

Beam Allows MSU's Virtual Students to Gain an Authentic Classroom Presence

About Michigan State University

The College of Education at Michigan State University (MSU) in East Lansing, Michigan has established a reputation for excellence and visionary thinking in its efforts to improve teaching and learning across the nation and world, particularly within the context of urban and global education. It is on the leading edge of higher education in its use of telepresence technology to support greater camaraderie and enhanced learning opportunities for distance and hybrid students.



MSU Accepts Beam

For the past several years, faculty and students in the Educational Psychology and Educational Technology programs in the College of Education at MSU have been engaged in research on human-robot interactions. Coincidentally, these studies aligned with the college's ongoing evaluation of new technologies to support a shift from traditional on-campus degree programs to a hybrid model that affords off-campus students the opportunity to make personal connections that are fundamental to the in-class learning experience.

MSU's two-year investigation of innovative communications technologies was not without challenges, however. Trying out traditional video conferencing technologies, the school discovered that they failed to provide remote students with an authentic on-campus presence and, moreover, detracted from the experience of others in the classroom.

John Bell, head of MSU's Design Studio and a professor in its doctoral program in Educational Psychology and Educational Technology, explains, "Social presence is what's so often missing when people attend a class from afar. With traditional video conferencing, the remote student has to rely on others to move a laptop or rotate a screen so they can see and hear, and be seen and be heard. It's inefficient and awkward for the remote student as well as those in the classroom—it's quite disruptive, actually."

Convinced of the impracticality of stationary communications tools for dynamic classroom settings, MSU narrowed its focus to robotic telepresence solutions to give remote students control over their own mobility. Eventually, the school selected Beam not only for its easy navigation, but also for its built-in, clear video and audio that provides a more natural experience and greater social presence.



A+ Collaboration Enriches the Student Experience

Design Studio instructors and students alike note that one of the most profound impacts of introducing Beam into the program is that it literally gives hybrid and remote students a seat at the table. When it's time for group or research projects, distance learners can meet with their team as effectively as if they were physically in the room. Beam gives them a "more natural" presence with their peers, fostering the sort of rewarding group dynamics that exist with in-person collaborations.

Rohit Mehta, an on-campus student, comments on the interactions with students who "beam in" from elsewhere: "It becomes more engaging. You feel more connected. And the funny thing is, when you meet them at conferences, you feel like you are just continuing the conversation."

Remote Students Rely on Beam

Chris Fahnoe, an Illinois-based student in the hybrid PhD program, recalls that faculty encouraged off-campus students to use remote communications tools from the start. Comparing Beam to several video conferencing products, he found that telepresence provided him with a sense of ownership over his movements and the space that he occupied, resulting in a greater feeling of group participation and, ultimately, more authentic interactions. Fahnoe adds that the Beam "has increased the engagement and connection in comparison to other models and other video conferencing tools previously used."

"Not all robots are created equal...
Ultimately, Beam has been the best fit for our program."

John Bell
MSU Professor
Educational Psychology and Educational Technology
Design Studio, Director