



Shedding New Light

Crestron DigitalMedia™ helps Native American Cultural Center prepare students for the future

From the soft tones of a flute to the excitement of a spirited debate, the mood changes quickly in the new Gathering Room at Northern Arizona University.

The Gathering Room is the central focus of the Native American Cultural Center, which recently opened its doors. By providing a place for Native American students to maintain their heritage, while integrating today's all-digital technology, the university is making a promise: students' futures are as important as their pasts.

A global community

The Gathering Room represents the circle of life, with its round shape and earthy colors.

But tradition is not enough. NAU students and faculty use the Gathering Room for meetings, training, lectures, panel presentations, film series, and music performances, which all rely on the latest video and audio technology.

"We are such a global community now," says Catherine Talakte, NAU's Director of Native American Student Services. "We felt we had to blend technology with the cultural design of the center."

The NACC is a place for presentations, events, inspiration and also for relaxation and reflection. A sandstone fireplace in the lobby comes in handy on a cold day. A story room on the second floor provides an intimate setting for individuals to burn cedar, sweetgrass and/or sage in keeping with their own spiritual customs. Memorabilia from Arizona's 22 Native American tribes adorn the walls in the Pattea conference room, named after Dr. Clinton Pattea, President of Ft. McDowell Yavapai Nation who is also a strong supporter of higher education.



Ready for new standards

Because they knew NAU professors and students might bring virtually any kind of audio and video media into the Gathering Room, and because they knew the center would be expanding their technology in the future, AVDomotics decided to install a Crestron DigitalMedia™ network.

“We have a variety of digital inputs, including laptops and a Blu-ray Disc® player, and we have to be able to accept older analog sources as well,” Andy White explains. “The flexibility of the DigitalMedia technology is a very big plus.” AVDomotics included a Crestron DM 8X8 switcher in the network, which, when Phase Two of the project is completed later this year, will allow them to route any of eight video inputs to any of eight displays or recording devices. “What makes the Crestron switch so versatile is that it is essentially a kind of card chassis,” says White. “Right now we have three digital input cards going to just one output, but we hope to add additional inputs and outputs later this year.”

The DigitalMedia network will also allow the center to accommodate new technologies as they become available, for example the new 4K Blu-ray players that have just been introduced, which offer four times the resolution of 1080p high definition. “Crestron is the only company properly handling the distribution of high-definition media,” says White. “Other companies are trying, but they are chasing Crestron.”

The Gathering Room has featured R. Carlos Nakai, a world renowned Native American flautist. “One of the things we’d like to do is take the technology outside this one area,” says Talakte. “We have had a number of small performances but, on a daily basis, we want to send music –even just on CD– throughout the building and outside.”

While Phase Two funding is being secured, The Whites have designed additional sound systems for the center using in-wall speakers. “We will actually install them onto the back side of the drywall so you don’t see them, but they will turn the whole wall into a loudspeaker,” Andy White explains. “We can do that with the windows in the center as well, so that the windows themselves become the speakers and people outside can hear the music playing inside.” The Whites also plan to install an automated camera in the Gathering Room, so that events can be recorded and broadcast live into other rooms on campus.

All of this will be done, of course, without detracting from the timeless feel of the center. “I think people feel really strongly about their Native American culture and traditions,” says Talakte. “But because we’re on a college campus, technology is something they interact with on a daily basis. We want the students to know there is a place where they can come and get help, hang out and study, and we want to make sure the technology is there to help them to do so.”

Variety begs versatility

According to Andy White, CEO of Sedona, AZ-based AVDomotics, the multiple missions of the center require flexible technology. On the one hand, he knew he had to design a system that would provide the highest quality visuals and sound, but he also needed to pay special attention to the aesthetics of the center and the mood to be created for a given event.

The architecture of the Gathering Room made the choice of a projection system a special challenge. Instead of using a traditional screen, he had a 10 foot X 5.6 foot section of the curved wall specially treated with a smooth white projection surface. “Because the projection surface is curved and because of the relatively high positioning of the projector, we knew we would have image distortion to deal with,” says Charlie White, Chief Technical Officer at AVDomotics. “We included a Digital Projection M Fusion projector, together with one of their image manipulation processors, and use the processor image warp technology to overcome that issue”.

The room includes an unusual array of LED lighting fixtures in the Gathering Room, concentrating six colorchanging Color Kinetics LED flood lights and 20 smaller LED spotlights in a flower-shaped lighting scrim hung below the center of the ceiling. A presenter can set the color and intensity of the lights for a particular meeting or event, controlling each fixture individually or choosing from a wide variety of preset effects and pre-programmed themed lighting shows, all designed to bring the feel of the outdoors inside. AVDomotics provided simplified control of all lighting effects, as well as of the audio

and video systems, from a nine-inch Crestron touch screen mounted on the lectern. “There’s a second Crestron touch screen above the input plate in the back, so a technician can operate all the various systems from behind the scenes,” Charlie White adds.

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Charlie White, Chief Technical Officer at AVDomotics

To maximize audio quality, the Whites based the sound system on a digital audio processor, plus amp and ceiling speakers.

Although the center is meant to be a home away from home for Native American students, it is not for their exclusive use. “We hope it will help to dispel some of the stereotypes that people have about Native Americans,” says Talakte. “Whether it’s through a film series or other types of presentations, we want people to understand that this is a place for everyone—for the local communities, the tribal communities, and all NAU students and staff to come in and use.”

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