

Educational Technologies at Missouri (ET@MO)

<http://etatmo.missouri.edu>
Dr. Andrew White, Director

In addition to supporting nearly 2,400 completely- or partially-online courses with 138,000 student enrollments per year, ET@MO advances the meaningful use of educational technologies. ET@MO's major initiatives in AY 2005 - 2006 included improvement of the MoCAT (Missouri Cares About Teaching) course evaluation system; the continuation of its Series on Academic Transformation, a program in which faculty teams use technology to solve teaching and learning challenges; efforts to garner campus support for an e-portfolio and assessment system.

Mission Statement

ET@MO supports the meaningful use of technology to improve teaching and learning. With a focus on both pedagogical design and technology innovation and excellence, ET@MO staff 1) engage in relevant academic- and technology-oriented conversations, decisions, and initiatives so as to make positive contributions; 2) facilitate the use of existing resources and infrastructure for the sake of quality, consistency, and efficiency, and; 3) research, design, and implement new educational technology innovations when feasible.

Executive Summary

ET@MO is a vital part of teaching and learning at the University of Missouri. More than 138,000 student enrollments from approximately 2,400 on-campus and distance courses use the online course management systems supported by ET@MO each year. With the purchase of WebCT by Blackboard, ET@MO and IAT Services are carefully weighing whether a consolidation to one platform would be in the best interest for MU. ET@MO's META (Mizzou Educational Technology Assistance) Team serves the educational technology support needs of faculty while providing students with valuable educational experiences alongside some of MU's most innovative faculty. This year, the META Team provided 109 faculty consultations and was involved in 14 major projects including the creation of web-based tools and interactive multimedia modules. The MoCAT (Missouri Cares about Teaching) course evaluation system was used in over 300 course sections at MU and was launched at UMKC in January 2006.

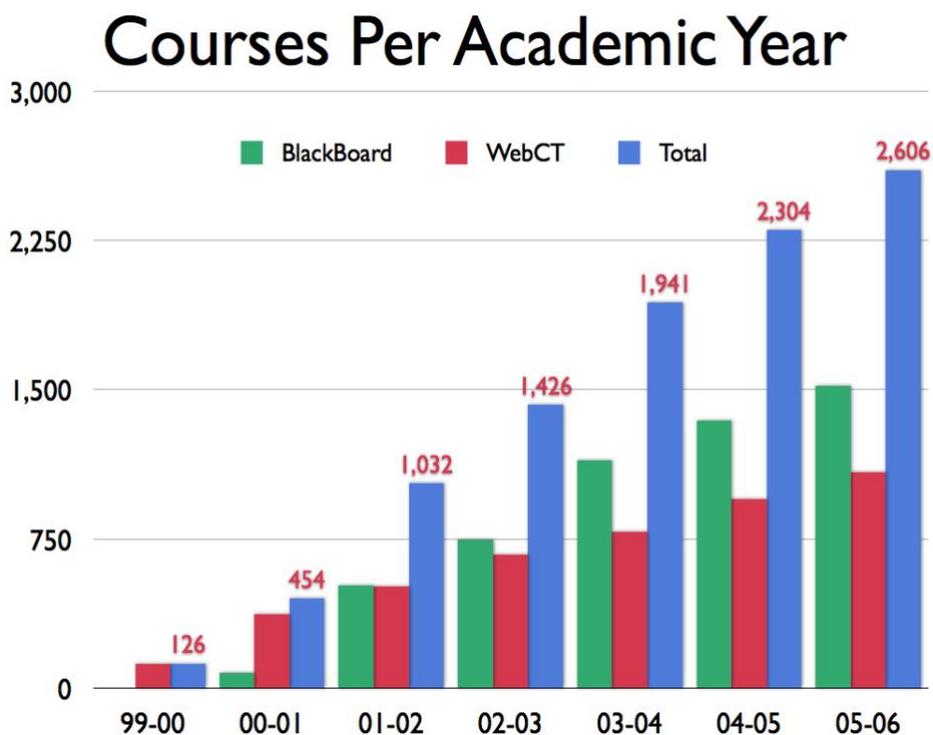
Ensuring that the use of educational technology is academically meaningful requires that faculty have access to professionals with instructional design and educational technology expertise. Individual faculty consultations included 45 ongoing projects supporting online degree programs (delivered through MU Direct) and additional consultations for on-campus faculty. ET@MO sponsored 9 departmental teams as a part of its Series on Academic Transformation, where teaching and learning challenges are addressed creatively with technology and pedagogical innovations. ET@MO staff also led campus efforts to standardize on a single student response system ("clickers"), which has resulted in the use of these systems in 25 course sections totaling 3840 enrollments. Finally, ET@MO embarked on a pilot with the College of Arts & Sciences to fund an "on-site" educational technology support staff member. This person will help meet the growing demand from A&S faculty to integrate technologies in their courses, particularly the time-intensive technologies such as student response systems and podcasting.

<i>2005 - 2006 ET@MO Service to MU - At a Glance</i>	
Student enrollments in BlackBoard and WebCT (per year)	138,000
Courses supported on BlackBoard and WebCT (per year)	2,400
Courses and projects supporting online degree programs through MU Direct	45
One-on-one faculty consultations (technology, pedagogy, or both)	247
Course surveys deployed using the MoCAT course evaluation tool	335
Course sections implementing student response system (“clickers”)	25
Faculty implementing student response system (“clickers”)	20
Students enrolled in courses using student response system (“clickers”)	3840
Faculty participating in TeAchnology - a week-long summer workshop	14
Academic Transformation departmental projects sponsored (year long)	9
META Team faculty consultations/visits/small projects	109
META Team major development projects	14

Program Highlights

Online Learning Systems

The Learning Technologies Team at ET@MO has fostered an ongoing and significant growth in the number of courses using BlackBoard or WebCT. This team manages and supports approximately 2,400 course sites (representing 138,000 student enrollments) each year. In addition, ET@MO’s Learning Technologies Team leads the effort to explore the Sakai platform as an online learning environment, which now includes the Open Source Portfolio (OSP) initiative. At MU, a select group of faculty members continue to explore Sakai 2.2 as a research and collaboration tool during the summer and fall of 2006, with 20 class, project and research sites and approximately 300 users. In addition, a pilot of OSP will be started with 3 portfolio sites for fall 2006. In winter 2007, it is anticipated that class and portfolio usage will be expanded and the number of users will total approximately 400.



Course Development and MU Direct Support

ET@MO instructional design staff were involved in 45 separate projects supporting MU Direct (most of which involved full or partial development in 3-credit courses). These activities ranged from planning new courses with new instructors to revising existing courses with veteran online instructors. This number also includes several courses which were migrated from the WebCT platform to BlackBoard, in anticipation that BlackBoard may eventually replace WebCT as MU's single course management system. In addition, several other services were provided to support the efforts of MU Direct, as well as numerous projects related to on-campus faculty. See Appendix B for detailed information about projects supporting MU Direct.

META Team Support

The Mizzou Educational Technology Assistance (META) Team is a group of talented undergraduate and graduate students who assist MU faculty on a variety of educational technology-related projects. Making faculty office visits as well as collaborating on long-term development projects, the META team serves the educational technology support needs of faculty and provides META Team members with valuable educational experiences alongside some of MU's most innovative faculty. For an investment of approximately \$50,000 in student hourly wages, the university receives the equivalent of \$130,000 in services (if compared to the cost of full-time staff positions of 2.375 FTE).

In addition to participating in other ET@MO events and initiatives, the META Team conducted 109 faculty consultations and 14 major projects including:

- WebCT to Blackboard course site conversions
- In-depth personal office visits to 30 new faculty (include ET@MO overview, and pre-loaded USB drive of MU resources)
- Romance Languages iPod support
- TigerTrips Web site (Online ride-share finder)
- MU Tigers for Tigers Web site
- Undergraduate Biotechnology Education Web site
- Idea Works Web template
- MU Informatics Institute Web site
- MU Positive Behavioral Interventions & Supports (PBIS) Web site
- CALEB - the Science Club Web site
- Engineering Research Office Web site
- Site design for 360 Professional Development Evaluation Tool
- Video production support for special projects
- ET@MO Faculty Guide support and enhancements

Pedagogy and Technology Workshops/Consultations

ET@MO hosts a variety of workshops, discussion sessions, and symposia focused on teaching with technology. Rather than offering hands-on workshops only at pre-scheduled days and times, the primary mode of working with faculty is now a one-on-one consultation format. ET@MO offered 247 such consultations this past year.

Excellence in Teaching with Technology Awards

Four awards were presented this year to recognize excellence in using educational technologies to meaningfully improve teaching and learning. The faculty and staff who were nominated for the awards (by students and/or fellow faculty), then ultimately selected by the ET@MO faculty advisory committee after reviewing additional portfolio materials were:

- Graduate or Professional Award: Vairam Arunachalam, School of Accountancy
- Undergraduate Teaching Award: Patricia Tew, School of Health Professions
- Staff Support Award: Sandra Gummersheimer, MU Direct
- Graduate Teaching Assistants/Instructors: Marc Strid, Food and Hospitality Systems

MoCAT Teaching Evaluation System

Through this collaborative project, an online version of the previously-available “early feedback” teaching evaluation form was made available to faculty and graduate instructors. Now called MoCAT (Missouri Cares About Teaching), the system allows faculty members to construct customized teaching surveys, send anonymous survey requests to their students, and compile results. In AY 2005 - 2006, 355 course surveys were deployed using the system. In addition, modifications were made to MoCAT to allow UMKC to begin using the system in January 2006. Version 3.0 of MoCAT will be available in Fall 2006 and will include improvements to how instructors create a survey template, based on various characteristics of their course. MoCAT code is also being “recycled” and used by others on campus who are interested in using “360 Feedback Surveys” to improve professional development at MU.

Series on Academic Transformation

For 2005 - 2006, ET@MO’s year-long *Series on Academic Transformation* assisted 9 MU departments in identifying and implementing transformative change in their courses to improve teaching and learning. Nominations and applications were sought from faculty teams via deans, chairs and the Provost’s office. Faculty teams which were accepted then participated in a year-long program facilitated by ET@MO staff. The first semester included presentations, workshops, and planning, while the second semester focused on implementing the projects (and designing any necessary technologies, curriculum revisions, etc., with support from ET@MO and other collaborating units). ET@MO supported 9 departmental teams which sought to meet one or more of these goals:

- Meeting growing enrollment pressure by creatively tapping resources with technology
- Establishing and improving assessment with technology
- Establishing interdisciplinary teaching collaborations through technology
- Meeting the needs of unique student populations with technology (first-year, under-served, high ability, nontraditional, etc.)
- Advancing the scholarship of using technology to improve teaching and learning
- Designing and implementing pervasive (anytime/anywhere) technologies and pedagogies
- Internationalizing the curriculum through the use of technology

Departments participating in Academic Transformation for 2005 – 2006 included Medical Education, Art, Agricultural Economics, Romance Languages, English/Folklore, Online Writery (Learning Center), School of Nursing, School of Social Work, Physical Therapy.

Teaching and Learning Council

ET@MO is a founding member of the MU Teaching and Learning Council, which is structured to better serve the needs of faculty members throughout their careers by integrating existing services and creating new alliances and synergies to maximize use of MU's expertise and financial resources. The ultimate goals of the Teaching and Learning Council are to enhance student engagement and student learning. ET@MO maintains the Teaching and Learning Council website at: <http://teachandlearn.missouri.edu>

An interim director was appointed for the Program for Excellence in Teaching in the summer of 2006. Goals for this position include continuing critical PET workshops and initiatives and fostering a campus conversation about how MU can best meet the needs of faculty support and development. ET@MO staff embrace this exciting change and look to enhance ET@MO's contribution to the improvement of teaching and learning at MU.

Unique Projects

ET@MO staff were involved in several one-of-a-kind projects:

- ET@MO maintains association with the Sakai Educational Partnership Program. Sakai is an open-source learning and collaboration environment. Through a partnership with IAT Services and the School of Information Science and Learning Technologies, ET@MO is investigating the potential use of Sakai as an online learning environment. ET@MO staff have been active within the Sakai development community and conferences.
- ET@MO staff assist faculty members who are interested in using Student Response Systems (“clickers”) in their courses. Following recommendations from a faculty/staff task force, a standard vendor was selected for the campus which reduces costs to students and streamlines faculty support. For AY 2005 – 2006, total enrollments in the 20 courses using this system totaled 3840. Seventeen percent of students in these classes used the devices in more than one course.
- ET@MO staff assist various faculty who are using digital video and audio (podcasting) in their courses. Podcasting and digital video continue to become of more interest to faculty and students. ET@MO staff worked with IAT Services staff to make the campus video streaming server available for academic courses at no charge. “iTunes U” has also been explored by ET@MO, IAT Services and several other campus units, although Apple Computer has not committed to a long-term support model.
- ET@MO provides support for the use of WebCASE, MU's online case study analysis system. Although faculty commitment has been slow to the system, interest in case studies has been steadily increasing.
- ET@MO staff were involved with MU libraries and the UM Office of Academic Affairs in planning a conference focusing on the issue of privacy in higher education.
- Two print issues of *The Innovator* were distributed to campus teaching staff. *The Innovator* celebrates innovative faculty and communicates important ideas regarding educational technology at MU.
- ET@MO staff are coordinating with other MU curricular support units to explore how internal databases might streamline workflows and improve service to faculty.

- As a new track for the Professional Development Seminars, ET@MO is collaborating with the MU Graduate School to assist graduate students who wish to learn more about teaching and technology. Anticipated outcomes include influencing graduate students' own professional development, in addition to improving instruction at MU.
- An ET@MO staff member was involved in designing an online centralized PAF (personnel action form) processing system in order to streamline the process and eliminate the abundance of errors. Originating within the Provost's fiscal offices, this successful initiative was adopted by Human Resources and the MU Office of Research and is available to other MU units choosing to use it.
- ET@MO began a pilot with the College of Arts & Sciences to fund an "on-site" educational technology support staff member. This person will help meet the growing demand from A&S faculty to integrate technologies in their courses, particularly the time-intensive technologies such as student response systems and podcasting.

Trends

As more faculty take advantage of existing educational technology resources at MU, ET@MO continues to emphasize high quality support while remaining engaged in campus-wide teaching and learning events, discussions, and initiatives. An on-going challenge for ET@MO staff will be to stay balanced while also making time to explore, research, and implement emerging technologies. Garnering campus administrative support for e-portfolios has been especially challenging the past year. Whereas faculty have asked for a campus-supported e-portfolio system, there has been a lack of central funding to provide such an environment. New initiatives and technologies such as podcasting will continue to take staff time in order to help faculty learn the technologies and develop assignments which leverage the technology meaningfully.

Partnerships

National/International Partnerships:

- Sakai Educational Partners Program membership (collaborative membership with IAT Services)
- POD (Professional Organizational Development Network in Higher Education) departmental/staff membership
- UCEA (University Continuing Education Association) staff membership and board position

Missouri-based Partnerships:

- MOTEC (Missouri Technology in Education Centers) membership
- MoDLA (Missouri Distance Learning Association) membership

External Leadership Roles & Memberships

Dr. Margaret Gunderson was elected to the national UCEA (University Continuing Education Association) Commission on Learning, Instruction, and Technology.

Dr. Margaret Gunderson, Dr. Danna Vessell, and Dr. Andrew White each participate in mentoring MU graduate students via thesis, dissertation, and program of study committees

Dr. Danna Vessell participates in the Sakai Educational Partners governance subgroup

Dr. Danna Vessell and Dr. Andrew White selected to conduct a pre-conference workshop on facilitating institutional technology change at the national EDUCAUSE conference

Dr. Andrew White selected for and participated in the university president's Administrative Leadership Development Program (ALDP)

Dr. Andrew White maintains active participation with the Higher Learning Commission, MU's accreditation organization

Dr. Andrew White serves as a campus representative to the AACU (American Association of Colleges & Universities)

Dr. Andrew White was invited to serve as an advisory board member to a FIPSE grant (under review) submitted by the University of Pittsburg and the University of Missouri. The grant will advance the use of online peer review in writing-across-the-curriculum courses.

Case Histories and Testimonials

Thanks for the quick turn-around with creating my WebCT site; due to a scheduling error, my course didn't even show up in the schedule of courses until Thursday but my WebCT site was up on Friday!

I just wanted to say thanks to Guy and the META team; they did a great job. The iPod sessions went smoothly and without much of a hitch thanks to the work they did.

*You rock! [My document is] now printing and rendering in the browser beautifully!!
More proof that META folks are elite...*

I truly appreciate the continued support I receive from ET@MO and the META team. You all have been instrumental in the development of a very useful product to enhance my student's learning.

I just received my copy of your newsletter – and it looks great. I'd like our current New Faculty Teaching Scholars (and alums) to receive one as well, as we have been talking about active learning.

I'm enormously grateful for your support since I first talked to you about the possibilities of an AT [Academic Transformation] project. You've been upbeat, resourceful, patient, and understanding throughout this long series of experiments, conversations, uncertainties, and decisions. I really appreciate your responsiveness and your willingness to meet beyond the scheduled [Academic Transformation] workshops last semester. Thanks for taking so much time to explore and consider the issues together.

TeAchnology was great! I feel that I learned something in every session this week. Not all of the conferences that I attend provide me with new and/or valuable information. There are usually one or two presentations that are not up to par. NOT THE CASE this week! Great job. I can hardly wait to sign up for next summer!

I really appreciate having the dedicated time to think about and explore my options. The ET@MO staff is very good at brainstorming with me.

The entire presentation was excellent! I felt like I learned a great deal about Blackboard that I didn't already know. Thanks so much!

[TeAchnology was] absolutely fabulous - fun AND informative.

Appendix A: ET@MO Staff and Faculty Advisory Board

ET@MO Staff

Director - *Andrew White, Ph.D.*

Associate Director - *Margaret Gunderson, Ph.D.*

Administrative Associate - *Kelly Holtkamp, B.A.*

Systems Support Analyst - *Marsha Lyon, M.Ed.*

Instructional Design Coordinator - *Matthew Livengood, M.A.*

Learning Technologies Coordinator - *Danna Vessell, Ph.D.*

Educational Technology Specialist - *Marla Germann, M.B.A.*

Educational Technology Specialist - *Gary Godsy, B.S.*

Educational Technology Specialist - *Guy Wilson, Ph.D.*

Educational Technologist – *David Reid, M.Ed.*

META Team Coordinator - *Tanys Nelson, M.B.A.*

META Team and Graduate Assistant Support (varies throughout year): *Matthew Legrand, Vincent Foley, Mark Singer, Michele Smolik, Faydre Paulus, Sruthi Kunnel, Amber Stokes, Temitope Adebambo, Sreya Ravi*

Faculty Advisory Board

Faculty Advisory Board members represent a diverse range of disciplines and educational technology interests at MU; specifically, responsibilities of the board include:

- Serving as a forum for exploring issues in learning and teaching supported by technology
- Serving as a resource in developing campus projects using technology in support of learning
- Conducting the annual Excellence in Teaching with Technology Awards

2005 - 2006 Faculty Advisory Board Members

Dr. Anne Stanton, Art History & Classical Archaeology

Dr. Cynthia Frisby, Advertising

Dr. Dorina Kosztin, Physics

Dr. Ellis Ingram, Pathology

Dr. Julie Caplow, Information Science and Learning Technologies

Appendix B: AY 2005 - 2006 Support for MU Direct

(54 separate courses or 44.75 equivalent 3-credit hour courses)

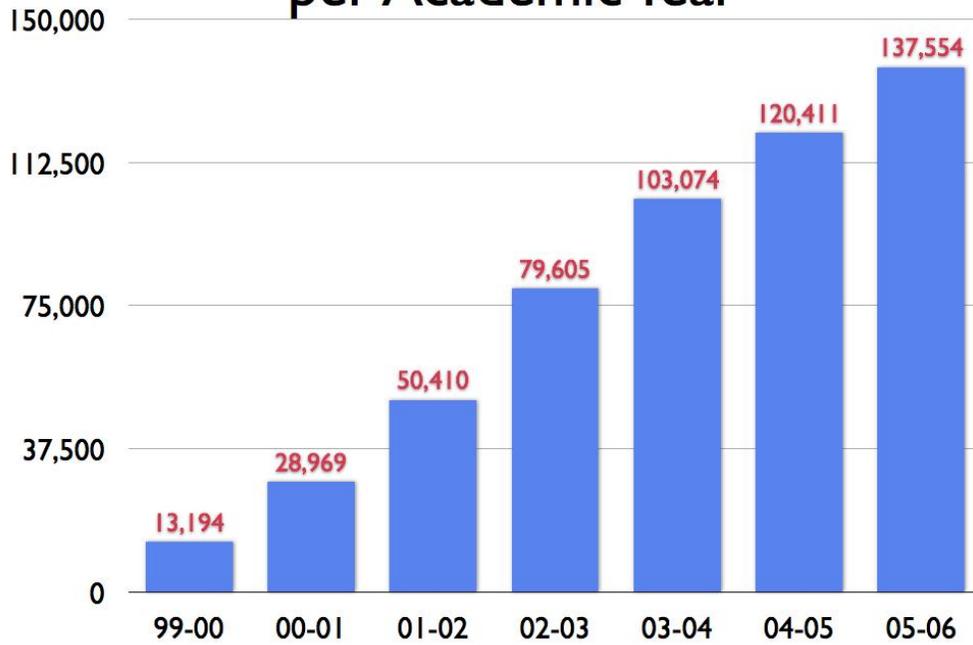
Number	Course Title	%
Ag Econ 2183	Agricultural Marketing System	25
LTC 8900	Advanced Assessment in Early Childhood	100
LTC 8900	Developing Home-School Partnerships: Working with Families	100
N7110	APN Role Acquisition	100
J8110	Editing and News Design for the High School Advisor	100
ESCP 7087	Seminar: Wellness Management for School Personnel	100
LTC 8616	The Teaching of Journalism	100
-----	Arthritis Research Project I	50
-----	Arthritis Research Project II	50
J8120	Media Law and Ethics for the High School Advisor	75
SPCED 8387	Seminar: Methods of Instruction for Students with Autism	75
LTC 8612	Advanced Early Childhood Curriculum	100
ESCP 8087	Teacher Leadership of the Psychosocial Curriculum	100
ISLT 9431	Library Materials for Children	75
SPCED 8495	Methods in Early Childhood Special Education	100
LTC 8680	Issues and Trends in Reading Instruction	100
J7000	Communications Law	100
Ru Soc 4325/7325	American Community Studies	75
J7510	Visual Communications	100
N8820	Health Care Financial Management	100
J7978	Media Management and Leadership	100
N7150	Research Methods in Nursing	100
N4200	Ethics & Law	75
N4950	Nursing Theory & Research	50
ANTHRO 3005	Topics in Anthropology	25
N3100	Pharmacology for Nursing	100
N8400	Clinical Management in Primary Health Care I: Adults Through Aging	100
N8410	Clinical Management in Primary Health Care II: Adults through Aging	75
J7736	Economics & Finance of the Media	100
ESCP 8087	Mental Health Preventions and Interventions for School Personnel	75
N8970	APN Role Transition	75
J7710	Newspaper Management	100
LTC 8915	Classroom Research	100
Rural Soc 8447	Building Native Community and Economic Capacity	50
N7140	Advanced Health Assessment & Promotion	100
Sinclair School of Nursing	Evidence-based Information Service Development and Delivery: Oh Librarian, Where Art Thou?	25
*J8120	Media Law and Ethics for the High School Advisor	100
*N7320	Nursing CID - Advanced Pediatric Pathophysiology	100
*ESCP 8087	Child & Adolescent Mental Health	100

*ESCP 8087	Diversity Issues for Educators	100
LTC 8900	Teaching Writing and Reading in the Content Areas	100
*ESCP 8087	Wellness Management for School Personnel	100
*ESCP 8087	Wellness Management for School Personnel	100
SPC ED 8300	Students with Behavioral Disorders	50
*N7310	Advanced Health Assessment for Pediatric Nursing Practice	100
LTC 8900	Instructional Strategies	75
CP&D 4955	Introduction to Research	50
ESCP 8087	Systems: Preparing Before Disaster & Trauma	25
*N8420	Primary Health Care Management: Newborn through Adolescence	100
*N8210	Special Health Care Needs of Children	100
*N8980	Advanced Clinical Nursing Practicum	100
*J8000	Mass Media Seminar	100
LTC 8900-24	Developing Home-School Partnerships: Working with Families	50
SPC ED 8387	Introduction to Autism	50
TOTAL		44.75

*Courses migrated from WebCT to Blackboard

Appendix C: Online Course Activity at MU 2005 - 2006

Bb/WebCT Total Enrollments per Academic Year



Students & Online Course Activity

Fall 2005

