

Annual Report

July 1st, 2013 - June 30th, 2014

Educational Technologies at Missouri (ET@MO)

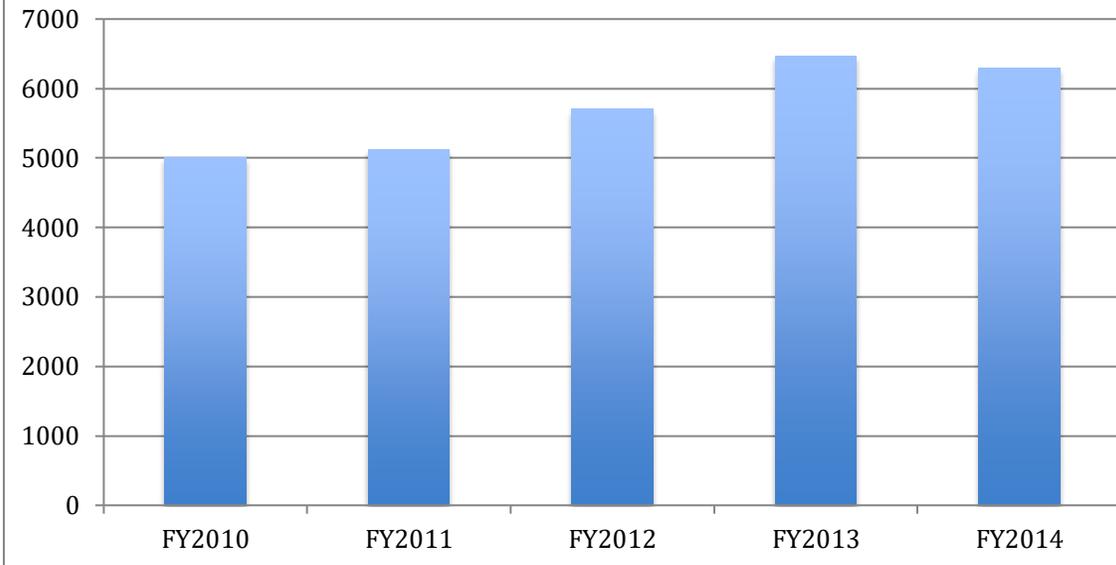
Dr. Danna Vessell
Director

ET@MO advances the meaningful use of educational technologies in teaching and learning at Mizzou through various programs, consultations and activities. We serve the learning technologies needs of MU faculty members, staff and students.

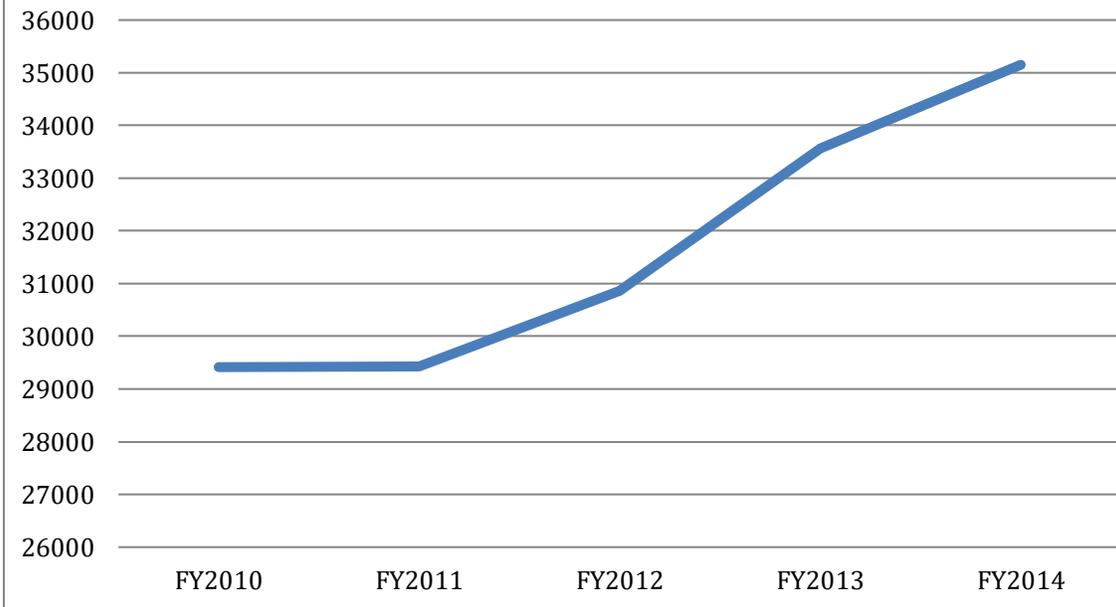
ET@MO staff:

- 1) Provide an inclusive center for teaching well with technology
- 2) Provide high quality technical and pedagogical support for instructors teaching with technology and second level educational technology support for students
- 3) Promote and maintain excellence in course design and development, while increasing the numbers of hybrid and online courses offered at MU
Advance faculty development at MU
- 4) Support innovations in teaching with technology
- 5) Advance faculty development at MU
- 6) Advance scholarship in teaching and learning research

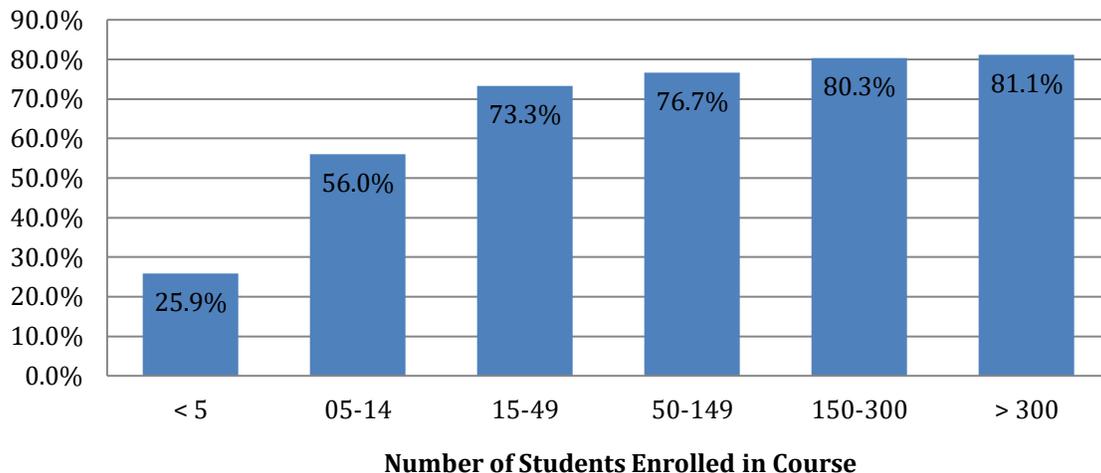
Total Courses Using Blackboard



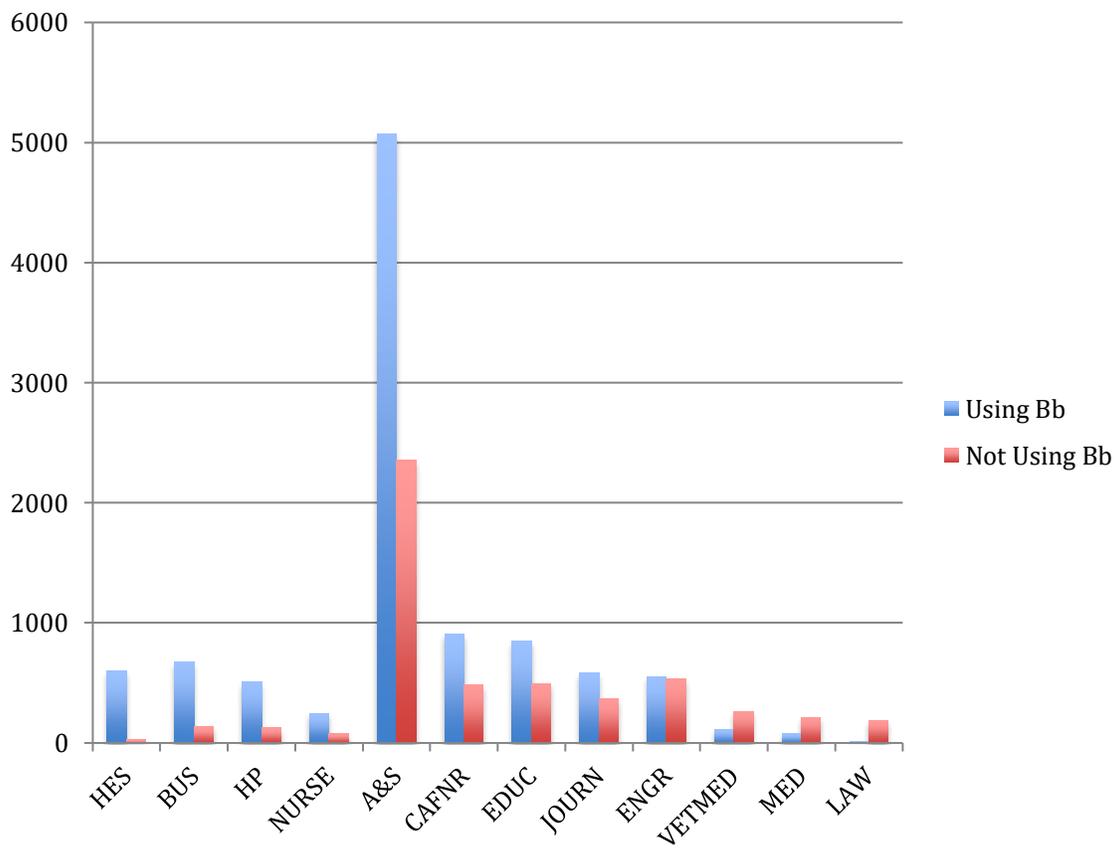
Blackboard Student Accounts



Percentage of MU Courses using Blackboard By Student Enrollment



Blackboard Courses By Academic Unit



ET@MO Services – At a Glance		
	FY2013	FY2014
<i>Learning Management (Blackboard)</i>		
Percent of MU Courses supported on Bb ^[1]	70%	67%
Students using Blackboard	33,570	35,151
Percentage of MU Students w/ Bb Account	97%	97%
Student Enrollments in Bb Course Sites	260,828	262,000
Students using Bb Mobile Learn ^[2]	11,207	4,943
Percentage of Bb Logins from Mobile Devices	11%	14%
<i>Lecture Capture (Tegrity)</i>		
Course Sites Utilizing Tegrity	874	1080
<i>Synchronous Collaboration (Bb Collaborate)</i>		
Virtual Classrooms ^[3]	5,174	5,329
Students using Collaborate	22,178	17,113
<i>e-Portfolios (Sakai)</i>		
Sites Created	101	165
Student Using e-Portfolios	3,615	3,604
<i>Media Encoding & Distribution (Kaltura)</i>		
Media Objects Uploaded	969	5,144
Media Views by Students and Faculty	n/a	98,779
Students and Faculty using Kaltura	n/a	9,218
<i>Media Blogging (VoiceThread) ^[4]</i>		
Student Enrollments in Voice Thread sites	n/a	748
<i>Student Response Systems</i>		
Courses Using i>Clickers	n/a	121
Student Enrollments in i>Clicker Courses	n/a	19,137
Pilot Courses Using i>Clicker GO or Top Hat ^[5]	n/a	52
<i>Mid-semester Student Feedback on Teaching (MoCAT)</i>		
Course Surveys	518	752
<i>Instructional Design Support</i>		
Courses Support w/ In-depth Design Assistance ^[6]	n/a ^[7]	177
Quality Course Reviews	12	8
<i>Celebration of Teaching</i>		
Conference Attendees	438	400
<i>Workshops, Seminars, & Presentations</i>		
Campus-wide Teaching and Technology Sessions	6	6
Department Workshops or Presentations	n/a ^[7]	74
TeAchnology Participants	5	6
<i>Faculty Technology Awards</i>		
Excellence in Teaching with Technology Awards	3	2
Teaching w/ Technology Innovation Fund Awardees	6	5

- 1 Changed the way we report this data, so numbers are not directly comparable. Data for FY2014 excludes independent study courses and class numbers with less than 5 enrollments.
- 2 Bb began charging students for the use of their Mobile app, which may explain the drop in usage. Since usage will be free again starting this fall, we anticipate this to rise sharply over the next year.
- 3 A single Blackboard site or course may have multiple virtual classrooms.
- 4 New starting January 14, 2014
- 5 Pilot beginning in 2014
- 6 Includes both self-paced and semester-based courses.
- 7 We changed the definition and data collection method for this FY2014 report cycle that does not allow for direct comparison of numbers obtained from FY2013.

Program Highlights

ET@MO is a vital part of teaching and learning at the University of Missouri, both on campus and at a distance. Ensuring that educational technology is used to advance student learning requires that faculty members have access to professionals with both instructional design and educational technology expertise. The professionals at ET@MO are spread across four functional groups within the department: the Learning Technologies Team (LTT), Instructional Design & Development Team (DESDEV), the Academic Technology Liaisons (ATLs), and the Mizzou Educational Technologies Assistance (META) team. The ATLs represent a group of decentralized instructional designers embedded within eight different academic units across campus.

Strategic Conversations

The staff members at ET@MO were able to assist with the dissemination, coordination, and strategic planning of issues surrounding teaching with technology on multiple levels by serving on or chairing the following campus committees:

- Technology Evaluation subcommittee
- MU Information Technology committee
- Campus IT coordination committee
- Campus course evaluation committee
- Campus eContent committee
- UM eLearning
- Learning Spaces committee
- LMS Review working group
- Learning Technologies Intercampus Consortium
- HLC accreditation committee
- Distance Education operations committee
- Disability Advisory committee

One of the major undertakings over the last year has been the kickoff of the LMS review project. While we did have significant challenges with Blackboard over the fall 2013 semester, this review project was initiated not just because of our recent challenges, but because it is time. The LMS market has changed significantly in the past few years, and it is due diligence to make sure we are using the best tools possible to support teaching and learning at Mizzou.

Teaching Support

ET@MO staff planned and executed the 5th annual Celebration of Teaching event here at Mizzou, and received high praise directly from numerous attendees, as well as written kudos from a follow-up survey from conference presenters. In addition, ET@MO offered six campus-wide Teaching and Technology (TnT) seminars, as well as over 70 smaller departmental or faculty presentation over topics related to instructional technology, and a weeklong Technology workshop.

Instructional Designers & Developers provided assistance and consultations on over 400 semester-based or self-paced courses this past year, including in-depth collaboration and work with Mizzou faculty on 177 courses. The instructional designers at ET@MO also supported the courses generated by the Mizzou Online RFP for online program development and the UM System course sharing initiative. We also have grown our eMentor team of faculty to help provide advice for those who are new to online/hybrid teaching and assist in our quality course reviews.

FY2014 eMentors

Eric Aldrich, *Atmospheric Science*
Tony Barbis, *Learning, Teaching & Curriculum*
Elizabeth Behm-Morawitz, *Communication*
Jenny Bossaller, *Info. Science & Learning Tech.*
Tony Castro, *Learning, Teaching, and Curriculum*
C.B. Chastain, *Veterinary Medicine & Surgery*
Teri Christiansen, *Mathematics*
Debra Gayer, *Nursing*
Dorina Kosztin, *Physics*
Kerri McBee-Black, *Textile & Apparel Mgmt.*
Gina Oliver, *Nursing*
Cynthia Reeser, *Human Devel. & Family Studies*
Jacquelyn Sandone, *Romance Languages*
Bethany Stone, *Biological Sciences*

This past year also saw the development of a new program to assist and train graduate instructors and teaching assistants using Blackboard. Designed as a supplement to the GATO training offered by the Graduate Studies office, this seminar focuses on teaching GI/TAs some basic pedagogy as well as digging deeper into the various learning technologies available to them as instructors. After an overwhelming positive response from the pilot, this training program will be implemented fully this fall.

Funded Academic Transformation Courses

FINPLN 1183: Financial Survival
Instructor: Ryan Law

BIOENG 3075: Introduction to Materials Engineering
Instructor: Heather Hunt

BIOENG 2080: Intro to Programming for Engineers
Instructor: Gang Yao

ACCTCY 4356: Financial Accounting Concepts
Instructor: Carl Prestigiacomo

These four courses should impact over 650 student enrollments over the next fiscal year.

The Academic Transformation initiative has also been reinstated this year, which provides an additional funding opportunity to support redesigning courses into a hybrid or fully online semester based course incorporating innovative pedagogies and technologies. The primary focus of these funds is to support substantive—preferably transformative—

enhancements in the pedagogy or technology of individual courses, and the funds can be used for faculty release time and/or summer salary.

Also completed this past year was a brand new Instructional Media Studio. The Studio, located in the Heinkel Building, provides a place for the production of high quality video, audio, and photographic resources to supplement and enhance instruction in MU courses. Towards this end, the facility includes new state-of-the-art equipment and technology, along with staff expertise from ET@MO. Post-production editing services are also provided. As with all ET@MO services, the Instructional Media Studio is provided as a service to all academic units at Mizzou at no charge for projects of an instructional nature.

Faculty Recognition

As part of our efforts to help recognize outstanding faculty here at Mizzou, The staff at ET@MO nominated, coordinated, and/or awarded the following faculty recognitions over the past year:

2014 ET@MO Excellence in Teaching with Technology Award

Award Winner (Graduate Teaching):
Newton D'Souza, Architectural Studies

Courses Highlighted:
ArchSt 8887: Environment and Behavior Seminar
ArchSt 8630: Design Theory
ArchSt 8001: Design Cognition and Design Process

Award Winner (Undergraduate Teaching):
Peter P. Motavalli, Soil, Environmental, and Atmospheric Sciences

Courses Highlighted:
Soil 3290: Soils and the Environment
Soil 4313: Soil Fertility and Plant Nutrition

2014 Ernest L. Boyer International Award for Excellence in Teaching, Learning, and Technology

“The Boyer award honors the world’s most highly creative men and women who have contributed significantly to teaching, learning, and technology in higher education. An international panel of distinguished faculty reviews all nominations for the award and selects the winner, who is honored at the International Conference on College Teaching and Learning with a trophy and a \$5,000 cash award.” – <http://teachlearn.org>

Recipient: Newton D’Souza, Architectural Studies

Technology Support

Over the past year, the learning technologies team (LTT) responded to over 10,000 support requests concerning educational technologies from MU faculty, staff, and students. In addition, ET@MO has added three new tools to our supported learning technologies here on campus, including two student responses systems (i>Clicker GO and Top Hat), as well as the Voice Thread tool, which allows individuals to utilize audio and video in a discussion around a media object. These technologies add to our existing campus learning technology stack that currently include the following:

- Learning Management System (Blackboard)
- Electronic Portfolios (Sakai)
- Student Response Systems (i>Clicker, i>Clicker GO*, Top Hat*)
- Synchronous Collaboration (Bb Collaborate)
- Lecture Capture and Video Dissemination (Tegrity)
- Media transcoding and distribution (Kaltura)
- Originality Checker (Bb SafeAssign)
- Student Feedback Systems (myCourse, MoCAT)
- Media blogging (VoiceThread*)

* *New for 2014*

Members of the LTT and META teams provided over 200 one-on-one consultations with faculty surrounding these technologies, as well as group training sessions for departments and classes, and written/video documentation on the etopics.missouri.edu website.

The LTT also played a key role in assisting Financial Aid to find and recover data from Blackboard it needed for a critical government report. Without this recovered data, the University could have been forced to return millions of dollars in federal aid it received on behalf of students.

In addition, the LTT has begun leveraging reports produced from products like Kibana and Piwik that mine data from Blackboard server logs to gain additional insights into the tools and methods used by instructors and students in their teaching and learning.

Our student META team also served the educational technology support needs of faculty members through phone, email, and in-office support. Additionally, every Thursday from 1-3 the META team assists in staffing the ET@MO open lab hours for faculty.

Scholarly Work

The professional staff at ET@MO continued to contribute to the national discourse on teaching with technology by publishing in academic journals and presenting at national and regional conferences focused on learning and technology issues.

Russell, D. (2014). Learning, Problem Solving, and Mindtools: Essays in Honor of David H. Jonassen. *Interdisciplinary Journal of Problem-based Learning*, 8(1).

Johnson, B. (2014, April). eLearning and Course Design Best Practices. Presented at the Great Plains IDEA Conference, Kansas City, MO.

Kwon, K., Liu, Y., & Johnson, L. (2014). Group Regulation and Social-emotional Interactions observed in Computer Supported Collaborative Learning: Comparison between good vs. poor collaborators. *Computers & Education*, 78, 185-200.

Bossaller, J. & **Kammer, J.** (2014). Faculty views on eTextbooks: A Narrative study. *College Teaching*, 62(2): 68-75.

Ma, Y., **Friel, C.** & Xing, W. (2014). Instructional Activities in Discussion Board Forum of an e-Learning Management System. *The 16th International Conference on Human-Computer Interaction, Creta Maris, Heraklion, Crete, Greece, June 22-27, 2014.*

Bossaller, J. & **Kammer, J.** (2014). The instructor as social entrepreneur: Maintaining trust and integrity in online learning. *Association for Library and Information Science Education (ALISE)*. Philadelphia, PA.

Patterson, T., & Wiebold, J. (2013, July). Focusing on SIS Frameworks: A Migration from Snapshot Integration Tools. Presented at the Blackboard Users Conference, Las Vegas, NV.

Ma, Y., Xing, W., **Friel, C.** (2013). Factors and Cues Impacting User Information Selection and Processing Performance in Kiosk Touch Screen Interfaces. *The 15th International Conference on Human-Computer Interaction, Las Vegas, Nevada, July 21-26, 2013.*

Technology Trends at Mizzou

Mobile Use Continues to Rise

Even as the use of the Blackboard Mobile application fell from the previous year, we have continued to see a rise in the number of individuals accessing Blackboard from web browsers on mobile devices. Currently, mobile devices account for about 14% of all Blackboard logins, up from about 11% last year. It is likely that we'll see a rise in usage for the next year since it is now provided to students for free.

Multiple Peer Response Systems in Use

We now have three student response systems in use here at Mizzou, as faculty continue to test out having students use their own mobile device for classroom feedback (e.g. TopHat), or the traditional approach of using a dedicated response device (e.g. i>Clicker). The i>Clicker GO product represents a hybrid model, allowing students to use either a smart device or a dedicated clicker.

Media Usage in Courses Continues to Expand

Tegrity, Kaltura, and VoiceThread continue to see their adoption rates increase from the previous year.

Goals for ET@MO in 2014-2015

Continue to gather information about the tools and methods instructors are using via Piwik, Kibana, direct queries on the database, etc to drive our strategic planning, recommendations and decision making, as well as support the scholarship of teaching and learning.

Finish and offer Online Teaching Scholars – an opportunity for instructors to “dive deep” into online teaching and learning and earn a certificate of completion. It

consists of one 4-week development course and one 2-week teaching course. Additionally, participants must complete a minimum of two targeted week-long elective courses.

Bring more focus and attention to mobile learning and design for instructors, and increase our support for mobile learning. One of the tools that is currently being considered for a system wide license, Turnitin, offers significant improvements in the tools for grading with mobile devices, and we would like to implement that over the next year.

Regardless of the results of the LMS review, work on implementing both a content management system and an ePortfolio tool within the LMS. All of the three major LMS vendors (Blackboard, D2L, and Canvas) now offer both of these as an integrated tool. A content system allows faculty members to enter or upload content once, and use it in multiple classrooms or on different delivery platforms. An ePortfolio tool would allow the University to more easily collect and assess student artifacts against program objectives, and be better prepared for our next HLC accreditation process.

Overall, continue our work over the next year in helping faculty members “teach well with technology” by supporting innovation, providing excellent design and technology assistance and furthering strategic conversations around excellence in teaching with technology wherever possible.