Title: Geoscience Diversity Experiential Simulations (GeoDES) Workshop Report

Authors: Heather R. Houlton, Jason Chen, Brentt Brown, Dena Samuels, Carolyn Brinkworth

Paper Number: ED22B-06

Date: Tuesday, 12 December 2017

American Geophysical Union Fall Meeting

Website: https://agu.confex.com/agu/fm17/meetingapp.cgi/Paper/229386

The geosciences have to solve increasingly complex problems relating to earth and society, as resources become limited, natural hazards and changes in climate impact larger communities, and as people interacting with Earth become more interconnected. However, the profession has dismally low representation from geoscientists who are from diverse racial, ethnic, or socioeconomic backgrounds, as well as women in leadership roles. This underrepresentation also includes individuals whose gender identity/expression is non-binary or gender-conforming, or those who have physical, cognitive, or emotional disabilities. This lack of diversity ultimately impacts our profession's ability to produce our best science and work with the communities that we strive to protect and serve as stewards of the earth. As part of the NSF GOLD solicitation, we developed a project (Geoscience Diversity Experiential Simulations) to train 30 faculty and administrators to be "champions for diversity" and combat the hostile climates in geoscience departments. We hosted a 3-day workshop in November that used virtual simulations to give participants experience in building the skills to react to situations regarding bias, discrimination, microaggressions, or bullying often cited in geoscience culture. Participants interacted with avatars on screen, who responded to participants' actions and choices, given certain scenarios. The scenarios are framed within a geoscience perspective; we integrated qualitative interview data from informants who experienced inequitable judgement, bias, discrimination, or harassment during their geoscience careers. The simulations gave learners a safe environment to practice and build self-efficacy in how to professionally and productively engage peers in difficult conversations. In addition, we obtained pre-workshop survey data about participants' understanding regarding Diversity, Equity, and Inclusion practices, as well as observation data of participants' responses during the simulations. Follow-up activities include monthly online meetings to engage problem solving and strategy-building skills for catalyzing institutional culture change within departments. This talk will specifically focus on workshop observations and preliminary reactions to the training.