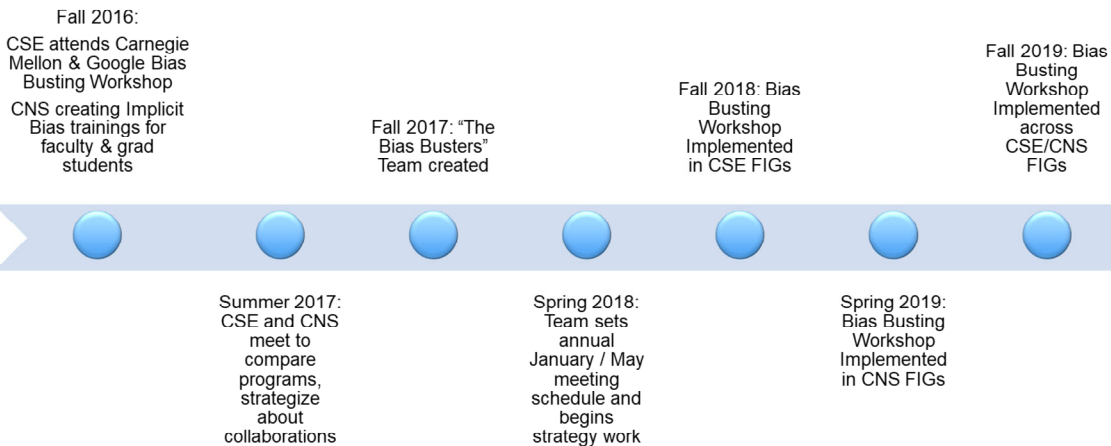
The You Belong Here Campaign also incorporates the Bias Busting Workshop and series of inclusion-focused learning opportunities for students, faculty and staff throughout the schools of engineering and natural sciences. The You Belong Here Workshop Series was initiated by the Carnegie Mellon and Google Bias Busting Workshop train the trainer dissemination with the Bias Busting Workshop offered to engineering students, staff and faculty. The workshop series expanded through collaborations with the College of Natural Sciences to include workshops on topics such as micromessaging, inclusive leadership, inclusive spaces, navigating the workshop.

Based on student input, the next phase of the You Belong Here Campaign focused on allyship is underway. Having a clear way to identify allies in our communities continues to foster an inclusive and welcoming environment for our students. Ally stickers with the You Belong Here Campaign branding are being created while the process to receive the ally designation is under construction.

Review comments: How were the 3 students included in the process?

They were not apart of the You Belong Here campaign but other initiatives that came out of the subsequent meeting (not included in this presentation)

Evolution of You Belong Here & Bias Busting



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Evolution of Grassroots Cross-College and Cross-Campus Collaborations:

Collaborations are often born out of serendipitous events and fostered by passionate people with the freedom or opportunity to take action. At the same time as staff from the colleges engineering and natural sciences were commiserating over lack of diversity and inclusion training and learning opportunities for students, faculty and staff across campus and exploring opportunities to collaborate, engineering diversity and inclusion staff were bringing the Carnegie Mellon and Google developed Bias Busting Workshop to campus. Common interests, opportunities for content sharing, and grassroots energy amongst engineering and natural sciences staff led to the creation of The Bias Busters and the launch of a collaboration dedicated to providing workshops to students, faculty and staff to raise awareness about bias and work toward a more inclusive environment in STEM. The Bias Busters is a staff-led, grassroots effort with a core cross-college team creating strategy and a larger team engaged in You Belong Here Workshop Series dissemination and driving progress and reach throughout the two colleges and beyond. As successes of The Bias Busters have grown to reach more and more students, faculty and staff, others across campus have joined the team and You Belong Here Workshop Series delivery has expanded to other colleges, community partners and organizations. The Bias Busters are leading the You Belong Here Campaign across the colleges of engineering and natural sciences.

Workshop Series

Bias Busting @ Work

building a more inclusive organization

re:Work

<https://rework.withgoogle.com/subjects/unbiasing/>

BiasBusters@CMU



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School of Computer Science



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The You Belong Here Workshop Series was initiated by the Carnegie Mellon and Google Bias Busting Workshop train the trainer dissemination with the Bias Busting Workshop offered to engineering students, staff and faculty.

From BiasBusters@CMU (<https://scs4all.cs.cmu.edu/biasbusters/>):

BiasBusters@CMU is modeled on Google's Bias Busting@ Work program, and developed in concert with Google. The program was piloted in the School of Computer Science (BiasBusters@SCS,CMU) to engage over issues of bias, diversity, and inclusion. BiasBusters sessions are led by members of the CMU community who have volunteered to be trained as program facilitators. BiasBusters@CMU now reaches communities across the Carnegie Mellon campus.

Several things distinguish BiasBusters@CMU from similar programs. First is the framing: the program has an academic tone, focusing on summaries of research evidence into which discussions of experience are woven. Second, the role-playing, based on relevant and real life scenarios, has proved to be a powerful and effective approach for engaging participants, both at Google and at CMU, creating commitments to greater inclusivity.

The Bias Busting workshop was first offered within the Cockrell School of Engineering and adapted based on audience. Role play scenarios and examples were customized for undergraduate students, graduate students, faculty and staff.

Reviewer comments:

- Are these workshops voluntary? Are there thoughts making it mandatory campus wide?

Depending upon the setting, workshops are required or voluntary. For example, some workshops are presented within classes and thus are required for students (participation grades, attendance, etc.). Other workshops are embedded into existing structures such as grad student orientation. Some of the workshops are currently being embedded into classes and thus will be required of all students at various stages throughout their college career. The Bias Busters team is evaluating what makes the most sense for each workshop as we continue to advance the initiative.

- Are administrators being exposed to the content? Do they have any interest in attending to ensure they are up to date on inclusive practices?

Yes, department chairs, research center directors and leadership teams, and other administrators have been exposed to the Bias Busting workshop and many have brought the workshop into their programs. It is not consistent across all audiences and not currently a mandate from the dean to participate. Participation continues to be grassroots.

Workshop Series

1. Bias Busting Workshops
2. Managing MicroMessaging
3. Inclusion through Identities
4. Countering Stereotype Threat
5. Navigating the Workplace
6. Inclusive Organization Leadership
7. Creating Inclusive Spaces
8. Inclusive Classrooms



Tricia

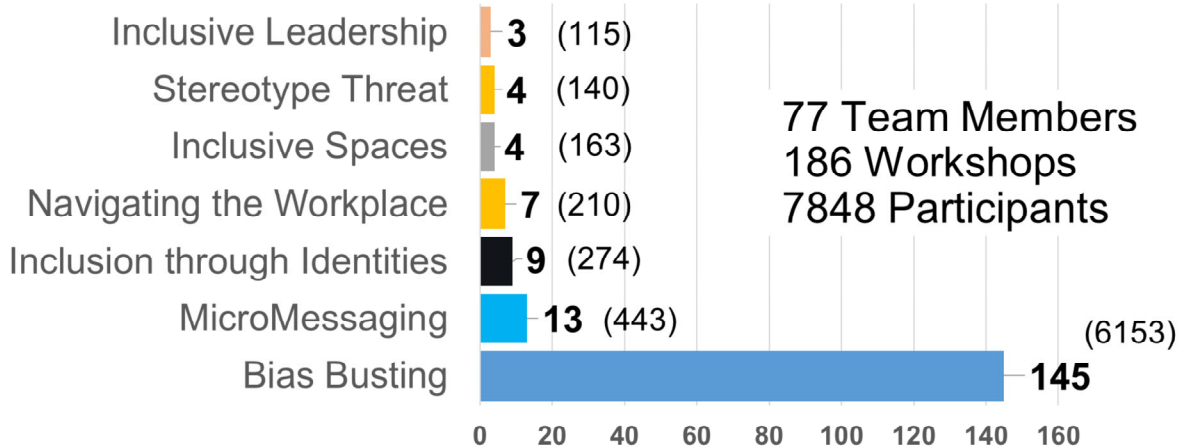
The workshop series expanded through collaborations with the College of Natural Sciences to include workshops on topics such as micromessaging, inclusive leadership, inclusive spaces, navigating the workspace. The current You Belong Here Workshop Series includes 8 workshops developed or customized for engineering and natural sciences students, faculty and staff. All workshops are variable in length from 30 minutes to 90 minutes and customizable based on audience. Most workshops include role-playing based on relevant and real life scenarios, providing a powerful and effective approach for engaging participants in creating commitments to greater inclusivity. Workshops include practical tips for addressing behavior and strategies to address situations.

- Bias Busting Workshops at our university are modeled after BiasBusters@CMU and Google's Bias Busting@ Work programs. Bias Busting Workshops have an academic tone, focusing on summaries of research evidence into which discussions of experience are woven.
- Managing MicroMessaging Workshops explore and discuss microaggressions, microinequities, microinvalidation, and microaffirmations.
- Inclusion through Identities Workshops identify, explore and discuss the intersectionality of social and personal identities.
- Countering Stereotype Threat Workshops define, explore and discuss stereotype threat

and its impact on students, classrooms and other environments.

- Navigating the Workspace Workshops and an alternative presentation that uses the Microsoft eLesson on Unconscious Bias discuss real scenarios presented in everyday work life. Following real-world scenario videos, presentation, discussion and supplemental worksheets help participants understand, document and discuss strategies to recognize and interrupt bias.
- Inclusive Organization Leadership Workshops engage student organization leaders in the design of inclusive practices for their organization's activities. Topics are customized based on the organization's needs and can include creating inclusive spaces, membership and leadership recruitment and engagement, inclusive meeting management and event facilitation, and more.
- Creating Inclusive Spaces Workshops are highly interactive and designed to foster discussion about what makes an inclusive space, how inclusive spaces feel, and how we can all contribute to creating inclusive spaces in our workplaces, gathering places, and other environments.
- Inclusive Classrooms Workshops are designed for graduate students to increase their awareness of respectful and inclusive classroom environments, to learn strategies to create inclusive classroom environments, to gain skills for preventing, recognizing and reacting to microaggressions and bias behaviors, and to increase awareness of campus resources that support inclusive and safe campus climate.

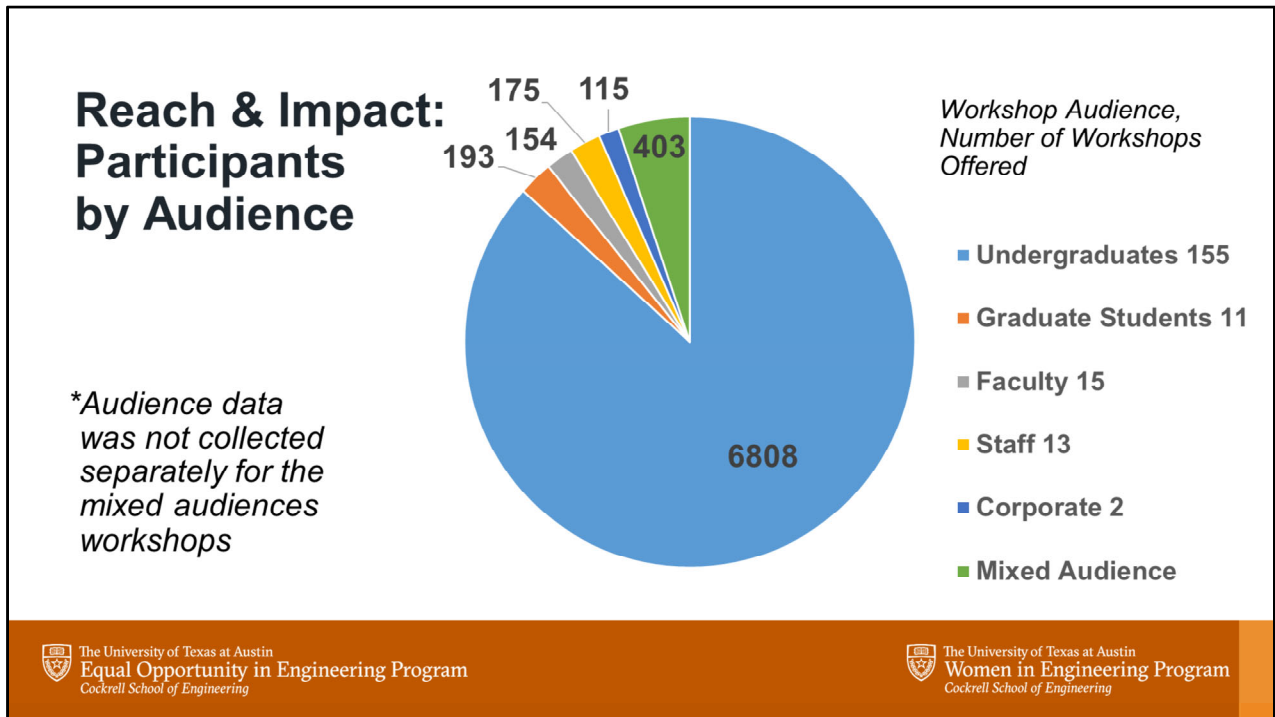
Reach & Impact: Workshops, Participants



Enrique

You Belong Here Workshop Campaign Reach and Impact:

Since the creation of the You Belong Here Campaign and adoption of the Bias Busting Workshop, The Bias Busters team, including 77 team members from across campus, has presented over 180 workshops from the series. Over 7800 students, faculty and staff have participated in the workshops. The chart shows the number of workshops presented in bold and the number of participants in parenthesis.



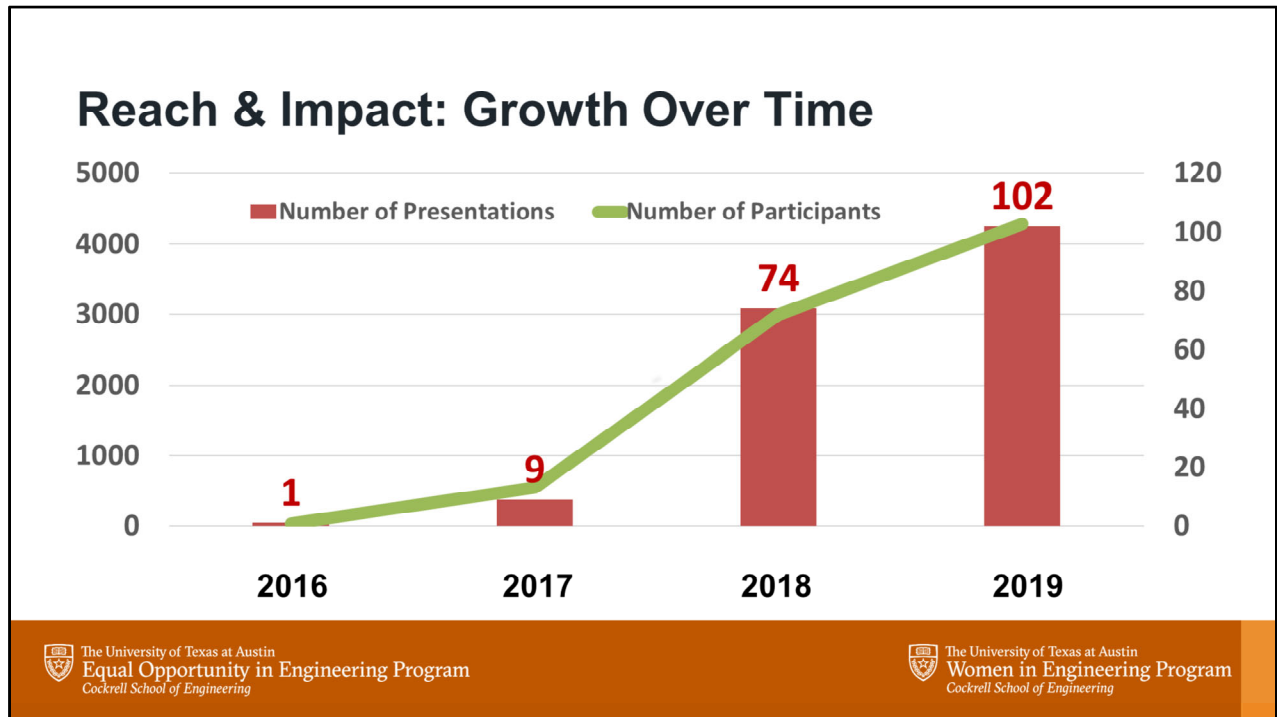
Enrique

You Belong Here Workshop Campaign Reach and Impact:

Since the creation of the You Belong Here Campaign and adoption of the Bias Busting Workshop, The Bias Busters team, has presented workshops from the You Belong Here Workshop Series reaching over 7,800 participants.

Workshops have reached the following audiences (*data was not collected separately for the workshop mixed audiences):

- Undergraduate Students Only: 6808
- Graduate Students Only: 193
- Staff Only: 175
- Faculty Only: 154
- Industry Professionals Only: 115
- Mixed Audience: 403



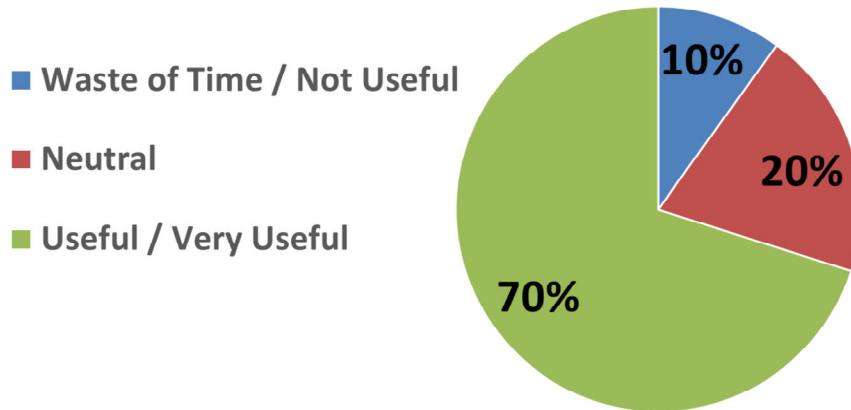
Enrique:

You Belong Here Workshop Campaign Reach and Impact:

Workshop delivery has grown from 30 participants in 1 workshop in 2016 to 539 participants in 9 workshops in 2017 to 2,991 participants in 46 workshops in 2018 and over 4,000 in 2019.

The Bias Busters team is currently exploring evaluation methods to assess the impact of the You Belong Here Campaign on culture and climate throughout the schools of engineering and natural sciences. Future climate surveys for students, staff and faculty will aid in the assessment with comparisons available with past climate survey data.

Reach & Impact: Bias Busting Workshop Post-Survey



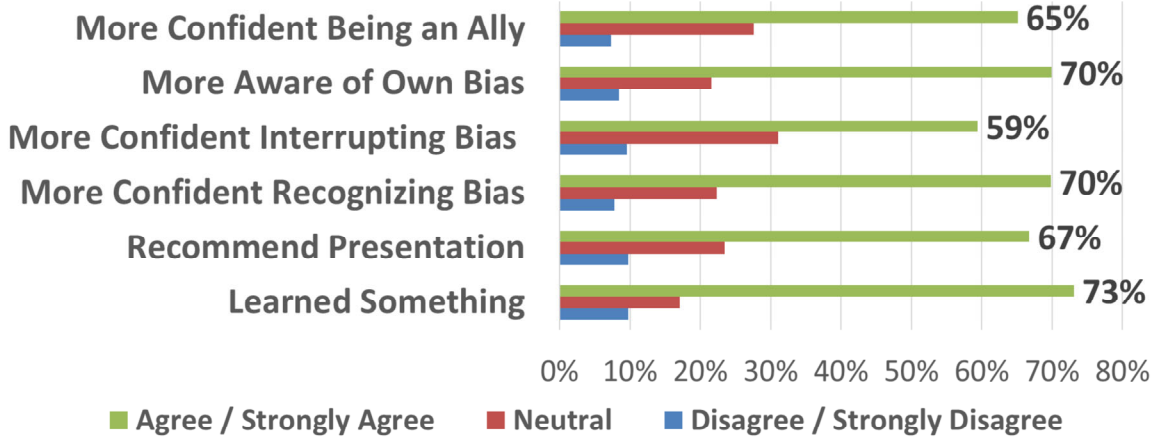
Enrique:

Bias Busting Workshop post surveys have been administered this fall in a subset of workshops across CNS and CSE. Participants are asked to rate the overall presentation on a scale that includes 5 options: waste of time, not useful, neutral, useful and very useful. 70% of participants indicated the workshop was useful or very useful.

Notes from Reviewer: How are you defining “Impact” in this case if you are still exploring evaluation methods?

Surveys now being administered at end of Bias Busting workshops. Data being collected. Survey and evaluation plan being created for other workshops but no data collected to date.

Reach & Impact: Bias Busting Workshop Post-Survey



Enrique:

Bias Busting Workshop post surveys also ask participants to respond to various statements shown on this chart with the percentage indicating “agree or strongly agree”:

I learned something in today’s presentation.

I would recommend this presentation to others.

After participating in this workshop, I am more confident about recognizing bias.

After participating in this workshop, I am more confident about interrupting bias.

After participating in this workshop, I am more aware of my own bias.

After participating in this workshop, I feel more confident being an ally.

Lessons Learned

- No end point
- Capacity to do the work & balance with job duties
- Messy, self-directed & undefined
- Working meetings and mini retreats help advance the work
- Staff turnover & building the team slows progress
- Ongoing professional development is a must
- Juxtaposition of freedom & lack of support creates challenges and opportunities



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You Belong Here Campaign Lessons Learned:

Beginning the fourth year of cross-college collaboration with the You Belong Here Campaign, The Bias Busters team has learned quite a few lessons along the way. First and foremost, it is really important to acknowledge and understand that there is no end to this work. Learning about bias, inclusion and how to best have conversations in these areas is an ongoing challenge which requires continuous learning, updating and effort in areas that are constantly evolving as society, language and social norms advance. Secondly, The Bias Busters team knows the efforts are tremendously impactful and vital to creating more inclusive communities, but delivering the work remains a true challenge for team members to balance with other programmatic, administrative and teaching duties that comprise primary positions. Many team members are doing this work as an overload and in addition to their “regular” job duties, making prioritization an ongoing challenge. Thirdly, the grassroots approach and organization of the collaboration is messy and frequently undefined. There is far more work and items to accomplish than is humanly possible but the team has remained persistent and satisfied with small achievements.

Scheduling working meetings at various intervals during the academic year has been critical in furthering the collaboration efforts and maintaining the partnership when there have been personnel, priority and workload changes. Providing ongoing, in house, professional development for team members has also been a critical factor in helping to continue learning and conversations. Expanding the number of team members who are confident and comfortable in workshop delivery continues to be a challenge and a priority so the workload is shared across colleges and personnel. The professional development, a tiered training model, and shared presentation responsibilities continues to help the team evolve and expand the workshop delivery.

Finally, as these efforts have been self-directed, the lack of institutional and local administrative leadership presents both challenges and opportunities. At times, it seems that The Bias Busting team efforts go unnoticed and unappreciated. However, the messy, self-directed and grassroots approach has provided the team with the opportunity to create, grow and remain open to new areas of development. The freedom from a top-down approach and administrative bureaucracy has also allowed for the organic growth and cross-college and cross-university collaborations and engagement to develop.

Future Directions

- Building a team of confident, competent workshop facilitators
- Integrating students into the student-focused workshops strategy
- Embedding more content into formal classroom spaces
- Implementing an assessment and evaluation plan
- Creating online content for wider dissemination
- Creating a You Belong Here credential to recognize participants

Tricia

The Bias Busters team is committed to the continuation, expansion, and improvement of the You Belong Here Campaign. Current priorities include creating an ally strategy to recognize and identify allies in our communities and the expansion of the team of workshop facilitators and trainers who are confident and comfortable delivering all the workshops throughout the You Belong Here Workshop Series. The Bias Busters team is also currently exploring evaluation methods to assess the impact of the You Belong Here Campaign on culture and climate throughout the schools of engineering and natural sciences.

Future directions include creating online content to expand delivery of workshops beyond the classroom environment, incorporating content into university learning management systems, and exploring a You Belong Here credential to recognize participants who have completed a set of workshops or learning experiences. The work is endless and exciting and there is only room to expand and grow as we diligently, deliberately, strategically and energetically work to create a more inclusive environment throughout our science and engineering spaces.

Reviewer comments: Are students allowed to also lead these workshops and provide input on content?

At this point students have taken a limited leadership role in presenting workshops.

Integrating student voice in the content and creating a team of trained student facilitators for some of the You Belong Here workshops is part of the future direction of the effort.



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