Dr. Breanne Litts of the Instructional Technology and Learning Sciences Department in the Emma Eccles Jones College of Education and Human Services at Utah State University has received a National Science Foundation Faculty Early Career Development (CAREER) award for her work exploring how a community-driven and culture-centered approach engages American Indian youth and elders in science and technology. The CAREER program offers prestigious awards in support of early-career faculty who have potential to serve as leaders in research and education.

While there have been many efforts to increase American Indian students' participation in science, technology, engineering, and mathematics (STEM) education, the majority of approaches do not adequately address the cultural factors that influence the relationship between Indigenous peoples and science. Litts' work builds on research suggesting that Indigenous peoples take an ecological approach to science and recognize it as intertwined with culture. Failure to embrace cultural wisdom in scientific study results in the marginalization of Indigenous peoples and ignores the cultural, political, and historical roots of science itself.

“I am interested in understanding more about how people learn with technologies and how this learning impacts their identities,” said Litts. “We hope our process will help other tribal communities who might want to engage in similar work and will inform researchers, educators, and designers who think about things like culture, science, and technology.”

The CAREER award to Dr. Litts supports a community-engaged project in partnership with both the Northwestern Band of the Shoshone Nation and Spy Hop, a digital media arts center that offers programming for students age 9-19. The research team will create three “place-based storytelling experiences,” or stories that can be experienced via mobile device in culturally significant locations. With the Northwestern Shoshone in charge of the project, Litts and her team hope to share and preserve important cultural and historical stories of the Tribe while developing technological and design skills.

“We are proud that Dr. Litts has received this prestigious CAREER grant,” said Beth Foley, dean of the Emma Eccles Jones College of Education and Human Services. “Our college greatly values community engagement, and our Office of Research Services has strongly supported Dr. Litts’ innovative project.”

Litts expressed appreciation for the support she has received from the college, stating, “I am deeply humbled to be able to do this work and am grateful we have a culture in this college where I am able to pursue work that has real community impact.”

Dr. Litts is an Assistant Professor in Instructional Technologies and Learning Sciences and director of the Learn Explore Design Lab at Utah State University. She conducts much of her work exploring identity, community, and cross-cultural collaboration alongside Indigenous communities, formal and out-of-school educators, and other community organizations.