Technology in higher education: learning with it instead of from it
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Isa Jahnke is an associate professor in the MU College of Education's School of Information Science and Learning Technologies. Credit: University of Missouri

Technology has shifted the way that professors teach students in higher education. For example, by uploading recorded lectures online, students can reference a digital copy of the topics discussed in class. However, lecture-based teaching traditionally leaves students as consumers of information solely with little room for student creativity or interaction.

Now, researchers at the University of Missouri have found that activity-based learning, rather than lecture-based, enhances student creativity and learning by allowing students to use technology to develop their own original ideas.

Isa Jahnke, associate professor in the MU College of Education's School of Information Science and Learning Technologies, collaborated with former doctoral student Julia Liebscher to study how higher education professors in Europe use mobile technology in their classes. She found that student creativity was most enhanced by professors who allowed their students to use technology in a team setting to come up with a novel product or idea.

For example, one group of students in a history class developed an app that virtually teaches users about the history surrounding the Berlin Wall. Rather than simply lecturing the material to the students, Jahnke found that allowing them to use technology in a collaborative way enhanced the students' creativity and understanding of the content.

"This research is useful for professors to rethink how they design their existing courses," Jahnke said. "We need to shift away from purely lecture-based learning where students are just consumers of information toward a more meaningful learning approach with technology where students are able to come up with creative and novel solutions in a team setting."

Jahnke added that there are resources at MU, such as the Teaching For Learning Center, to help professors rethink their course designs amidst the ever-changing educational landscape.

"If we have universities that are producing more creative-thinking students, then we have more people who can help come up with solutions for all of society's grand challenges," Jahnke said. "Creativity will lead to better innovators, entrepreneurs and business owners, but first we need to ask ourselves as educators if we are using technology to put our students in positions to be creative in the first place."
