

# We belong: fostering inclusivity and building skillsets through experiential learning

Tana L. Verzuh & Riley Bernard



## VALUES GUIDING INSTRUCTION

Allowing supported struggling  
Fostering creativity, curiosity, and failures  
Celebrating effort & student-led learning



## STUDENT LEARNING OUTCOMES

After a combination of active classroom and experiential educational settings, students analyze, apply, and evaluate newly acquired skills that include baseline knowledge of field safety, vehicle maintenance, first aid, navigation in the backcountry, risk assessment, and personal/gear prep.

Students will make improvements on their self-assessed confidence in the skillsets described above and therefore their sense of belonging in science will increase.

Students will be able to write a field safety protocol that addresses all 5 of the major safety concerns and at least 2 subheadings under each

## PEDAGOGIES

The course was structured using **experiential learning & problem-based learning**. We employed team-based learning for classroom sessions on sexual harassment & field preparedness. Students read articles before class and worked in groups to evaluate & make recommendations on a lab safety plan. Students had the opportunity throughout the course to ask an expert. Each day, students met & learned from experts in ecology & natural resources. Rooted in Universal Design for Learning, we provided multiple means of engagement, representation, action, and expression. The course was meant to be relevant to female-identifying undergraduate students, giving them practical skills & instilling confidence by connecting their learning to experiences that are meaningful & valuable. We aimed to create a climate where all students felt they belonged. We honored students' experiences, discussed difficult topics that are often not addressed which can leave students feeling alienated, & provided an environment where it is safe to ask questions & share.

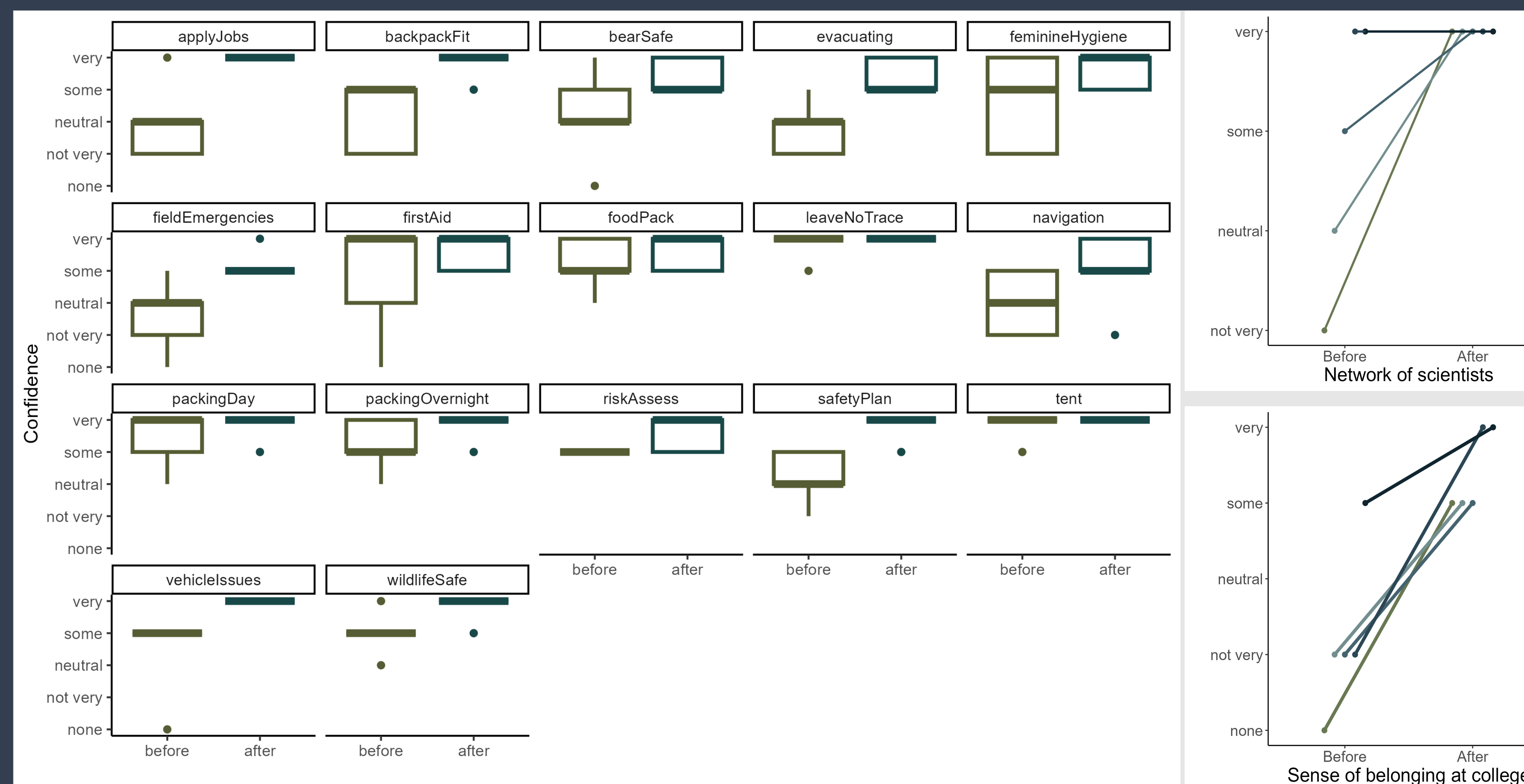
## METHODS OF ASSESSMENT



- **Pre and post knowledge and values assessment.** We had students that missed the initial morning & thus shifted to a post survey & adjusted our questions to reflect changes across the course.
- **Evaluation of safety protocol.** Students worked in teams to evaluate and make recommendations on a field safety protocol. Each team presented their suggestions to the class.
- **Field-based mock scenarios.** We had planned a summative evaluation which we were unable to carry out due to weather.

*"My favorite part was meeting and working with other scientists. I really loved getting to hear their different perspectives, knowledge, and stories. They were all incredibly smart and creative. It was also very encouraging, **it really helped me feel more confident and like I do belong in this field.**"*

## FINDINGS



We saw improvement in all skillset areas and students reported increased confidence in field data collection, assessing risk, safety protocols, and having a network of scientists.

Questions/comments: [tverzuh@uwyo.edu](mailto:tverzuh@uwyo.edu)

## FUTURE DIRECTIONS

- We would like to offer the course, perhaps on a bi-annual basis, varying the location across the state to include more community college students.
- In future courses, we will have a contingency plan for weather to ensure students take part in the mock scenarios. We will also include class time to fill out pre and post surveys.