

**BPC: Encouraging Alaska Native Participation in Computing  
Demonstration Project**  
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The BPC: Encouraging Alaska Native Participation in Computing program builds on well-documented evidence that the learning styles and educational goals of Alaskan Natives differ from traditional “western” computing students, and that deficiencies in current programs do not effectively meet the needs of Alaska Natives. Addressing those deficiencies, and development of methods to address them, is our program’s focus. We are working with current successful programs in Alaska to expand and adjust to better meet the needs of students in computing disciplines. Our approach is founded upon four keys to success: developing the students’ *disciplinary knowledge*, helping student develop their *identity* with respect to the field of computing, establishing the practices of *navigation* by which students move through the institutional contexts of their computing education, and *contributing* through which the students can return to their home communities and share their knowledge.

A major focus of our project is to continue developing and implementing foundational program structure as we progress toward meeting our goals. Our most significant partnership is through the Computer Information and Office Systems (CIOS) Department of the Tanana Valley Campus, which is a division of the College of Rural and Community Development (CRCDD). With significant input from CIOS faculty, we have developed a bridging program between the certificate, associate, and bachelor degree programs in computer science and computer security. The new Information Technology Specialist certificate and associates degree program will be offered via distance through CRCDD. Students completing the certificate program can continue their education in the Information Technology Specialist associates degree program, and ultimately a bachelors or masters program if desired with a smoother transition to a bachelors or masters.

Other accomplishments include:

- Worked closely with Mt. Edgecumbe High School, a predominately Native Alaskan boarding school in Sitka, Alaska. Staff conducted multiple site visits to assess needs of students and school administration, and have subsequently made visits to the school to work with the students on technology activities and presentations.
- Selected students from Mt. Edgecumbe High School were invited to attend a two day workshop on the University of Alaska Fairbanks campus. Accompanied by a high school technology teacher, the students participated in several technology activities in the UAF Advanced System Security Education, Research and Training (ASSERT) Lab, an isolated research and educational environment for the study of topics related to computer security. In addition to intensive lab exercises, the students were able to attend the annual Science Potpourri, tour the Arctic Region Supercomputing Center Discovery Lab, and view campus life from an insider’s perspective.
- A MEHS student who attended the workshop mentioned above began attending UAF as a Computer Science freshman in Fall 2009. Recently, we sent him back to MEHS to share his outlook on the transition to college life and the computing resources at UAF with his former classmates. As a result, we generated interest in another visit to UAF for students considering computing degrees.