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Final Copy of Case Study

Year:
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Status:
Laureate

Organization Name:
4-VA

Organization URL:
http://www.4-va.org

Project Name:
4-VA: Transformation through Collaboration

Please select the category in which you are submitting your entry.
Collaboration

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.)

In 2010, Virginia Governor Robert McDonnell's Higher Education Commission and his Commission on Economic Development and Job Creation released their reports on how higher education needed to change in order to better serve the citizens. The presidents of four Virginia universities, George Mason University (GMU), James Madison University (JMU), the University of Virginia (UVA) and Virginia Polytechnic Institute and State University (Virginia Tech), joined together to form the 4-VA consortium to strategize how to meet the needs identified by the Governor's two commissions. The university presidents met with the Governor and with the CEO of Cisco Systems, John Chambers, to acquire and implement technology for the consortium that would enable the 4-VA universities to

collaborate in ways that would leverage the strengths of each partner university to accomplish much more than any individual university could achieve alone. The presidents set the 4-VA goals as decreasing the cost of delivering instruction, expanding access to education programs, increasing research competitiveness and enhancing the success rate of students in Science, Technology, Engineering and Mathematics (STEM) courses and programs. To enable the universities to collaborate efficiently, each 4-VA university reallocated physical facilities and technical staff to work with its technology partner, Cisco, to install eight immersive video (TelePresence) rooms, two on each campus. These new facilities enabled hundreds of collaborative meetings involving Chief Academic Officers, Deans, Faculty, CIOs and other educational leaders from the four schools. Because these universities have different cultures, practices, and goals, not much collaboration or resource sharing had occurred in the past. The immersive nature of TelePresence, the feeling of being in the same room with remote participants, helped to build strong relationships and effective, collaborative win-win projects.

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.)

Upon the recommendation of Governor McDonnell, the Virginia General Assembly appropriated $3.4 million dollars in March 2011 to get 4-VA off the ground. Work within the program began in July 2011.

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.)

4-VA is making significant headway on improving all Virginians' access to higher education. For example, it has created three distance education degree completion programs for community college graduates unable to attend a four-year university due to geographical constraints. 4-VA is also working to improve communications between educational organizations outside of its own partner universities, such as state libraries, and other groups that often have to travel long distances in order to get together to share best practices. One library director was so impressed with the state meetings on TelePresence that he brought in C-SPAN founder Brian Lamb to experience the strides in management that the statewide organization has realized. During the current phase of the initiative, GMU has created two large group rooms that hold close to 100 students, teachers and staff, making it possible to share presentations by government and world leaders located close to its campus in Washington, D.C., but who would have difficulty getting to the other three partner universities. The language teachers in particular are pleased with the ability for their students to

interact virtually with global leaders in their field of study. 4-VA has also developed protocols for using immersive video technology to share courses across the universities, and has successfully shared language and STEM courses. The short-term next steps include large scale collaborative STEM course redesign, the use of immersive video technology to share more courses, an upcoming conference for representatives from all education sectors to strategize improving biology articulation among the sectors, and the completion of several collaborative research projects. One 4-VA goal over the next six years is to offer the shared infrastructure model that GMU, JMU, UVA and Virginia Tech have designed to all Virginia higher education institutions, bolstering the state's economic development.

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.)

4-VA impacts all members of partner university communities. Instructional talent is being leveraged in the delivery of programs in foreign languages and STEM fields to create meaningful changes and prepare students for jobs in the global economy. "A good example of this [collaboration] would be the course in national security policy that JMU offered. We don't offer that course, and it was a course that can be very useful to students and they couldn't have gotten it any other way," says UVA President Teresa Sullivan. The schools now offer languages such as Chinese, Persian, Turkish and Portuguese, which otherwise would not have been available, or would not have attracted large enough numbers on each campus. Through immersive video, students can clearly hear the instructor and analyze the enunciation of the language in great detail. JMU has assisted Virginia Tech by teaching Portuguese to students who plan to participate in programs in Brazil. Another priority area for 4-VA is STEM education. To improve the success of biology instruction, in spring 2012 4-VA brought together instructional leaders to identify student success issues. As a result, 4-VA is now working with the Virginia Department of Education to connect AP coordinators from K-12 districts and community college leaders to improve articulation for obtaining and transferring credits in biology. 4-VA is also now sharing an advanced biology seminar through immersive video and expects shared STEM seminars to be an area of high growth. "One of the things that's really exciting is the shared technical infrastructure," says James Hilton, chief information officer at UVA. "The great thing about partnering from the beginning is [the ability] to build that infrastructure in a way that's shared and allows us to concentrate on different areas of expertise."

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 4-VA initiative is an innovative education model that addresses issues surrounding the delivery of higher education that schools face every day across the nation. "We've moved from an industrial-based economy to one that's more information network based. The 4-Virginia initiative and the technology have been a catalyst for universities," says Erv Blythe, former CIO for Virginia Tech. One challenge is making education more affordable while still expanding and improving the student experience. From travel time to cost savings, the incorporation of immersive video not just at the student level, but at the administrative level for planning and business-related purposes allows leaders in higher education to collaborate instantly and share best practices and solutions across the country, and even internationally, in real time with a large cost-avoidance. "4-VA is a national model in the way that it's really brought together four of our premier institutions in the Commonwealth of Virginia," says Laura Fornash, secretary of education for the Commonwealth. Using 4-VA as a model to improve access to education, other universities can create similar consortiums to drive resource sharing and increase the number of graduates on their own campuses. The use of technologies such as TelePresence to help leverage resources will become more and more important in the delivery of higher education. From reducing the cost of on-campus instruction to providing dual enrollment opportunities for high school students, technology will serve as a catalyst to lower costs while at the same time increase access. "If this model is successful, and so far it has proved to be successful, it can be replicated across the country," says Dr. Charles W. Steger, president of Virginia Tech.

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

The 4-VA initiative was the result of a tremendous level of collaboration. Governor McDonnell, joined by Cisco's CEO John Chambers, and each university worked collaboratively to foster the initiative and the pilot projects. Governor McDonnell has also worked closely with Secretary of Education Fornash to promote the participation of the universities. The Governor and the Secretary have "starred" in several TelePresence meetings. Those involved with the program believe that 4-VA, by improving higher education in Virginia, will also have a positive impact on the state's economy and workforce. "I consider this technology to be groundbreaking in terms of being able to partner with colleagues and other institutions," says Dr. Linwood H. Rose, president emeritus of JMU. "Collaboration across universities is difficult in the best of worlds and can be impossible if the universities are so distant that frequent in-person meetings

are not feasible. TelePresence has made it possible for this collaboration to grow in breadth and impact," says Joy Hughes, GMU's vice president for information technology/CIO and executive director of 4-VA. "Virginia is reforming and reinvesting in higher education to ensure that we have the highly skilled workforce necessary for recruiting knowledge-based business and jobs in Virginia," says McDonnell in regards to the 4-VA program. "Using tools such as Cisco's TelePresence and immersive video technology, we are fostering the greater affordability of, and access to, higher education."