

Exploring Narratives of LGBTQ Student Veterans in Engineering

Dr. Susan M Lord, University of San Diego

Susan M. Lord received a B.S. from Cornell University and the M.S. and Ph.D. from Stanford University. She is currently Professor and Chair of Integrated Engineering at the University of San Diego. Her teaching and research interests include inclusive pedagogies, electronics, optoelectronics, materials science, first year engineering courses, feminist and liberative pedagogies, engineering student persistence, and student autonomy. Her research has been sponsored by the National Science Foundation (NSF). Dr. Lord is a fellow of the ASEE and IEEE and is active in the engineering education community including serving as General Co-Chair of the 2006 Frontiers in Education (FIE) Conference, on the FIE Steering Committee, and as President of the IEEE Education Society for 2009-2010. She is an Associate Editor of the IEEE Transactions on Education. She and her coauthors were awarded the 2011 Wickenden Award for the best paper in the Journal of Engineering Education and the 2011 and 2015 Best Paper Awards for the IEEE Transactions on Education. In Spring 2012, Dr. Lord spent a sabbatical at Southeast University in Nanjing, China teaching and doing research.

Prof. Michelle M. Camacho, University of San Diego

Michelle M. Camacho is Professor of Sociology at the University of San Diego. She began her career at UC San Diego in 1999 as a postdoctoral fellow at the Center for US Mexican Studies, and later as a UC Faculty Fellow in Ethnic Studies. In 2015-16, she returned to UC San Diego as a fellow of the American Council on Education. As a bilingual/bicultural Latina, Camacho has 30 years of experience in higher education advocating for underrepresented groups and first generation college students. For over a decade, her work on institutional transformation has received funding from the National Science Foundation to examine and address inequities in higher education, specifically as they relate to Science, Technology, Engineering and Mathematics (STEM). She served the NSF ADVANCE grant initiatives as a co-Principal Investigator, working to improve practices to recruit and retain women of color in STEM and enhance institutional climate at USD. Other current research grants support pathways for veterans in higher education, and the NSF program called, "Revolutionizing Engineering & Computer Science Departments." Her co-authored books include The Borderlands of Education (with Susan Lord), Mentoring Faculty of Color, and Beginning a Career in Academia: A Guide for Graduate Students of Color. She is past-Vice President (2017) of the Pacific Sociological Association, and an appointed consultant to the American Sociological Association's Departmental Resources Group. Fluent in both quantitative and qualitative research methodologies, her research uses theories from interdisciplinary sources including cultural studies, critical race, gender and feminist theories. Central to her work are questions of culture, power and inequality. She is affiliated faculty with the Department of Ethnic Studies, Women's and Gender Studies, and Latin American Studies.

Dr. Catherine Mobley, Clemson University

Catherine Mobley, Ph.D., is a Professor of Sociology at Clemson University. She has over 30 years experience in project and program evaluation and has worked for a variety of consulting firms, non-profit agencies, and government organizations, including the Rand Corporation, the American Association of Retired Persons, the U.S. Department of Education, and the Walter Reed Army Institute of Research. Since 2004, she been a member of the NSF-funded MIDFIELD research project on engineering education; she has served as a Co-PI on three research projects, including one on transfer students and another on student veterans in engineering.

Dr. Catherine E. Brawner, Research Triangle Educational Consultants

Catherine E. Brawner is President of Research Triangle Educational Consultants. She received her Ph.D.in Educational Research and Policy Analysis from NC State University in 1996. She also has an MBA from Indiana University (Bloomington) and a bachelor's degree from Duke University. She specializes in evaluation and research in engineering education, computer science education, and technology education. Dr.



Brawner is a founding member and former treasurer of Research Triangle Park Evaluators, an American Evaluation Association affiliate organization and is a member of the American Educational Research Association and American Evaluation Association, in addition to ASEE. Dr. Brawner is also an Extension Services Consultant for the National Center for Women in Information Technology (NCWIT) and, in that role, advises computer science and engineering departments on diversifying their undergraduate student population. She remains an active researcher, including studying academic policies, gender and ethnicity issues, transfers, and matriculation models with MIDFIELD as well as student veterans in engineering. Her evaluation work includes evaluating teamwork models, broadening participation initiatives, and S-STEM and LSAMP programs.

Dr. Joyce B. Main, Purdue University-Main Campus, West Lafayette (College of Engineering)

Joyce B. Main is Assistant Professor of Engineering Education at Purdue University. She holds a Ph.D. in Learning, Teaching, and Social Policy from Cornell University, and an Ed.M. in Administration, Planning, and Social Policy from the Harvard Graduate School of Education.



Exploring Narratives of Gay Student Veterans in Engineering

Susan M. Lord, Michelle M. Camacho

University of San Diego

Catherine Mobley, Clemson University

Catherine Brawner, Research Triangle Educational Consultants

Joyce Main, Purdue University



Presented at the 2nd Annual CoNECD Conference
Washington DC April 2019



Context: LGBTQ issues in Engineering Education

- Stakeholders
 - Students
 - Faculty Allies
 - Professional Society: NOGLSTP "nah'-goal-step"
- ASEE
 - Celebration
 - Controversy
 - Safe zone training



About

Safe Zone Workshops

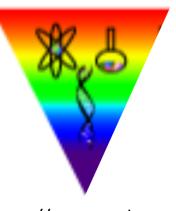
Our Community

Resources

One STEM, a Rainbow Branches

Promoting LGBTQ Equality in STEM

Action on Diversity



https://www.noglstp.org/

Literature Review

Intersectional approach

LGBTQ in Engineering

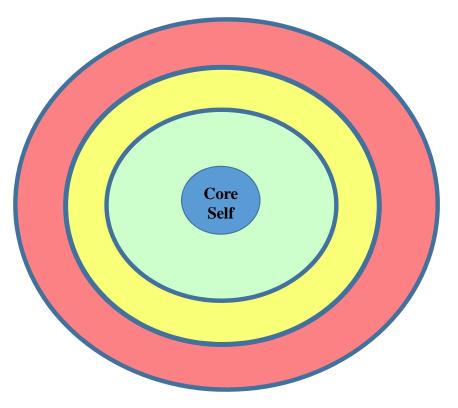
LGBTQ Student Veterans in Engineering

Exploring intersectionality in our research on veterans

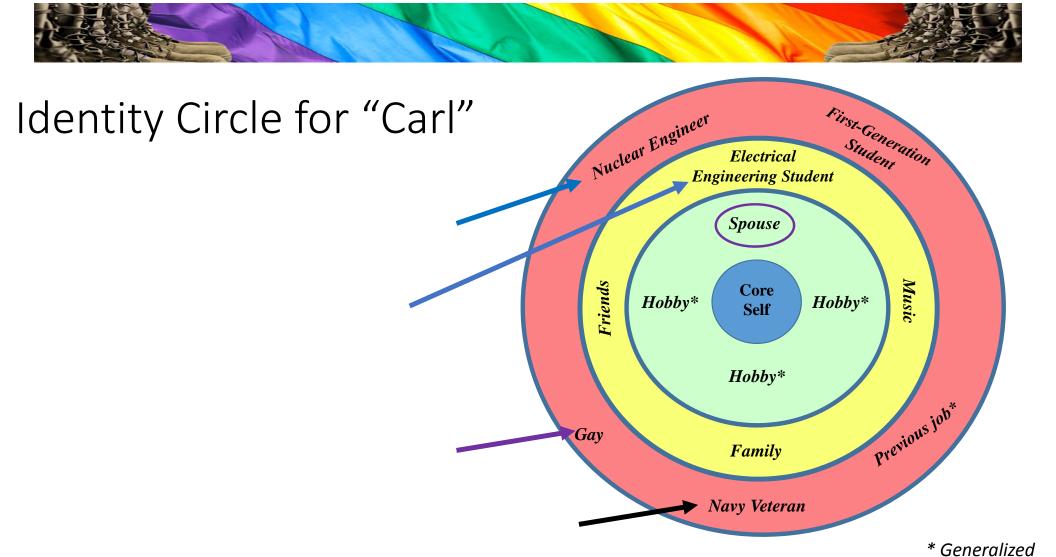
Methodological Challenges

- Sensitive topics
- Identity circles
- Research with small numbers
- Coming out during an interview

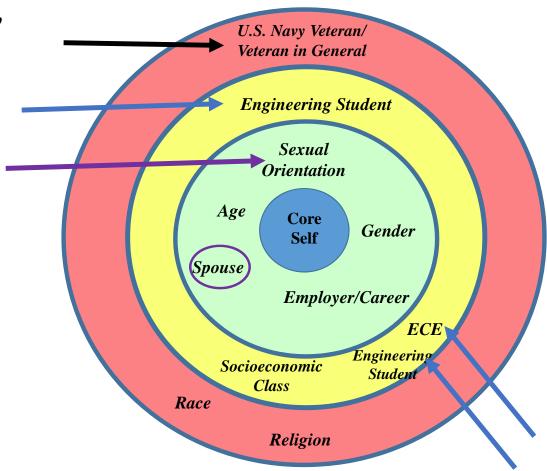
Identity Circle



Self	At home	Student /worker	Service-related
Gender	Spouse/ partner	Engineering Student	Veteran
Race /ethnicity	Parent	Transfer Student	Combat Veteran
Socio- economic Class	Caregiver	First- generation student	Veteran of a Particular Branch
Sexual orientation	Single	Employee	Reservist
Age		Volunteer	Disability
Religion			



Identity Circle for "Jim"



Engineering and the military

- My experience has been just positive. It [military experience] only helped me in engineering. It didn't hinder me at all. (Jim)
- I'm not really sure [about issues military veterans might face as they pursue engineering]. Nothing really because I was a veteran was a problem. (Carl)

Engineering and the military

- [Being a veteran has] actually been a social benefiter ... The only friend I have here at (university) is another military guy who's in the Coast Guard.
 We were in orientation at the same time, sitting there talking... I think we got to talking because we were both in the military part. (Jim)
- Yeah, that's what it was. We were both in the military part of it, we were talking about what branch we were. And then somehow that transitioned into video games. And now we're friends. (Jim)

Desire for a successful life with partner

•We would be married had it not been not legal for so many years, ...now we're kind of at that point we've been together so long it doesn't affect us...that defines who I am in almost every way because I'm a completely different person from since we've met, and a lot of that is my drive to make sure we have a successful, and a good life together. I want to have a good job, and I want to have a good education to insure that that job is never challenged. So that is a big pushing force for this. (Jim)

Challenge of being gay in the military

• [Don't ask/don't tell policy] was a big problem... in the Navy, as far as taking a stance of asking people about their personal lives because they wanted to maintain healthy minds because of suicide rates being so high and things like that. Well, that becomes a problem when you have a don't ask/don't tell policy, and you're asking me about my relationship problems. Now, I can't even tell you information about that because my relationship problem actually stemmed from the fact that I can't talk about it to people. (Carl)

Challenge of being gay in the military

- I don't try to go out of my way to tell them [classmates in engineering]..., but it's a thing that I've decided, ever since I came out as gay, because, in the military, don't ask/don't tell was in when I was in.. (Carl)
- [Being out about sexual orientation] in public, ... caused me the trouble in the military. . . if somebody asks, I'm going to tell them. (Carl)

Challenge of being gay in the military

• It was very awkward, and it was something that I didn't even think about when I joined [the military]. After I got there, I'm like, "Wow, I'm not allowed to talk about this." Now, when it comes up, I talk about it cuz I hated that. If people don't like it, I don't wanna talk to them. That was what I decided. Like, "Okay, this is what I do. This is what I am. If you don't like it, then I don't wanna talk to you." That's actually the stance that got me into my relationship, too. (Carl)

Having the courage to be out about sexual orientation has given him the courage to be bold about other aspects of his life

• Even now, I've taken that stance now in life. When people ask me about things, I tell them, and if they don't like it, then they're like, "Okay, bye. I don't wanna talk to you anymore." It was the same thing for all my interviews for jobs, even. (Carl)

Being gay in engineering: Are there gays in engineering?

• From an engineering perspective I actually find it kind of a challenge; it makes me feel a little more challenging in relating to people, and engineering fields, and usually a lot of geek fields don't always . . . aren't necessarily the most welcoming for gay people. And, I don't think a lot of people even realize that 'cause most gay people are geeks, but it's not. Like if I was maybe in band, or some type of art class, okay, that'd be great . . . Yeah.

Being gay in engineering: Are there gays in engineering?

• Yeah. And 'cause I, you know, whenever you have situations where people are talking, sometimes a student will be talking about stuff, they'll be talking about, "Oh, you know, weekend plans," or whatever and this and that, you know, and now I have people inviting me like, "Hey, you know, do you want to come over to hang out," whatever, and it's like I'm thinking, "Well, if I'm going to go my partner's going to come with me," and then I'd have to broach that whole subject so it's just a lot easier to just say, "No," Plus, a lot of veterans too, 'cause the way the military, are not that accepting of it. (Jim)

Being gay in engineering: Engineering not open to difference

• if you look at the classic engineer it's the geeky White guy, ... and heterosexual. ... And a lot of them, surprisingly, being that they're geeks and they love to read about the oddball X-men, you know, the people who are different, they seem to not want to see different people in real life. ... You know, and that kind of conceptually bugs me, because why would you fantasize about people who are specifically different and not liked by society and yet you're one of the society that doesn't like different people. (Jim)

Being gay in engineering: optional visibility and measured responses

- I'm a White male, and as long as I keep my mouth shut and nobody knows that I'm a gay White male so, for me visibly I can get away and sit comfortably in class,
- but there are those times where I'm like I don't want to talk with people because I don't want to be in that situation because I don't get angry, and I don't get violent, unless you insult me in that regard.
- that is the one area where I'll punch an 18-year-old kid in his face, I don't give a damn. So, if he's insulting me or my loved ones, so I just don't get into that conversation or topic ... just prevent that whole situation from ever coming about. (Jim)

People surprised at combination of identities "wait, you're both gay and a veteran?"

- People think it's interesting, especially when I tell them I'm married. They're like, "You're married?" "Yeah," and then I tell them I'm married to a guy. They're like, "You're married to a guy? Wait, how old are you?" ... They're like, "Wait, what?" There's a like a triple whammy there that happens to people when they find out about me. (Carl, "triple" age, veteran, gay)
- What happens is that, if people look at me, they see that I'm gay, and I'm also a veteran. Some people think that they're a juxtaposition to each other. They're like, "Wait, you're both?" Because people sometimes look at veterans. They think of more of a conservative in—which, a lot of veterans are. (Carl)

People surprised at combination of identities "wait, you're both gay and a veteran?"

• A lot of the veterans are conservative, but a good amount of them are also liberal. I would say it's about 50/50 more than what people think. Well, at least on the nuclear side, I would say that about half of the people were conservative, half the people were largely liberal Even as far as social things like—I don't know. A lotta people might have those problems, but I haven't run into those problems at all. If somebody thinks that I'm conservative, or if there's a problem with that, they also say, "Wait, he's also gay." Obviously, I don't have the social ideologic, and they're right. I don't at all because I could never support any kind of ideology that's against me being gay. (Carl)

Veteran Success Center/SVA not large source of support

- I have [been to the Veteran Success Center] a few times, ...—I've been to some of their meetings, but I just don't need the support. I'm going to classes. I have [spouse] to help me if I do have any questionable problems. (Carl)
- I'm on their [the University's SVA] Facebook page, and I do read when they post stuff on there, but I've never been to a single meeting. So, it's kind of one of those where if there was something that I felt that I could benefit them, I don't mind to 'cause that is part of the military honor, I guess, is you still want to help your community when possible. ...They're just not the same type of people as me, so what little time I have I don't want to invest it in that because I'm not going to benefit them and they're not going to benefit me. (Jim)

Thank you for coming to this presentation.

- Questions?
- Contact info:
 - Susan Lord, Integrated Engineering, <u>slord@sandiego.edu</u>
 - Michelle Camacho, Sociology, <u>mcamacho@sandiego.edu</u>
 - Joyce Main, Engineering Education, jmain@purdue.edu
 - Catherine Mobley, Sociology, camoble@clemson.edu
 - Catherine Brawner, Consultant, <u>brawnerc@bellsouth.net</u>





