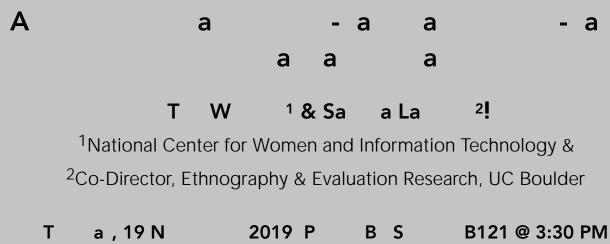
A DBER Science Education Seminar



Course-based Undergraduate Research Experiences (CUREs) are a promising way of making STEM undergraduate education more authentic and meaningful. We will discuss the apprentice-model for undergraduate research (UR) which emphasizes scientific discovery and practices, collaboration, and trial and error. The educational benefits of participating in undergraduate research are sometimes at odds with more traditional scholarly outcomes such as papers, presentations and long-term career achievement in STEM. Instead, educational benefits are related to more difficult-to-assess constructs related to thinking and acting like a scientist such as solving problems, designing experiments, and analyzing data. The difference between scholarly and educational outcomes becomes more pronounced with CUREs given that students must receive grades and learn pre-requisite content and skills for future courses.

We will discuss evaluation use and outcomes embedded in the Undergraduate Research Student Self Assessment (URSSA), a survey developed by our group. After presenting our approach to survey