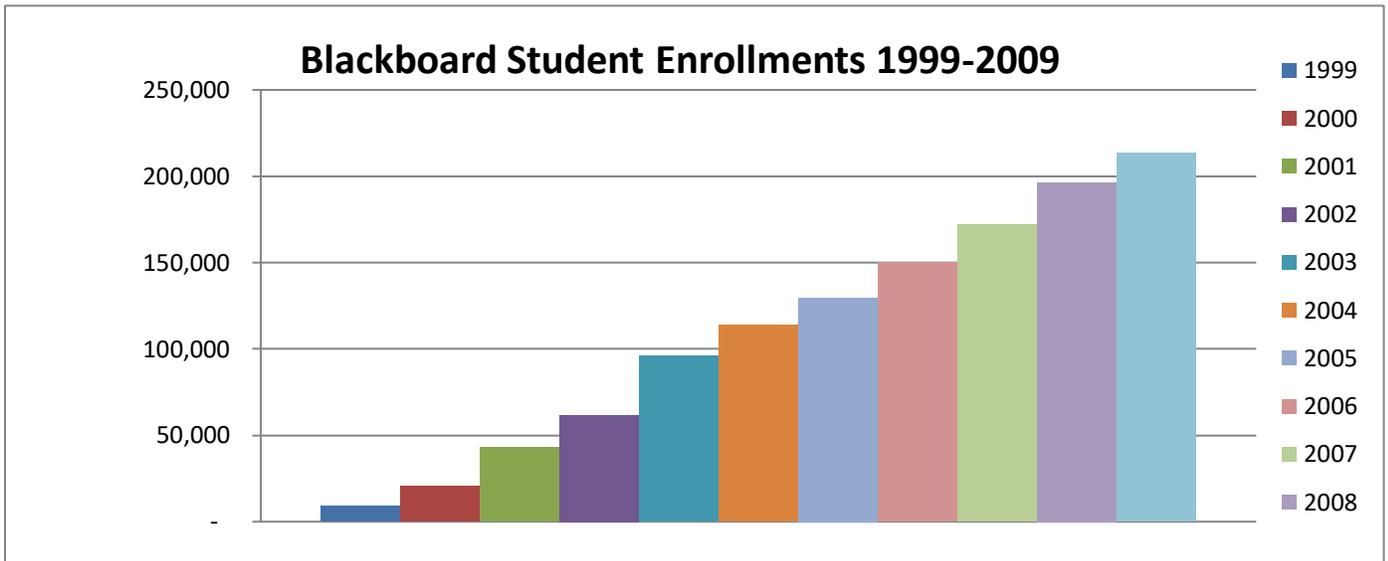
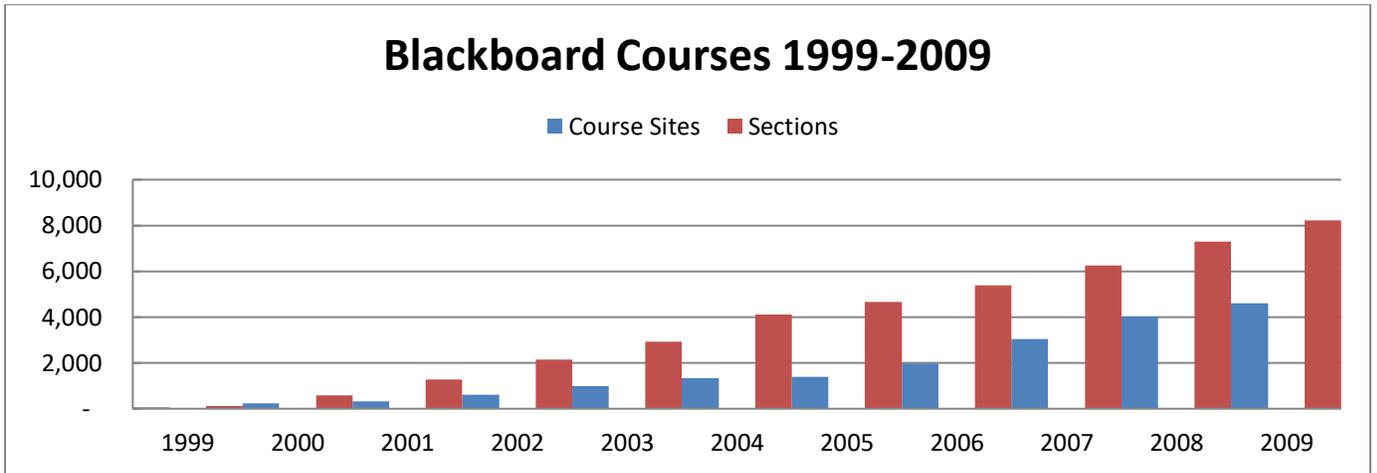


E-learning at Mizzou

E-learning for Residential Students

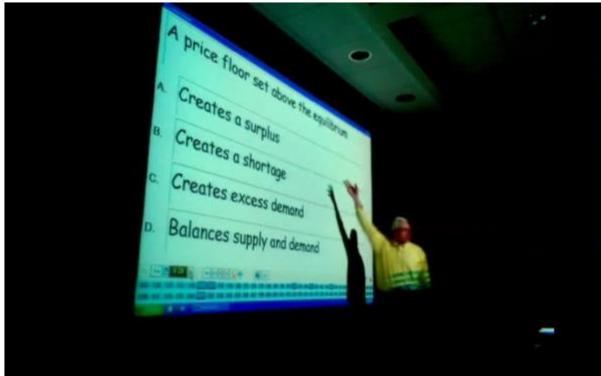
At the higher education level, E-learning encompasses many facets of teaching and learning. It ranges from small amounts of technology used to assist in a traditional classroom, such as a computer and projector, to courses that are taught completely online using the latest web-based technologies. Since 1999, Mizzou faculty members have continually advanced the use of technology in their courses. One example of this is in the online course management system Blackboard, which includes tools like content posting, automated quizzing, and a grade book. During the last ten years, usage has soared.



Recent Technologies

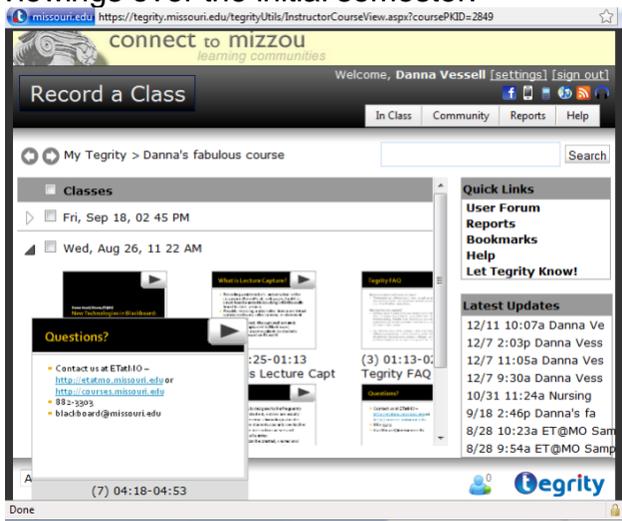
Additional new teaching technologies such as plagiarism checking (SafeAssign), wikis and blogs, and online audio tools (Wimba Voice Tools) to allow better teaching and comprehension of language have been integrated with Blackboard recently.

In the classroom, instructors use student response systems (clickers), to ask multiple choice questions, the results of which are then automatically tallied by their computer to present class level data, which can then be displayed and discussed.



These technologies allow “just in time” teaching as the instructor can poll students on concepts, engage students with difficult topics, facilitate class discussion and pace the class accordingly according to the summation of the students’ results.

In FS2009, lecture capture software (Tegrity) was also introduced. Tegrity allows instructors to easily capture in-class presentations, demonstrations and their voice, and then automatically formats the capture, divides it into chapters, and loads the video file into Blackboard for later review by students. Mizzou had 85 instructors who used this in FS2009, with 10,751 student enrollments. In late October, Mizzou was #1 in the United States in number of student views of lectures in one week, and ended up with 78,000 viewings over the initial semester.

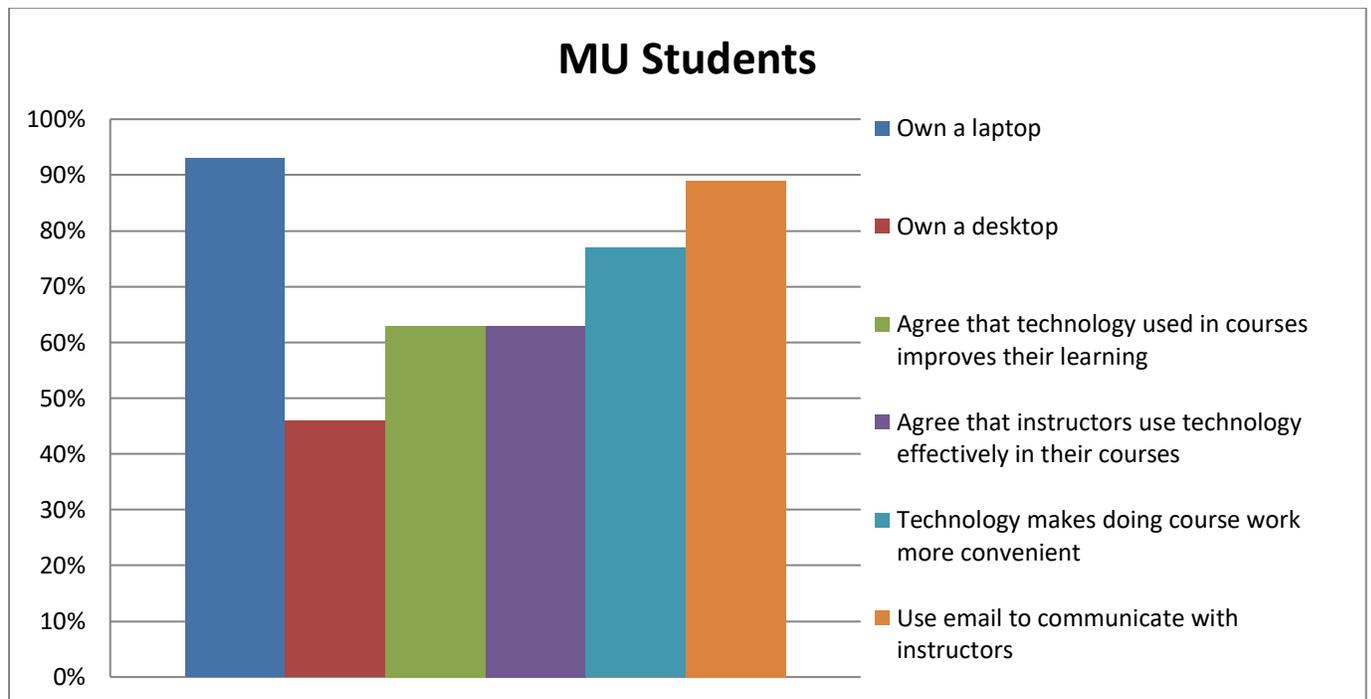


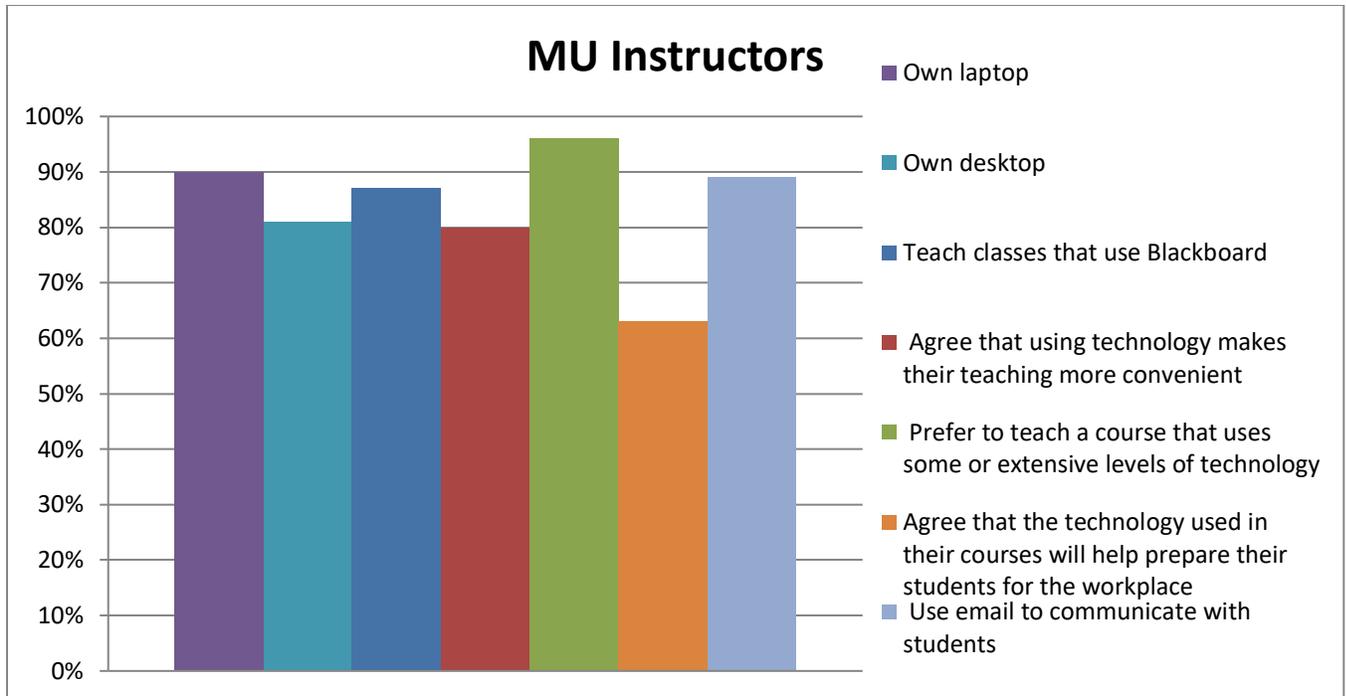
Students in Chemistry 2100 used Tegrity to review concepts from class, to make up for an absence, or to access content when they were out of class due to seasonal illness, which was especially valuable to them. Ninety-nine percent of students in the Chemistry 2100 class indicated that they would want the instructor to use Tegrity again.

Feedback on Teaching

The MoCAT (Missouri Cares about Teaching) mid-semester course evaluation system is used to deliver results while instructors can still improve that course. The results are confidential and can be administered at any time by the instructor. Another system, MyCourse, developed at Mizzou, is used to administer end of the semester online final evaluations for over 1100 courses, replacing the paper version at a significant cost savings. Data to meet Missouri Senate Bill 389 are also collected in this manner. MyCourse is being considered for adoption by UMSL for online course evaluation as well.

Every spring, Mizzou faculty and students are surveyed about their uses of technology in teaching and learning. These results show that MU students and faculty are very similar to national trends in their usage of technology in teaching and learning.

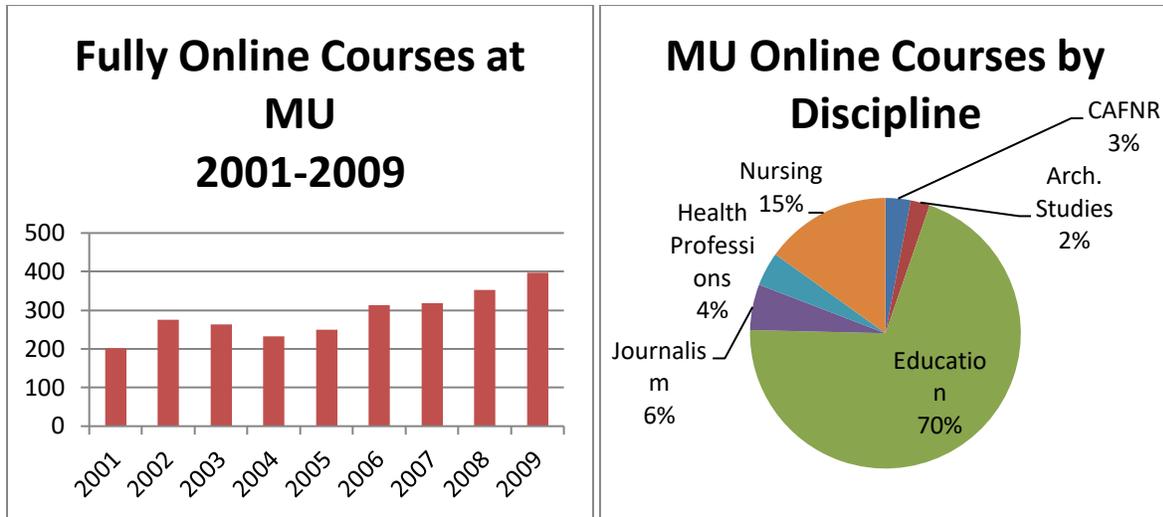




E-learning for Online Students

Currently at Mizzou, MU Direct partners with Educational Technologies at Missouri (ET@MO) to provide administrative, technology and pedagogical support for instructors teaching courses delivered completely online. This includes program and curriculum planning, extensive instructional design assistance and higher levels of technical and pedagogical support. For a typical course, this would include planning the course, managing the overall project, content creation assistance and multimedia support. ET@MO is currently undergoing a planning process with MU Direct to enhance what services are offered to faculty teaching online and facilitate the process as much as possible. As can be seen from the charts below, the number of online courses has increased by approximately 10% every year. This trend will soon be sharply escalating due to amplified interest by students, faculty, and administration in offering courses and programs online.

Online students use all of the technologies available to residential students and more. Their classes are conducted via wikis and blogs, discussion boards, voice chats, online quizzing, homework submission, and project creation. One of the newest technologies to be implemented in Spring 2010 to directly support online courses is web-based videoconferencing. This allows for synchronous interaction from students in multiple locations or allows distant students to be a part of a face to face class. All students and instructors will need is a webcam or microphone as all of the software will reside on Blackboard. Instructor will be able to share their desktop, poll students and communicate with them in real time.



Planning for the Future of E-Learning at Mizzou

Phase 1

In the summer of 2009, Danna Vessell (Director of ET@MO), Kevin Bailey (Director of Desktop Technologies at the Division of IT), and Gary Allen, UM Vice President for Information Technology, chaired the Teaching and Learning Task Force, a subcommittee of the MU Information Technology Committee. The task force, comprised of faculty members, staff members, administrators, and students, examined current campus e-learning practices and recommended possible processes and investments to support and advance it. Several specific recommendations came out of the committee;

- Develop an ongoing governance structure to ensure that campus educational technology needs and application development are vetted, prioritized and resourced appropriately
- Expand the availability of local education technology assistance for faculty in addition to presently available central assistance
- Plan, resource and launch an Application Development Support Network to support the creation of applications for Teaching and Learning
- Invest in the following content and collaboration technologies—lecture capture, content creation, management, retrieval and publishing
- Ensure that MU has physical classrooms that meet the current and future teaching and learning needs
- Increase access to training available on current technologies

Phase 2

In order to address some of these recommendations, a campus wide academic technology governance process is being developed that will eventually become a subcommittee of the MUITC. This committee will make recommendations for the processes and technologies to best support learning at Mizzou.

The MUITC also funded the Academic Technology Liaisons program, which provides departments and divisions with a process to acquire additional educational technology assistance located in the same buildings as faculty members. This allows the faculty member to walk down the hall and chat with a knowledgeable colleague rather than calling a remote help desk or going to a central location. It also allows the faculty member to focus on teaching, research and service rather than learning the details of the technology, which is more efficient and effective.

In addition, Campus Facilities has started a space planning committee to design and implement technology enhanced ideal classrooms. This committee includes administration, faculty, and student representatives.

Plans are also being made to implement the other recommendations recommended by the Teaching and Learning Task Force.

Phase 3

New and disruptive technologies are constantly being examined for their use in teaching and learning. Significant efforts for new technologies include implementing and supporting additional uses of wikis and blogs as well as audio and video conferencing software to support real time instruction at a distance, to hold class and do advising. Another focus for the future is on mobile devices and the information and services offered via them. In partnership with the Division of IT, we are currently exploring the possibilities of having academic and other university related information available for a variety of Smartphone platforms.

Mizzou, like many other universities, has historically looked at online education as a method that is mainly used to serve non-traditional students, rural students with limited access to campus, and other students (such as those place bound by full time employment) as befits the mission of a land-grant institution, hence the program's origination in Extension. Times have changed and we now recognize the need and opportunity to offer more in this arena.

Students today expect that technology will be used to some degree in all of their classes. They do not make a differentiation between face to face, hybrid, and completely online courses, but expect some technology

The latest report from Ambient Insight Research says;

- Currently 12 million students take courses online -- 1.25 million fully online, but 10.65 million take at least one course online
- This will skyrocket to approximately 22 million students within next 5 years - 3.55 million will take all their courses online while 18.65 million will take at least one of their courses online
- About 50% of these students are attending public four year institutions and about 50% are working on a bachelor's degree

Using new technologies and pedagogies as well as the multiple forms of e-learning, we have tremendous opportunities to reach out to community colleges (by offering online Mizzou courses and advisers as a transition tool), to facilitate accelerated three year degrees for Mizzou students, address curricular bottlenecks, and expand capacity and access for present and future Mizzou students. In order to achieve these goals, as a university, we will need to examine the present structures that support e-learning and develop processes to allow MU to be nimble in making process, technology and pedagogy decisions to best support online courses and e-learning in general.