

Background

The *American Recovery and Reinvestment Act of 2009* (ARRA) included a \$650 million allocation in ESEA Title II, Part D, commonly referred to as the *Enhancing Education Through Technology* program (EETT). This case study was prepared by the State Educational Technology Directors Association (SETDA) – the principal association representing the technology leadership of state and territorial departments of education – to provide an example of ARRA funds working at the district and classroom level that creates effective, viable, and robust reform in education, and improves the way teachers teach and students learn.

Alaska's EETT Competitive Grants

Alaska's ARRA EETT competitive grants focused on helping students and teachers achieve proficiency in technological literacy and skill in integrating technology into the curriculum. Grants that were selected built models that could be replicated in other communities. Presentations were given at the Alaska Society for Technology in Education (ASTE) conference, Alaska's annual technology conference, to ensure sharing and modeling of the final products.

Wave VII: Turning Our School Inside Out Sitka School District, Alaska July 2010-June 2011

With district funds and other federal grant dollars providing wireless access and equipping schools with technological tools, such as interactive whiteboards, document cameras, and student response systems, the ARRA EETT grant, Wave VII: Turning Our School Inside Out, provided focused professional development for sixth grade teachers as a means to foster collaboration and communication, to integrate technology, and to change the educational experience for Sitka students.

Demographics

Sitka is located on Baranof Island in what is considered the panhandle of Alaska and can only be accessed by plane or boat. The population of Sitka is approximately 9,000 and is the fifth largest city in Alaska. The Sitka School District (SSD) consists of two elementary schools, one middle school, and two high schools, serving approximately 1,300 students. Approximately 50% of SSD students are Caucasian, 30% are Alaska Native, and the remaining students have a variety of ethnic heritages with Asian being the next largest student population subgroup.

Project Description

The Wave VII: Turning Our School Inside Out grant focused on providing professional development to five sixth grade teachers in Sitka's only middle school. Historically, sixth grade students were having difficulties transitioning to the middle school, and the intent of the grant was to change the traditional classroom experience through the integration of technological tools. Furthermore, by targeting sixth grade, the intent was to set the stage for a positive, technologically enhanced middle school experience. The hope was to have students feel connected to the academic content and their classmates, thus helping with the transition to the rest of their school career.

Seventh and eighth grade classrooms had been the focus of previous grants yet never received the intense professional development needed to maximize technology integration. By targeting sixth grade students and teachers, the intent was to "trickle up" the experience and expertise. Through formal, professional development meetings and informal discussions, teachers and administrators collaborated and shared internally across the district. The Wave VII teachers provided a vision of meaningful technology integration that allowed teachers, colleagues, and the community of Sitka to understand the critical need to empower students to be collaborators and contributors to their own learning.

ARRA EETT Grant Details

Grant Focus	Project-Based Collaborative Learning and High-Access and Technology-Rich Learning Environment
Beginning/End Date of Grant	July 2010-June 2011
Locale	Rural
Funding	\$99,778
Grade Level(s)	Grade 6
Number of Teachers Impacted	5
Number of Administrators Impacted	2
Number of Students Impacted	88

Project Implementation

To best prepare for the influx of technology tools and the increased use of the online content, the school district used ARRA: State Fiscal Stabilization Funds to help build a wireless broadband network and to purchase an online content management system for the schools. A majority (62%) of the Wave VII grant money was spent on professional development. Remaining dollars went to technology purchases, including a laptop cart to be used exclusively by the sixth grade team.

Our confidence with the technology grew greatly due to the collegial community. I think this was the most powerful part of the project.
- Deborah Riva, Wave VII Teacher

TheWave VII grant provided professional development and technology tools for five Blatchley Middle School (BMS) sixth grade teachers. The Wave VII teachers represented each of the four core curriculum areas (Language Arts, Math, Science, and Social Studies) and the technology teacher. Teachers received a total of ten professional development days organized into three distinct focus areas: August Kick-Off (two days), Focus on Technology Integration (two days), and Learning About Engaged Learning (six days). During the August kick-off, teachers met with a consultant to set the stage for technology integration and targeted training was provided in the use of the interactive whiteboards and student response systems. Teachers were given time to create and share a technology-enhanced lesson they would use the first week of school. The remaining professional development days occurred throughout the school year, typically on Saturdays. Teachers were trained in technology integration and the use of specific technology tools, and were provided the opportunity to develop and share lesson plans. Throughout the school year, teachers used online tools to share resources and experiences and also met in person each Tuesday to collaborate and focus on student learning. The on-going professional development allowed teachers the opportunity to build their skills and learn from one another throughout the school year.

Classroom Examples

- In the Social Studies classroom, the teacher designed a geography game to review landforms. Each student received a different landform written on a piece of paper for “his or her eyes only.” Students were then randomly selected to come up to the front of the room and act out his/her assigned landform in a charade format via the video document camera tool. After 30 seconds of acting, students in the audience texted their response via the interactive response systems and results were posted on the screen. This activity became a template for other topics and other subject areas.
- In a cross-disciplinary lesson, integrating science, history, health, and technology, students were shown Alaska seaweed species and recipes. Next, students researched various seaweed recipes on their laptops, and created a digital seaweed card that included a picture, classification, explanation of how to harvest, and a recipe. Cards were printed and shared with friends and family.

I let students teach me technology techniques and praised their expertise! I saw student productivity double along with their excitement of the research.

- Patty Dick, Wave VII Teacher

Evaluating Effectiveness

The success of the Wave VII grant helped to define professional development for Sitka School District teachers in the area of integrating engaged technology-infused teaching and learning. The ongoing professional development established through regular face-to-face meetings and the use of online tools was often cited as the most important part of program’s success. The support the teachers received from their peers was critical in terms of understanding successes and failures and how to improve for the future.

The sixth grade teachers emerged as school and district leaders and served as models for innovative teaching. For example, at the Technology Infused Learning Conference, the Wave VII teachers taught sessions in a mini-conference environment for their secondary colleagues. They also presented at the Alaska Society for Technology in Education (ASTE) conference.

The grant evaluator surveyed the teachers at the end of the grant period, and as a result of the responses found three themes that emerged from the data.

Themes

1. The grant had a positive impact on how teachers teach.
2. The grant had a positive impact on how students learn and behave.
3. Collegiality was a key to success.

Moving Forward

A critical mass of stakeholders, students, parents, school board, teachers, and administrators embraced the journey toward relevant teaching and learning for today's students. Even in the face of declining revenue, the school board increased the technology budget for the 2011-2012 school year. This program will continue to expand; the teachers involved in the grant will mentor other teachers. The progress made in acquiring hardware and bandwidth will continue to open new opportunities for all teachers in the district.

Resources

Sitka School District's Grant Page
<http://sitkaschools.org/Page/288>

Alaska's Full Evaluation Report of the Wave VII Competitive Grant
<http://tinyurl.com/6sksrt2>

Alaska Department of Education and Early Development's Educational Technology Resources
<http://eed.state.ak.us/EdTech/>

SETDA ARRA Information and Resources
<http://setda.org/web/guest/ARRAresources>