



The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

Final Copy of Case Study

Status:

Laureate

Year:

2013

Organization Name:

Maricopa County MCESA and OET

Organization URL:

<http://www.maricopa.gov/technology/>

Project Name:

MCESA IVL and Electronic Assessments

Please select the category in which you are submitting your entry:

Human Services

Please provide an overview of the nominated project. Describe the problem it was intended to solve, the technology or approach used, how it was innovative and any technical or other challenges that had to be overcome for successful implementation and adoption. (In 300 words or less.)

The goal of the MCESA IVL and Electronic Assessments project is to increase student academic progress, achievement and success through alliances and innovation for the benefit of all students. Provided below are overviews of three parts of this project that use technology to transform school districts and charter schools throughout Maricopa County. 1. Interactive Video Learning for Students: MCESA recognized the need of delivering education services to small, rural communities that are part Maricopa County through Interactive Video Learning (IVL). Through IVL, these communities can now access highly qualified and highly effective math and science teachers. IVL also provides after-school clubs that provide unique opportunities. 2. Interactive Video Learning for

Teachers: IVL is also used to provide professional development to teachers in remote areas. MCEA offers many popular workshops for Arizona educators on topics ranging from developing assessments to delivering engaging lessons that increase critical thinking and complex problem solving skills in students. 3. Electronic Assessment Delivery: Online assessments are a very valuable tool for teachers and administrators as they work to use reliable data to make instructional decisions. However, many of the schools in Maricopa County struggle with maintaining the infrastructure and acquiring the hardware necessary to utilize this powerful solution. MCEA provides tablet devices to schools and districts without the necessary technology and broadband bandwidth to administer on-line assessments.

When was this project implemented or last updated? (Please specify month and year.) Has it incorporated new technologies and/or other innovations since its initial deployment? (In 300 words or less.)

The project was implemented in January 2011 and will have all updates implemented by June 2013. The innovative use of the Interactive Video Learning (IVL) environment has enabled five of the county districts to bridge distance and take part in opportunities they have never had before. In particular, the IVL allowed two highly effective teachers of math and science to teach several times per week ten different classes of algebra, science, or elementary math to nearly 350 students, some of whom were a hundred miles away from the city. Furthermore, teachers in three districts were able to participate in professional development with a professional instructional coach trainer without the costs of travel or needing to leave their students in the care of substitute teachers. Even more exciting is that these teachers were able to collaborate with teachers from other districts, but with similar contexts, thus expanding the knowledge base in their own setting. Some districts served by MCEA are not limited by geography, but rather capital funds, because they serve areas of poverty. These districts struggle to raise the necessary capital to keep pace with the technology expected by school mandates. For example, all schools in Arizona are expected to test students in all subject areas to evaluate teacher effectiveness and student performance. This is a high burden and requires on-line technology to be accomplished efficiently and securely. Schools without enough computer labs are at risk for not being able to comply with the mandate. MCEA was innovative in arranging for districts to borrow computer tablets that can be easily transported and shared among schools in order for students to take their tests on-line instead of resorting to costly, unsecure and inefficient paper assessments.



Is implementation of the project complete? If no, please describe the project's phases and which phase the project is now in. (In 300 words or less.)

No. The technology is procured, functioning, and out of the pilot phase. The final installations will occur for all stakeholders by June 2013.

Please provide at least one example of how the technology project has benefited a specific individual or organization. Feel free to include personal quotes from individuals who have directly benefited from the work. (In 300 words or less.)

Through the use of IVL, students in the remote community of Mobile, Arizona connected with a class of students in Panama City, Panama and a biologist working in the rainforest outside of that city. Together these students crossed language and cultural barriers, and worked together with the aid of the biologist to explore Leaf Cutter Ants and learn about the medical breakthroughs that are happening due to the work being done in Panama.

Would this project be considered an innovation, a best practice or other notable advancement that could be adopted by or tailored for other organizations and uses? If yes, please describe that here. (In 300 words or less.)

The project is considered an innovative use of technology and notable advancement in educational services. The use of IVL and tablet device to deliver educational services from a metropolitan area to remote areas is certainly a notable advancement in educational services that provides students, who in this case are young people and individuals within the academic profession, opportunities not previously afforded within the communities in which they live.

If there are any other details that the judges should know about this project, please note them here. (In 300 words or less.)

This project was a joint effort between a MECSA, which is focused on educational services, and OET, which is focused on technology. Should judges deem this project worthy of an award, the award should reference both departments.