Addressing Geographic Challenges of Rural Education Through Collaboration

Through the organized use of technology, educators overcome geographic isolation and provide varied learning opportunities to students.

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Alaska is the largest state in the United States. The extremely rugged terrain sprawls across four time zones and makes the construction of roads difficult—and broadband typically follows public transportation routes. In an economy in which education funding is on the decline, it is a challenge to provide robust digital education resources for rural Alaska's students and teachers.

Rather than viewing the difficulties as overwhelming obstacles, several Alaska leaders and education institutions have come together to address this challenge. Principals and district leaders can look to the following examples to bridge the economic shortfalls that often hamper collaboration and innovation beyond their buildings.

The Alaska Department of Education and Early Development (EED), the University of Alaska's Broadband Technology Opportunity Program (BTOP), and the Association of Alaska School Boards (AASB) each received funding through a combination of grants, legislative appropriations, third-party matching, and regular operating funds to help increase digital literacy. Each of those groups is working to accomplish similar goals: reaching rural Alaskan students and teachers with technology-rich tools that are meaningful and relevant.

As a result of geographic isolation and the need for communication among remote villages, Alaska has typically been an early adopter of technology advancements and instructional techniques. For a long time, the communities and schools used radios and fax machines to communicate and provide distance education, but now most of the schools have more-reliable satellite dishes for phone and Internet service. Adequate bandwidth remains a challenge, however. As Therese Ashton, the principal of Wrangell School District, explained, "It's imperative that we have connectivity to be effective. In southeast Alaska, we have more bandwidth than up north. Skype is a great tool, but due to the low bandwidth [in other districts], we are limited to texting through Skype, for our weekly standing ed tech statewide meetings. Having access to the cloud gives principals more options to be creative."

Thanks to a collaboration of leadership across the state, educators are already successfully engaging rural and nonrural students in ways that are making a difference. The creation of digital, online, and face-to-face tools—including Alaska's Digital Sandbox, Alaska's Learning Network (AKLN), and on-site iPad training for educational technology—are a few of the innovative ideas that help us embrace the challenges of rural education and address the learning needs of students in unique and meaningful ways. Alaska has traditionally promoted site-based decision making because of the unique cultural needs of its communities, but educators are also creating statewide tools and processes to meet the needs of rural education systems. Through collaboration, these agencies intend to demonstrate to other states how they can use these types of tools and resources to minimize rural education challenges across the nation.

As a means of encouraging students to stay in school or to prevent losing them to other educational options, some school districts have established virtual schools. The EED established the the learning network as a high-quality option for all Alaska school districts. A unique characteristic of AKLN is that the accountability

for the educational success of students still resides with the school they attend or are enrolled in. Communication between the district offering the online course and the receiving site takes place through the network. All course fees are paid per student, through the district, with the foundation formula funding remaining intact with the school. Moreover, through AKLN, each district in Alaska has the ability to offer courses to other students statewide regardless of location. Woody Wilson, the director of AKLN, said, "The transformation in both students and staff has been phenomenal, and we would never want to return to the old ways. Student attitudes and productivity have greatly increased, as has parents' appreciation of the district's ability to educate their children."

 An advisory board consisting of regional representatives from all 54 districts is responsible for vetting all courses for quality and rigor. For those practitioners and leaders, the most important lesson learned during the two-year process of getting the AKLN coalition started lies in understanding Alaska's unique culture: courses that are successful in one part of the state are not always as successful in another setting because the learning can often be lost in "translation."

Generally, courses that have been refined to provide a "real-life" connection for students are more successful than those that are based primarily on knowledge acquisition. "My teachers want to explore experiential learning, with activities that connect students outside the classroom walls, through the cloud, in a blended learning model," said Ginger L. Blackmon, the principal of Anchorage School District. "When our students are able

to engage actively, through hands-on, real-life examples, the lessons become relevant, and the students make connections to how they can apply things in real life. Teachers are ready to model for others in the state on blended learning instruction, knowing that the collaboration and sharing will help us all."

The EED is working with Bridging the eSkill Gap in Alaska, which is a project of the BTOP Sustainable Broadband Adoption project, to develop and populate Alaska's Digital Sandbox. The sandbox will house a wide variety of grade- and subject-level materials, including fully developed units and lesson plans to samples of student- and teacher-generated work. It is intended to bring together a wide variety of agencies and serve as the permeable barrier between unique market sectors, including health, higher education research, public safety, industry, and K–12 school districts. Traditionally, those agencies have been so busy responding to the needs of

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their own customers that they haven't had the time to identify and share resources with one another. Alaska's Digital Sandbox provides a systematic framework to make it easier to share relevant resources with one another. As another part of the BTOP grant, leaders are working to create a process called "AK20 InCommon," which is a one-passcode authentication with expanded access for each teacher and principal in Alaska.

In support of strengthening digital literacy for teachers and students across the state, the AASB is working with other state agencies to create and sustain a consortium for digital learning. The consortium was originally created to help schools implement their technology vision by providing students with one-to-one access to laptops. Many schools benefitted

from the project, which included hardware and software bundles, wireless technology and web connectivity, staff development, technical support and training, and equipment repair. The services of the consortium have grown to include an expanded menu of professional development trainings, leadership support, digital assessment of infrastructure, and bulk purchases of technology resources. Further, the consortium has signed a contract with Apple for an Alaska K–12 iTunes U site that will provide a standalone digital repository with offerings for teachers, students, and administrators in technical trainings, digital objects, and highlighted educational partnerships. In addition, iTunes U K–12 will support the Alaska Digital Sandbox by aligning with and contributing to course and unit development.

During tough economic times, it is tempting for leaders to get territorial and become excessively competitive for the scarce resources, but this divisive behavior erodes the quality of services that can be offered to students and teachers. In contrast to such behavior, the cooperation and collaboration among the EED, the AASB, and the University of Alaska have enhanced the limited resources that are available to all of Alaska's learners so that they can receive a better education despite economic hardship. **P**L