Kayas Cultural College blends in-person and virtual learning to transform education model.

Kayas Cultural College is a comprehensive training center that prepares adult students living within the three remote communities of Little Red River Cree Nation (John D’or Prairie, Fox Lake, and Garden River) with the necessary academic skills to pursue higher education or enter today’s evolving workforce.

By adding Microsoft Surface Hub and Office 365 to its classrooms, and equipping educators with Microsoft Surface Pro, Kayas College has successfully blended distance learning with face-to-face collaboration. Their solution empowers teachers and students in disparate locations to actively engage with curriculum and interact with each other in real-time, just as if they were in the same room.
Embracing a culture of collaboration

For people who live in remote locations with harsh weather conditions, activities we may take for granted, such as commuting to work, maintaining a family home, or getting to school represent great challenges. For Little Red River Cree nation, this resulted in an estimated enrollment rate of 20% for students by the time they reach the 12th grade.

Collaboration is key to living well here. Kayas Cultural College was created as a local training center to provide adult residents with better access to education and training, without having to travel off reservation.

"Being so remote, the school had trouble retaining teachers and was operating with antiquated systems when I arrived," says Trumpour. "Our students were aware that we were not up to par with provincial institutions, and they didn’t feel like it was a real school."

One of the first things Trumpour wanted to do to increase enrollment rates was to implement technology that would increase student motivation and motivate his staff as well. "We had a vision; we wanted a virtual teaching classroom—for students who weren’t in front of an instructor to feel like the instructor was with them. They get that with Surface Hub."

Microsoft Surface Hub

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Kyle Trumpour
Director, Kayas Cultural College
An engaging virtual classroom

In 2011, when Trumpour first joined Kayas as a math teacher, there were a total of 13 students enrolled in the college across its three locations. With limited broadband and resources, class assignments were faxed or emailed and an old conference phone system with faulty CRT televisions was the only method for videoconferencing.

“The workflow didn’t make any sense,” says Trumpour. An overhaul was in order. Over the next six years, he and community initiatives coordinator Kyle Kelly worked tirelessly to secure grant funding for capital purchases, upgrades to infrastructure, and modernization of curriculum.

The college utilized laptops and projectors as budget allowed, yet neither delivered on the vision Kayas held. “You didn’t feel like you were part of a classroom,” says Trumpour. “It just felt sterile, not engaging. We wanted students to interact with each other and with their teachers.”

On the lookout for innovations that could transform the distance learning experience, the team implemented Skype for Business and followed the development of the Microsoft Surface very closely. “When the first Surfaces came out, it was great,” recalls Trumpour. “Using the pen on Surface Pro, teachers could mark assignments digitally. By linking them to projectors, they could interact with students in a different way while teaching.

But again, you didn’t have that last piece of the puzzle, which was being able to stand in front of a class and have people who weren’t at the same location as you, feel like they were there with you. When Surface Hubs were released, we jumped on it. It’s exactly what we wanted. That was our vision, an engaging classroom.”

The 84-inch Microsoft Surface Hub is a group collaboration device that integrates videoconferencing, presentation, digital whiteboard capabilities, and runs Windows 10 Universal Windows Platform applications. Having one Surface Hub in each of the school’s classrooms allows Kayas instructors to present information and interact directly on the screen with students at all three locations simultaneously.

“As an instructor, it’s as close as you’re going to get to being in the same classroom as the students. It feels like you’re there,” explains Trumpour. “Whether you’re writing on the board or standing in front of the screen, students at our other two locations can easily see and interact with the instructor and each other through Surface Hub’s integrated cameras and microphones.”

By partnering with Sharp’s Audio Visual, the school was equipped with three Surface Hubs, delivered with built-in dynamic high-def cameras, in time for the start of the school year, despite being hundreds of miles away in the northern reaches of Canada.

“The ease of using OneNote Class Notebooks us to eliminate paper entirely,” says Trumpour. “Office 365 is the backbone for our organization, all teachers and for students.” Teachers post assignments in OneNote Class Notebooks. Students then access and complete their homework using Office 365 applications on classroom laptops. Teachers then markup the assignments using Surface Pen on the Surface Pro 4 - and students can even watch as their homework is graded.

Increasing student engagement

The transformation that Kayas has made using Microsoft technology and products, over the past two years, has changed program delivery in an extremely tangible way, where administration can see, very clearly, how students are benefiting.

“Before the Surface Hubs, interaction was so limited that it made it difficult to instruct, and next to impossible to track student engagement,” says Kelly. “Now, it’s much easier to identify participation. We can see clearly which students are in each location, call them by name, and at a glance, see who has done the work. I can see who’s been online. If they haven’t been online, we can get in touch with them, find out why, and engage with those students. In turn, we can make the learning more interactive and engaging for them, and encourage them to be successful.”
Using OneNote and Office 365, teachers can see assignments that are completed, mark them right away, and give almost immediate feedback to students. And with Skype for Business, students can ask questions directly to instructors in real time.

“It’s a much better method of delivery for education than anything we’ve used previously,” says Kelly. “Microsoft tools are great for an educational setting because they’re user-friendly. Since everything is cloud-based, students always have access to classroom materials from any device. If they miss a class or Internet access is out—which happens in these remote locations—they go into their personal Office 365 account, open their OneNote Class Notebook, and everything is at their fingertips. They can continue to work independently and are self-sustaining. They think it’s fantastic.”

Extending collaboration to the wider community

“The reception that these changes have garnered from our community and from our students has been overwhelming,” says Trumpour. “The level of retention for students over each semester has gone up every year since we started implementing these changes, as has enrollment and graduation rates. We now have 110 unique students passing through Kayas every year, which is a huge transformation and it’s because of the technology that we’ve been implementing. This place feels like a professional institution now.”

“People in Little Red River Cree Nation are valuing education more,” says community initiatives coordinator Kyle Kelly. “We engage the adults, and they, in turn, will engage the children.”
“Parents who are students themselves are becoming more confident in their ability to learn and are placing a higher importance on their children’s education,” says Erin Awe, regional student support service coordinator for the nation’s board of education. “Bringing in new management and technology has improved teacher retention rates, helped us grow the continuity of our math and literacy programs, and increased our knowledge sharing between the college, elementary and high school.”

Additional community has started utilizing the high-tech learning environment at Kayas firsthand, with community members collaborating and holding meetings using the Surface Hubs. In fact, the local government is planning to purchase three new Surface Hubs for Chief and Council management. And with 99 percent of Kayas students being parents, the motivational impact is becoming contagious. Enrollment rates at the Little Red River Cree Nation’s K-12 institutions continue to rise as a result.

Leaders at Kayas Cultural College believe they have found a scalable solution for adult distance learning in First Nations communities and are working with local governments to replicate it across northern Canada.

“There’s a lot of community members out here on income support who’ve never left; this is all they know,” says Trumpour. “If the cycle is not broken, it’s all they will ever know. Education is invaluable and what they need to be successful. It’s the first step to getting a better quality of life.”

Microsoft Surface Hub

Surface Hub is a collaboration device designed to unlock the power of the group, powered by Microsoft software and services like Windows 10, OneNote and Skype for Business.

For more information about Microsoft Surface Hub, go to:
http://www.microsoft.com/surfacehub