



Accessible Earth: Enhancing diversity in the Geosciences through accessible course design and Experiential Learning Theory

Rick Bennett (1) and Diedre Lamb (2)

(1) University of Arizona, Department of Geosciences, Tucson, AZ United States (rb0@email.arizona.edu), (2) University of Arizona, Disability Resource Center, Tucson, AZ, United States (dlamb1@email.arizona.edu)

The tradition of field-based instruction in the geoscience curriculum, which culminates in a capstone geological field camp, presents an insurmountable barrier to many disabled students who might otherwise choose to pursue geoscience careers. There is a widespread perception that success as a practicing geoscientist requires direct access to outcrops and vantage points available only to those able to traverse inaccessible terrain. Yet many modern geoscience activities are based on remotely sensed geophysical data, data analysis, and computation that take place entirely from within the laboratory. To challenge the perception of geoscience as a career option only for the able bodied, we have created the capstone Accessible Earth Study Abroad Program, an alternative to geologic field camp with a focus on modern geophysical observation systems, computational thinking, and data science. In this presentation, we will report on the theoretical bases for developing the course, our experiences in teaching the course to date, and our plan for ongoing assessment, refinement, and dissemination of the effectiveness of our efforts.