zoom

case study

The University of Arizona Achieves Student-Centered Learning with Zoom and Kubi

On Michael Griffith's first day as the new Director of Instructional and Learning Technology for the College of Education at the University of Arizona, the college was converting a computer lab into a telepresence classroom that would serve both local and remote students. The room was gleaming, with four 80-inch screens that displayed content and remote participants and three high-definition cameras to capture the in-person faculty and student interactions alike.

The classroom, which was a pilot project sponsored by the University's central IT, was opened with great excitement in the college as it allowed classes to bring in students from all over the world to learn together. The pilot, however, revealed challenges for both faculty and students. "It was difficult to move from whole group to small group activities and back, a key component in the style of teaching at the college," explained Griffith. "Remote students also only saw what a camera operator chose to show in the initial use of the room," he said.

So Griffith got to work fixing these problems. "We went hunting for an actual student-centered solution," said Griffith. The solution they discovered: the combined power of Kubi hardware with controls integrated into Zoom software. It was clear to Griffith that iPads representing remote students was the best way to have them interact with their peers in the classroom. He turned to Kubi, the robotic iPad stand from Revolve Robotics that allows a remote participant to display their face and direct their attention around the room.

"No longer are remote students on the front and back walls of the classroom. The Kubi sit sideby-side with the resident students and when an instructor looks out they see all the faces of their students," said Griffith.

THE UNIVERSITY OF ARIZONA

University of Arizona

Industry: Education

Challenges: The University of Arizona was looking for a video solution that would seamlessly bring their remote students into the classroom.

Solution: Bring in remote students on Kubi Telepresence Robots running Zoom

Business Benefits: Immense cost savings, and more importantly, a stronger educational experience and higher engagement for local and remote students.

Kubi lets each remote student appear on a separate iPad screen and direct their attention as they like: to other students, the teacher, the whiteboard, and so forth. Zoom allows them to join via a high quality, reliable connection with powerful e-learning tools built in – then control their point of view to look around and interact simply and easily.

Griffith numerated the many benefits of the combined solution. "We liked that, on Zoom, it was easy to create reoccurring meetings so students have just one link that works every week and that there are minimal administrative requirements. We also love that it is easy to use for our students, that they click once and they're in the class," described Griffith. "The Kubi robot allows the remote student to decide what is important to them in the classroom and turn their attention to that. Before, remote students participated minimally. Now they connect early, engage with classmates, and take advantage of the whole learning experience from formal presentations to small group work."

The University has seen significant cost reductions. "A full telepresence classroom can cost over $100,000 to implement. A Kubi, even fully decked out the way we did with a mic stand, shotgun microphone, and external speaker for the best possible audio, is still just about $1,000. And we can move them from room to room, deploying them around the building as needed into classrooms."

But for Griffith and his team, it's not about costs. "This started with one student calling me, saying that they were attending class on a friend's phone and simply asking for a better learning experience," said Griffith. "With Zoom and Kubi, we're putting students in control of their own learning. The local students forget that they're looking at a robot, and it quickly becomes about the person on the other end of the call. And the remote students are participating at the same level as their in-person peers."

Based on how Zoom on Kubi was being used by students, Griffith made suggestions to the Revolve Robotics team about how Zoom on Kubi could be improved to provide a better experience, especially with multiple remote students attending class. The Revolve Robotics team has worked closely with Zoom engineers to make Zoom on Kubi even more useful with many education-optimized features.

As for the future, Griffith is focused on expanding use of Zoom and Kubi beyond the current heavy usage in the Disability and Psychoeducational Studies and the Teaching, Learning & Sociocultural Studies departments. He is looking forward to performing formal evaluations, but he is confident given the informal measures he already uses: "Do faculty request this solution for their classes, and do my distance students know the names of their in-person peers and vice versa by the end of the semester? The answer to both is yes!"