A Case Study Spotlight: Education

The Challenge:
James Madison University was looking for a dynamic and innovative IT solution that enabled telepresence, virtual collaboration, and in-room collaboration, between individual students, teachers, and others involved in the educational process.

The Solution:
A Custom Designed AV Solution
Key features include:

- Audio Conferencing and Cisco TelePresence
- Cisco Webex for Remote Collaboration
- Quad or Combined Screen Ability
- Wireless Presentation
- Multi-input Collaboration
- On-screen Annotation

The Results:
- A new X-Lab that features conferencing, PC, collaboration, and presentation modes
- Improved collaboration via a new Cisco video conferencing system
- Wireless content sharing from any device with multi-screen touch collaboration
- Expanded student/professor learning opportunities
- State of the art technology viewed as a recruiting tool for students and faculty
Who Is James Madison University?

James Madison University is located in Harrisonburg, Virginia and has an enrollment of more than 20,000 undergraduate students, and nearly 2,000 graduate students.

U.S. News & World Report has recognized JMU as the number 2 top public school in the south.

The university prides itself on it’s slogan, that it’s been “changing the world since 1908.”

“Change” is also happening at JMU in a large way, with the addition of it’s brand new, innovative, state of the art

The Challenge:

James Madison University strives on a daily basis to be a leader in innovation in every aspect of higher education. In many cases, that innovation begins in the classroom.

That’s why JMU challenged itself to create a “classroom of the future,” known as the X-Lab, that would fundamentally change and improve the collaboration process between students, professors, and others involved in the educational process.

JMU turned to Cisco, the worldwide leader in IT, to initiate the process.

Cisco immediately contacted IVCi, a Cisco Premier Partner, because of its vast experience in designing these exact types of classrooms.

“Cisco often reaches out to IVCi as a trusted partner,” says Robert Mathews, the Collaboration Strategist for IVCi.

He says, “We have specific expertise in delivering the correct collaboration solutions and A/V solutions for our clients.”

He adds, “This is a specialized environment therefore it was important the correct technology could be utilized in a cost-effective manner to deliver the right solution that fits the users needs. We appreciated that Cisco and ABS brought this opportunity to us.”

IVCi’s previous experience in creating these “specialty rooms” was enormously helpful to the decision-makers at JMU.
The Challenge (cont.)

Nick Swayne, the Executive Director of Four Virginia at JMU, says, “The biggest thing that helped us seal the deal with IVCi was that they came highly recommended by the partners that we had used for integrations of some of our other systems, and they had used really advanced video conferencing systems at a number of other institutions.”

The Value of AV Consultation & Design

The value of the AV consultation and design process during the X-Lab project cannot be overstated. It all started with a “needs assessment” to figure out exactly what JMU’s requirements were.

Mathews says, “I really wanted to focus on exactly how the space was going to be used. So, we did several interviews prior to designing the X-Lab to determine what the University’s needs were.

He adds, “We interviewed a number of users and managers who use and develop some of the latest technology, including wearables, 3-D printing, electronics, and other high-tech items.”

Mathews says, “The goal was to deliver technology as a seamless interface to their work and their ability to collaborate. The workflow through the X-Lab system was more about fostering the creative process rather than a more traditional instruction-led environment.”

From JMU’s perspective, the hours of consultation and answering questions paid big dividends. The University had a vision for what it wanted, but visualizing how to transform what used to be an old, rundown TV station with thick concrete walls, into a state of the art collaborative classroom of the future, was challenging.

In order to bring its vision to life, IVCi went “next level” in presenting its ideas

“To best convey the solution,” Mathews says, “blueprints and 2D design weren’t enough. We were able to use 3D technology visualization to create the environment and present that to the university.” He says, “The JMU team were very excited to see the 3D models that I created because they could experience a walk-through, an interactive environment that I could modify and design on the fly as we developed the concepts. The 3D visualization really helped them understand what was going to be in the room, how it would work, and what it would be capable of.”
The Solution

The X-Lab concept is a major technological breakthrough in today’s modern classrooms. It features cutting edge technology that is infinitely flexible and integrates easily into any space.

Mathews explains “The solution we chose enabled Cisco telepresence, optimal audio and visual capabilities, virtual collaboration, and in-room collaboration between both individuals and groups, small and large.”

These capabilities combine to create the four unique modes of operation the X-Lab performs in: conferencing, PC, collaboration, and presentation.

Now, experts can lead specialized hands-on courses to JMU students from across the globe, and students can actively participate remotely via Webex to avoid missing a class.

In addition to unique virtual visits, students in the X-Lab can access personal and university files without bringing separate hard drives to the classroom.

They are also able to share content from their laptops or mobile devices wirelessly across four screens, and much more.

In short, this classroom, which can be used by a drone class one day, and a medical class the next, is impressive on so many levels, that everyone at JMU is not only wanting to use the room, but they are telling anyone who will listen about its seemingly endless capabilities.

The Results

The longest part of the X-Lab project was the construction involved in transforming a 65-year old TV station into a state of the art, 21st century classroom. The actual design and implementation provided by IVCi took only about 8-weeks.

Swayne says, “I was surprised that we could get it all done in that short of time, and probably even more surprised at the price-point that we were able to get at.” He adds, “IVCi really came in with a good understanding of the scope of the work that needed to be done and put it together very easily for us. I think that was a big benefit of working with IVCi.”

JMU students who are currently using the X-Lab say that this new collaborative space not only helps them with their classwork now, but will undoubtedly help them in their future careers.

Dan Carrier, an Engineering major, says, “What makes the X-Labs really cool is not only the fact that we now have the ability to have people teleconference in to us from anywhere, but many students are also benefitting from this technology on a very personal level. Carrier adds, “For example, the class that I took in the X-Labs allowed me to meet new people and start an internship that didn’t look like much at first, but turned to actually start snowballing into a small business.”
The university is also getting rave reviews from other institutions who visit the X-Lab for conferences and presentations. Because of those visits, many universities are looking into what it takes to have the same telepresence technology installed at their campuses.

What’s more, university officials are excited by the reception the X-Lab is sure to receive by those who may be interested in investing in, or attending, JMU.

Swayne says, “This needs to be a stop when we are having students come and visit JMU. The foundation has been down there, our development office has been down and they looked at the space and said, wow, this is great, we need to get donors down here to see this because it’s clear that this is where stuff happens.”