

Hayley Smith: Computer Science

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Storytelling: Computer Science for American Indians in the Middle Grades

Computer Science is rarely taught in the high schools, and even less likely to be taught in a middle school. However, research suggests that students decide if they will continue in STEM by the end of 8th grade. Students have a natural ability to tell stories, especially the students from tribal communities who use stories to express themselves. ALICE is developed to be an easy to learn programming software that uses 3D graphics to provide instantaneous results to the user. This research project will develop curriculum using ALICE to teach computational thinking and computer science to middle school students by embedding storytelling activities into the Indian Education for All standards currently implemented across the state of Montana. To increase effects of these research, a website will also be developed to provide the community information about the project, research results and the lessons developed.