

## Educational Technologies at Missouri (ET@MO)

http://etatmo.missouri.edu  
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*ET@MO advances the meaningful use of educational technologies in teaching and learning through various activities. We support more than 196,000 student enrollments in approximately 4000 on-campus and distance courses taught by over 2000 faculty members each year. In particular, 100 new courses were either partially or fully developed for MU Direct (the equivalent of 75 fully developed courses) in Blackboard by the instructional design team (see Appendix A for a complete listing).*

Other teaching with technology support activities and programs in 2007 – 2008 included: support of e-portfolios, iTunes University, and student response systems, ET@MO's Series on Academic Transformation/Technology programs, MOCAT, Teaching Renewal, New Faculty Orientation, as well as facilitating communication and coordination on educational technology topics among the different university levels.

### ET@MO Mission

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.

<i>2007 - 2008 ET@MO Services - At a Glance</i>	
<b>Online Learning Systems</b>	
Courses supported on Blackboard (academic year)	3743
Student enrollments in Blackboard (academic year)	196,359
<b>Distance Education Support (MU Direct)</b>	
Number of online courses supported	331
Online course equivalent of instructional designer developed sites	75
<b>Pedagogy/Technology Consultations</b>	
One-on-one faculty consultations (technology, pedagogy, or both)	250
Course surveys deployed using the MoCAT mid-semester course evaluation tool	575
Faculty participating in TeAchnology - a week-long summer workshop	11
Academic Transformation departmental projects sponsored (year long)	5
<i>Innovator</i> publications featuring faculty innovators (campus-wide each semester)	2
<b>New Technologies Support</b>	
Course sections implementing student response system ("clickers")	49
Enrollments in courses using student response system ("clickers")	8959
e-Portfolio student sites	600
Courses using iTunes University	56
<b>Student META Team Support for Faculty</b>	
META Team faculty consultations/visits/small projects	96
META Team major development projects	13

## Executive Summary

ET@MO is a vital part of teaching and learning at the University of Missouri, both on campus and off. Ensuring that the use of educational technology is academically meaningful requires that faculty have access to professionals with both instructional design and educational technology expertise. In particular, this includes supporting Blackboard for nearly 3,500 technology enhanced or completely online courses with over 180,000 student enrollments per year. Individual faculty consultations included 102 ongoing projects directly supporting online degree programs (delivered through MU Direct) as well as many additional consultations and workshops for on-campus faculty.

## Trends

The 2008 Horizon Report suggests that over the next year or two, there will be a lot of interesting technologies used for teaching and learning at the higher education level. These include;

- Grassroots video - video captured via inexpensive video cameras or cell phones and shared by students
- Collaboration webs – editing group documents, such as Google docs, and holding online meetings
- Collective intelligence – harnessing the “wisdom of the crowd” through projects such as Wikipedia, data mashups or Blackboard’s Scholar
- Mobile devices – the creation of content specifically to be displayed on cell phones, PDA’s, and other mobile devices.

In addition to the trends noted in the Horizon report, as a department, we’ve also been looking at screen recording and new ways to capture, develop and deliver audio and video course content, including instructor recordings and podcasting.

## Program Highlights

While ET@MO provides Blackboard course sites and faculty technology/pedagogy support for over 3700 courses a year (with about 10% of these being completely online), additional in depth instructional design and programmatic support for courses taught through MU Direct is provided by our instructional design coordinator, Matthew Livengood. Although we are only contractually required to develop 55 courses per year for MU Direct, this year we were able to fully or partially develop 100 courses (see Appendix A for details). Online course development includes curriculum planning, in depth individual design assistance and higher levels of support for faculty teaching online.

ET@MO also sponsored 5 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’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 members. This year, the META Team provided 96 faculty consultations and was involved in 13 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 575 course sections at MU and will also be available on the MS&T campus next year.

ET@MO staff also continues to support student response system (“clickers”), where the use of these systems included 49 course sections totaling 8700 enrollments. Significant efforts for other technologies also include implementing and supporting an e-portfolio system for campus, which now has funding and is in limited production, and the start of a class capture/podcasting project.

## Case Histories and Testimonials

### Lex Akers

Dr. Lex Akers expressed his satisfaction and appreciation for Matthew's work with the folks in the College of Engineering as they bring their program online as follows; "I really appreciate the great job you are doing to help support our faculty and their effective use of technology as part of their teaching efforts. "

### Deborah Oliver

Dr. Oliver was teaching the on-line Research Methods class for the first time, and she wanted to find a way to connect with her distance students. Boden Lyon, our digital media support person met with Dr. Oliver and to provide technical support and offer suggestions about appropriate use of video in an on-line courses. Dr. Oliver decided to use 10-minute video clips each week during the semester to introduce the lessons and also give a human face and voice to the course. The students were so pleased with the use of video; they nominated her for a Teaching with Technology award.

### Tammy Gillespie

From an e-mail from Tammy - *"Greetings ET@MO friends, Just thought I'd share the email below since it made my day (okay, week)!!! Last Friday I received a call from a 70+ year old 4-H volunteer who referred to herself as "disabled and on crutches".... Anyway, she was unable to go to the in-person 4-H volunteer orientation due to the snow storm. She decided to give the online 4-H Volunteer Orientation a try. She even printed the print version and read through it a couple days before going online to do the quiz in SurveyMonkey! Thanks again for helping me make our orientation a viable option for dedicated 4-H volunteers of all ages! "*

Note: Tammy also went on to work extensively with our team to create digital video for use in her work with Extension.

### Nancy Spaeder

After spending six months in developing a new online course on Cultural Communication for the Mizzou@Home program, Nancy Spaeder reported *"I am enjoying this online course more than I believed possible! Many students have communicated their approval of the course work and their enjoyment of the experience so far."*

## Appendix A: ET@MO Online Course Development 07-08

Department	Course Number	Course Name	Instructor	% of Instructional Development
Anthropology	ANTHRO 2200	World Archaeology	Mark Beary	75
Architectural Studies	Arch St 8050	Research Methods	Ronald Phillips	25
Architectural Studies	Arch St 7620	Environment & Behavior	Ronald Phillips	25
Architectural Studies	Arch St 4620	Environment & Behavior	Ronald Phillips	25
Architectural Studies	Arch St 7960	Readings	Ronald Phillips	25
Architectural Studies	Topics 8001	Community Design: the Shaping of Human Settlements	Wayne Mehrhoff	100
Architectural Studies	8950	Qualitative Research Methods in Architectural Studies	Debra Oliver	100
Architectural Studies	Archst 7001	Topics: Place-Making in Community Design	Asha Kutty	100
Cardiopulmonary and Diagnostic Sciences	CP&D 2190	Medical Terminology	Mary Sebacher	50
Classics	CL 1060	Classical Mythology	Jim Crozier	75
Communication	COMM 4400	Ethical Issues in Communications	Joy Piazza	75
Communication	Comm 4473	Political Communications	William Wells	100
Communication	3470	Culture as Communication	Nancy Spaeder	100
Communication	3701	Health Communication	William Wells	100
Curriculum And Instruction	LTC 8900	Language and Culture for Educators: Myths and Realities	Yang Guo	75
Curriculum And Instruction	LTC 8900	Language and Culture for Educators: Human Diversity	Yang Guo	50
Curriculum And Instruction	8642	Teaching Writing and Reading in Content Areas.	Rebecca Dierking	25
Economics	1014	Principles of Microeconomics	Sharon Ryan	100
Educational, School and Counseling Psychology	ESC PS 7087	Wellness Management for School Personnel	Mary Heppner	75

<b>Department</b>	<b>Course Number</b>	<b>Course Name</b>	<b>Instructor</b>	<b>% of Instructional Development</b>
Educational, School and Counseling Psychology	ESC PS 8087	Mental Health Preventions and Interventions for School Personnel	Jody Marshall	50
Educational, School and Counseling Psychology	ESC PS 8087	Communication and Collaboration with Children and Families	Jody Marshall	50
Educational, School and Counseling Psychology	ESC PS 7087	Exploring Mental Health Issues in Schools	Jody Marshall	50
Educational, School and Counseling Psychology	8087	Issues in Early Childhood Mental Health	Lauren Brewer	75
Educational, School and Counseling Psychology	TBD	American Sign Language	Stephanie Logan	50
Educational, School and Counseling Psychology	ESC PS 7170	Introduction to Educational Statistics	Todd Robinson	100
Educational, School and Counseling Psychology	ESC PS 8087	Seminar: Psychiatric Disorders in the Classroom	William Dikel	100
Educational, School and Counseling Psychology	4170/7170	Intro to Educational Statistics	Christie Crouch	100
Graduate School	8108	News Reporting & Writing for the High School Advisor	Earnest Perry	100
Graduate School	7736	Economics and Finance of the Media	James Gentry	100
Health Professions	Public Health: 7001	Principles of Public Health	Linda Cooperstock	75
Health Professions	Public Health 8001	Social and Behavioral Sciences in Public Health	Deborah Hume	100
History	2440	History of Missouri	Richard Cotner	100

Department	Course Number	Course Name	Instructor	% of Instructional Development
Human Development And Family Studies	HDFS 7257	Aging in the Family	Teresa Cooney	100
Human Development And Family Studies	7001	Adult Development and Aging	Timothy Killian	100
Human Development And Family Studies	HDFS 7234	Adolescents and Their Families	Melissa Herzog	50
Human Development And Family Studies	7231	Foundations of Youth Development	Lawrence Ganong	100
Information Technology	Info Tc 2810	Fundamentals of Network Technologies	Matthew Dickinson	100
Journalism	J8122	Graduate Proseminar for High School Advisors	Eleanor Farnen	100
Journalism	J7978	Media Management & Leadership	Ebony Reed	75
Journalism	J7436	Investigative Reporting	Mike McGraw	100
Management	4201	Topics in Management: Business Communications	Sandra Crews	100
Mechanical Engineering	ME201	Introduction to Machinery and Equipment Valuation	Richard Berkemeier	25
Mechanical Engineering	ME202	Machinery and Equipment Valuation Methodology	Richard Berkemeier	25
Nursing	N8010	Family Dynamics	Larry Ganong	100
Nursing	N7100	Theories in Nursing	Jane Bostick	50
Nursing	N8980	Adv. Nursing clinical Practice-MHNP	Jane Bostick	50
Nursing	N8620	Brief Individual Psychotherapy	Jane Bostick	50
Nursing	N8610	Diagnosis and Psychopharmacology for Mental Health Nurses	Jane Bostick	50
Nursing	N8640	Group Therapy and Social Skills Training	Jane Bostick	50
Nursing	N8430	Primary Health Care Management: Reproductive and Sexual Health	Kristin Metcalf-Wilson	50
Nursing	N7120	Physiological Concepts for Nursing	Kristin Metcalf-Wilson	50

Department	Course Number	Course Name	Instructor	% of Instructional Development
Nursing	N8980	Advanced Clinical Nursing Practicum	Kristin Metcalf-Wilson	50
Nursing	N8970	APN Role Transition	Kristin Metcalf-Wilson	50
Nursing	N7140	Advanced Health Assessment & Promotion	Delilah Pennington	100
Nursing	7150	Research Methods in Nursing	Lorraine Phillips	100
Nursing	N3080	Communication & Computer Skills	Tonya Eddy	50
Nursing	N4200	Nursing Ethics & Law	Sarah Breier-Mackie	50
Nursing	N4950	Nursing Theory & Research	Tonya Eddy	50
Nursing	N4380	Health Assessment & Pathophysiology	Gina Oliver	75
Nursing	N4580	Evidence-based Nursing practice	Tonya Eddy	50
Nursing	N4970	Nursing in Communities	Glenda Nickell	100
Nursing	N8800	Leadership and Management in Healthcare Systems	Jill Scott-Cawiezell	75
Nursing	N3100	Pharmacology for Nursing	Pamela Evans-Smith	100
Nursing	N8600	Public Health and Sociocultural Issues	Kay Libbus	100
Nursing	N8120	Community-based Public Health Interventions	Kay Libbus	100
Nursing	N7130	Clinical Pharmacology	Delilah Pennington	100
Nursing	N8500	Primary health Care Management of Aging I	Delilah Pennington	100
Nursing	N8510	Primary health Care Management of Aging II	Delilah Pennington	100
Nursing	N8130	Developing and Evaluating Health Programs	Constance Brooks	100
Nursing	N9540	Seminar in Nursing	Jill Scott-Cawiezell	100
Nursing	N8610	Diagnostics and Psychopharmacology for Mental Health Nurses	Deborah Fingfeld-Connett	100
Nursing	N8960	Leadership Practicum	Jill Scott-Cawiezell	100
Nursing	N4970	Nursing in Communities	Tonya Eddy	50
Nursing	N7120	Physiological Concepts for Nursing	Deidre Wipke-Tevis	100
Nursing	N7100	Theories in Nursing	Lori Popejoy	100

Department	Course Number	Course Name	Instructor	% of Instructional Development
Nursing	N8100	Epidemiology for Public Health Practice	Patricia Schnitzer	100
Nursing	N8110	Concepts for Specialization in Public Health	Patricia Schnitzer	100
Nursing	N8720	Symptom Management in Chronic Illness	Joanne Banks-Wallace	100
Nursing	N9120	Nursing Practice Theories and Models	Deborah Fingfeld-Connett	100
Nursing	N5549C (UMKC number) N7330 (UMC number)	Pharmacology for Advanced Nursing Practice	Teri Thompson	100
Nursing	8980	Advanced Clinical Nursing Practicum	Patricia Schnitzer	100
Nursing	9510	Advances in Health Care Systems	Jill Scott-Cawiezell	100
Nursing	N7854	Preparing Nurse Educators	Kristin Lee	25
Nursing	N7150	Research Methods in Nursing	Eileen Porter	100
Nursing	N8960	Leadership Practicum	Amy Vogelsmeier	50
Nursing	N8800	Leadership and Management in Healthcare Systems	Amy Vogelsmeier	50
Nursing	N8810	Management of Patient Care Services	Amy Vogelsmeier	50
Personal Financial Planning	FINPLN 2183	Personal and Family Finance	Deanna Sharpe	75
Personal Financial Planning	PP/GJ201	Introduction to Personal Property Valuation	Margaret Olsen	25
Personal Financial Planning	PP/GJ202	Personal Property Valuation Methodology: Research and Analysis	Margaret Olsen	25
Philosophy	2430	Contemporary Moral Issues	Shaun McDonough	100
Psychological Sciences	3320	Drugs and Behavior	Dennis Miller	100
Psychological Sciences	2210	Mind, Brain and Behavior	Matthew Will	100
Public Health	7150	Principles of Public Health	Lynelle Phillips	100
Public Health	N8820	Healthcare Finance	Amy Vogelsmeier	50
Radiologic Sciences	RA SCI 3150	Radiological Pharmacology	Mary Sebacher	50



<b>Department</b>	<b>Course Number</b>	<b>Course Name</b>	<b>Instructor</b>	<b>% of Instructional Development</b>
Religious Studies	2110	Major World Religions	Justin Arft	100
Social Work	SW 7952	Research Methods & Design in Social Work	ManSoo Yu	100
Sociology	SOC 3320	Sociology of Sex Roles	Candace Korasick	75
Veterinary Biomedical Science	VM1010	Biomedical Career Explorations	C.B. Chastain	25
<b>Number of Courses Developed</b>				<b>100</b>
<b>Total Course Development Equivalent</b>				<b>75.75</b>