

Wind River Elementary Computer Science Collaborative

A collaboration to support culturally relevant computer science in elementary schools on the Wind River Reservation

What is the Wind River Elementary CS Collaborative?

We are forming a collaborative on the Wind River Reservation to bring culturally relevant computer science to Grades 3–5 through Wyoming’s English language arts and social studies standards by integrating Northern Arapaho and Eastern Shoshone history and culture.

Drawing from the expertise, history, and culture of the Northern Arapaho and Eastern Shoshone people, this collaborative will include teachers, administrators, professional development providers, and researchers from Fort Washakie School, Wyoming Indian Schools, Fremont County School District #38, Wyoming Department of Education, Partner to Improve, BootUp PD, and the American Institutes for Research.

Who are the primary collaboration partners?



What are the goals of the Collaborative?

Develop and refine two culturally relevant computer science units and teacher professional development with Grades 3–5 teachers on the Wind River Reservation.

Build Grades 3–5 teachers’ interest in, knowledge of, and ability to bring computer science to their students through English language arts and social studies.

Teach computer science concepts to Grades 3–5 students in a culturally relevant way.



This collaboration is led by Dr. Joseph P. Wilson (Principal Investigator, jwilson@air.org, American Institutes for Research) and funded through National Science Foundation Award #1923375

October 2019: Project received funding from National Science Foundation.

February 2020: Project team traveled to Wind River Reservation to conduct focus groups to discuss strengths of the community and cultures of the Eastern Shoshone and Northern Arapaho.

July 2020: BootUp created first draft of the culturally relevant curricular units.

January 2021: BootUp conducted its most recent professional development with Fort Washakie teachers.

Spring 2021: Host an art competition for Wind River Reservation students to solicit their artwork for the project curricular units.

Summer/Fall 2021: Carry out professional development for teachers to educate them on the new curricular units.

December 2019: Traveled to Wind River Reservation to discuss the project with the Eastern Shoshone and Northern Arapaho business councils.

May 2020: AIR team sent findings of focus groups to Fort Washakie, Fremont #38, and Wyoming Indian Schools superintendents.

August 2020: BootUp team performed its first professional development session with Fort Washakie teachers.

Spring/Summer 2021: Hold meetings with teachers from Fremont #38, Fort Washakie, and Wyoming Indian Schools to discuss the first curricular unit and gather feedback.