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Technology and Gendered Spaces: Examining Equity and Access

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Nicole holds a Bachelor of Arts in International Studies from the University of Mississippi, a Master of Arts in Women's Studies from the University of Alabama and a Ph.D. in Women's, Gender and Sexuality Studies with a Graduate Interdisciplinary Specialization in Folklore from The Ohio State University. Prior to coming to OSU, Nicole served as Assistant Director for International Student and Scholar Services at the University of Alabama.

Technology and Gendered Spaces: Examining Equity and Access

A workshop-style presentation

PowerPoint Presentation Outline:

I. Introduction to Topic: Technology and Gendered Spaces

II. Examining the Current Landscape

   a. Brogramming Culture: define the concept and share examples

   b. Sexual Harassment in Technology Spaces: share recent examples of sexual harassment allegations in technology spaces; provide an overview of the larger #MeToo movement

   c. Data: share data regarding CS and CSE graduation numbers both at the graduate and undergraduate level

III. Examining Interventions

   a. Implicit Bias: define implicit bias and share examples of how implicit bias is present in technology spaces

   b. Buckeye Bias Busters Initiative: overview of this training currently being facilitated to employees in technology spaces at Ohio State

IV. Conclusion

   a. Dialogue-Based Discussion: interactive dialogue on inequity in technology spaces

   b. Next Steps

I. <u>Introduction</u>

Recent allegations exposing hostile work environments in technology spaces have made headlines, bringing to light a culture that is generally unfavorable towards women, people of color and other targeted social identity groups. This workshop/presentation will examine these allegations and how this overall climate has negatively affected inclusion in technology spaces. Drawing on data from ASEE, I will explore the structural inequities and barriers women and

other underrepresented groups face in technology spaces including data with regards to Computer Science Engineering (CSE) graduates. Particular attention will be paid to gender. I will end the presentation by sharing specific strategies to increase representation and improve culture including a model of bias-awareness training currently being facilitated by our ADVANCE office and the Office of the Chief Information Officer at Ohio State University.

II. Examining the Current Landscape

Brogramming

Sexual harassment allegations are sweeping the nation from Hollywood to Washington, D.C. and to Silicon Valley. As high-profile men face these allegations, our society is having a moment of reckoning, conceding the aggressive climate of hyper-masculinity that has plagued so many workplace environments. The technology sector is not immune to this behavior. In fact, a term has been coined specifically naming this behavior: brogramming. Brogrammer is a slang term for a stereotypically masculine programmer which also represents a subculture in the technology industry. According to PCMag, a brogrammer is, "a macho programmer. A brogrammer is a tongue-in-cheek slang for a high-tech geek who works out a lot in the gym, is popular with the opposite sex, likes to party and is admired by his buddies for his flair and super coolness." [1]

I suggest that this brogramming culture discourages women from entering technology fields while also creating a hyper-masculine environment that leads to many women and underrepresented groups leaving the technology industry. In 1985, 37% of U.S. college

[1] PCMag. "Encyclopedia." PCMag.com. https://www.pcmag.com/encyclopedia/term/64050/brogrammer (accessed December 13, 2007)

computer science graduates were women, yet only 17% were women in 2014.[2] This number has decreased dramatically. This presentation will examine possible factors contributing to this decline.

Brogramming culture and the stereotype of the brogrammer has replaced the computer geek culture that was prominent prior to the start-up technology boom. This has provided a hyper-sexualized, hyper-masculine culture of parties, booze and ultimately sexual harassment. Forty-five percent of female technology workers have experienced exclusionary behavior in the workplace according to a study by Indeed, a tech-based job board.[3] Brogrammer culture can contribute to a culture of sexual harassment, "where the nerdy computer-programmer stereotype is shunned and is replaced by a jet set, skirt-chasing, bottle-popping, frat house attitude. Often, this brogrammer clique consists solely of white men."[4] Hollywood has portrayed the brogramming culture in films like *The Social Network* and in television shows like *Silicon Valley*. While Hollywood has put its own spin on portraying these environments, one must assume that there is some truth to these portrayals based on the current news cycle of sexual harassment in the workplace.

Sexual Harassment in Technology Spaces

The systemic sexual harassment present in the both the academy and the workplace has received a great deal of attentions in recent months. With larger social media movements such as the #MeToo movement, women and men have come forward to share their own stories of

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[2] Porter, Jane. "The Fascinating Evolution of Brogramming and the Fight to Get Women Back." FastCompany.com. https://www.fastcompany.com/3037269/the-fascinating-evolution-of-brogramming-and-the-fight-to-get-women-back (accessed December 13, 2017).

[3] Hightower, Aaron. "Brogrammer Attitude May Hinder Technology Diversity." Shrm.org. https://www.shrm.org/resourcesandtools/hr-topics/technology/pages/brogrammer-attitude-may-hinder-technology-diversity.aspx (accessed December 13, 2017).

[4] Hightower, "Brogrammer Attitude May Hinder Technology Diversity."

sexual harassment. Technology spaces are certainly not immune to these behaviors. One of the larger cases involves Uber. On February 19, 2017, Susan Folwer wrote a 3,000-word essay detailing the harassment and sexism she faced at Uber for a year. This case brought to light many of the inequities facing women in technology spaces.

Data

ASEE data show that in 2015-2016 there were 112,721 bachelor's degrees in engineering. Of these 20.8% were awarded to women with 12.3% in Computer and 16.3% in Computer Science (Outside Engineering). These numbers are some of the lowest in representation of women among all engineering disciplines. These low numbers negativity affect gender diversity in the technology sector.

III. Examining Interventions

Implicit Bias

In recent years, implicit bias has garnered more attention as a bias that negatively affects hiring processes and workplace climate. Characteristics of implicit bias include: one is unaware of bias, it is difficult to control, it is unintentional, there is no introspection, it is not endorsed and it is a habit of the mind. We all have implicit biases that are learned from culture and stereotypes. Implicit biases often conflict with our consciously endorsed beliefs. We often believe that we are fair and do not exhibit biases based on race, sex or other social identities, but in fact our implicit biases often do exhibit these characteristics. It is important for individuals to become aware of their implicit biases and take steps to address these.

Buckeye Bias Busters Intervention

Ohio State ADVANCE recently adapted the Carnegie Mellon Bias Busters training created in partnership with Google and the Carnegie Mellon College of Engineering and School of

Computer Science. Buckeye Bias Busters addresses the implicit biases present in technology spaces. Ohio State ADVANCE adapted the workshop with the Ohio State Office of the Chief Information Officer. This is a three-hour dialogue-based training.

IV. Conclusion

The presentation will conclude with questions to prompt a dialogue-based discussion. Additionally, best practices and next steps will be shared.