



Note: The document header includes the NSF logo as well as logos for the project partners, including AUI, Oregon State University, Independence Science and Tumble Media.

Project Details

Project Title: Engaging Blind, Visually Impaired, and Sighted Students in STEM with Storytelling through Podcasts

NSF Award Numbers: 2148711 & 2148712

Dates: 2022-2025

Project Type: Developing & Testing Innovations

Project Team: Sara Robberson Lentz, Kelly Riedinger, Cary Supalo, Lindsay Patterson, Martin Storksdieck, Peter Walters, Tim Spuck, Marshal Escamilla, Ashley Neybert

Project Overview: The STEM Storytelling through Podcasts (SSP) project focuses on broadening participation for blind/visually impaired (BVI) and sighted upper elementary students by engaging them with podcast technology to promote access to STEM and introduce students to STEM/ICT careers.

Research

The STEM Storytelling with Podcasts project will explore the following research questions: *How can listening to and producing podcast technology increase awareness and interest in STEM careers for blind, visually impaired (BVI) and sighted students? How does featuring BVI scientists and their work normalize participation of persons with disabilities in science and scientific research? To what degree does this lead to a sense of possible selves in science for BVI students?*

Lessons Learned & Insights Gained

In the first 3-months of the project, we have been discussing how best to work collaborative across a team of blind, visually impaired (BVI) and sighted team members to ensure our work is accessible to everyone. For sighted team members, this has included learning more about accessible practices for team work as well as developing understanding of assistive technologies from the Independence Science partners.

Equity

The SSP project will include a listening track and production track to engage BVI and sighted elementary aged students (grades 3-5) in STEM storytelling through podcasts. The listening track will use podcasts in grades 3-5 classrooms to introduce STEM and ICT careers, featuring

BVI and sighted scientists while the production track will engage students in using podcast media to communicate about STEM & ICT careers featuring BVI and sighted scientists.

New Challenges & Next Steps

The SSP project launched in June 2022 and the team is building collaborative processes, engaging project advisors and developing the research plan and initial podcast episodes featuring BVI scientists. Next steps for the project including launching a national survey, recruiting teachers to join our teacher advisory group and developing the initial podcast episodes.