

REPORT ON ONLINE LEARNING AT UMASS AMHERST

Prepared by

Joint Task Force on Online Learning

Submitted to

Provost Charlena M. Seymour and the Faculty Senate

**Final Report
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The Charge

The Joint Task Force on Online Learning was established and presented with the following charge on December 4, 2006:

1. What should be the standards/best practices for online instruction at UMA? (Should the standards differ from those of courses taught face-to-face?)
2. What strategies should be undertaken in the future to handle the demand for online instruction? (Will “online instruction” become institution-wide or remain mostly program specific? How will faculty be selected? Who decides when and where the online courses are taught? How will online courses be maintained and sustained? Should there be a limit on the number of online courses taught in a department? Should there be a required minimum of face-to-face instruction stipulated in residential degree programs on a residential campus?)
3. For what purpose should resources be allocated for the delivery of online credit courses? (Faculty training? Program development? Where should resources be directed in order to deliver quality instruction and services? [The Taskforce is requested not to deliberate how much should be charged or spent at this time.])

A report to the Provost and the Faculty Senate was requested by June 15, 2007.

Introduction

The Task Force affirms that the University of Massachusetts Amherst is a residential campus committed to providing a learning environment where students from the Commonwealth, the nation, and the world receive a high-quality education that enables them to contribute to society and have successful careers. However, it is clear to the Task Force that the learning environment the University offers is undergoing significant change as online education becomes an increasingly important instructional element in the quest to educate and train students, both on campus and across the globe.

Already, an increasing number of university courses and programs are being offered with online components, and a growing number of courses offered through Continuing and Professional Education (CPE) are totally online and delivered through UMassOnline. In addition, our student body not only is increasingly comfortable with technology and online delivery options, but expects delivery in a variety of forms.

While reaffirming that the University is primarily a residential institution, the Task Force believes that as the world becomes a more digital and online environment, and in order to prepare students for future educational and workforce experiences, UMass Amherst must provide the widest possible collection of course and program delivery

options, ranging from in-person¹, one-on-one independent instruction to global-scale, totally-Web-based opportunities.

It is also clear that we are now in a period of transition where concerns ranging from the integrity of instructor-student relationships and testing to the process to financing and the oversight of operations will have to be answered. Nonetheless, we believe there is no turning back and that UMass Amherst should wholeheartedly embrace this emerging form of instruction, as the benefits are many and the costs are surmountable.

In the coming years we will see faculty members who are increasingly adept in this form of instruction. A substantial number of our faculty already embrace Instructional Technology (IT) as they enhance and enliven their delivery of educational material and add online activities for their students in what were once more traditionally taught in-person courses. These IT campus leaders will provide outstanding examples and with new hiring of IT experts in our Center for Teaching, Academic Computing, and the Library we will develop a faculty capable of teaching a continuum of course delivery methods—from supplemental IT materials for in-person teaching to full online instruction. Such faculty members using online tools will be prepared to instruct students from as close as our dormitories to as far as India.

Through oversight from the Provost's Office, perhaps with an academic director of online education, we will work with individual departments to monitor online pedagogy to insure the integrity of this form of instruction. By so doing we will gain the confidence of the academy, students and general public in the quality results of our instruction, regardless of method. The Provost's Office will also be responsible for insuring continuous improvement in all our courses with the appropriate use of instructional technologies whether they are on campus or online.

We foresee that online education will grow from its current modest slice of our teaching style to be a mainstream component of our education delivery system on this campus. It will be available to our residential students in the same manner as any other course. It is essential for our students to be comfortable with online instruction for we expect it will be a critical part of their workplace learning and lifelong education.

In summary, while online instruction is beginning to enter into the core of our pedagogical culture, it needs to be nudged, stimulated, monitored and carefully controlled as it continues this journey. The University has no choice. We must embrace this IT transformation.

¹ The more widely accepted term describing this type of learning is “face-to-face.” In this document we use the expression “in-person” to be consistent with current SPIRE definitions.

Standards/Best Practices/Policies on Online Learning

Learning in an Academic Setting

It is important to note that many issues related to learning in an academic setting apply to ALL instructional delivery methods (i.e., in-person, blended and online).

- Assessment is a very critical component of the learning process for all types of instructional delivery methods. Effective assessment mechanisms are needed to evaluate the quality of the teaching and the mastery of the subject matter by the students. In online courses the effectiveness of the learning management system may also need to be assessed.
- Course instructors should have the option to utilize a secure “testing center” in courses for which a fully authenticated final exam (or other major test) is required or desirable. This option is particularly relevant for instructors of large lecture courses and online courses. Instructors in online courses must have the option to utilize the global network of “testing centers.” Secure online testing tools should be made available to all online course instructors.
- Pedagogy should address the issue of student engagement. Strategies must be developed and systematically employed that encourage students to share knowledge and opinions with other students and faculty and feel connected to an interactive learning experience. Helping dispersed students taking online courses feel connected to their courses (and to the University) requires focused attention.
- The GenEd Council is urged to consider the importance of public speaking as an essential component of undergraduate education. Mechanisms for implementing such courses in an online setting should be developed.
- Departments and/or programs should evaluate what differences, if any, exist between student learning, satisfaction and engagement between in-person and online graduate and undergraduate courses.
- Frequently, the learning process in in-person courses can be significantly enhanced with the use of the latest web technology. Instructors and programs should consider how best to employ web-based learning in their courses.
- The central administration must provide appropriate technological and pedagogical infrastructure to support online and blended learning.
- The Ad-hoc Committee for Online Learning has produced a document addressing the strengths and challenges of teaching online and it is attached to this document as Appendix B.

Academic Policies/Procedures

- All UMass Amherst courses and programs (including those offered through CPE), regardless of their SPIRE classification, should continue to be subject to the same policies and procedures to include: administration, assessment, evaluation, faculty selection, course development, and overall quality. Course proposals will include an indication of the proposed classification in SPIRE (see Definitions in Appendix A and Faculty Senate Doc. No. 07-007 A).
- Clarify the distinction between UMassOnline courses and programs vs. online courses and programs originating from the UMass Amherst campus.
- State legislation prohibiting the commingling of CPE and state supported instruction (i.e., CPE course taught on-load) must be reexamined.

Program/Administration Issues

- The development of online programs and courses must be consistent with the overall mission of the department and/or program.
- All instructors of UMass Amherst courses, regardless of their classification in SPIRE and including those offered through CPE, must be vetted by the appropriate Departmental Personnel Committees and Department Chair.
- Faculty must participate in the decision-making process regarding the development, use and administration of online teaching material, class size, platforms, staffing and other critical administrative issues.
- The faculty must continue to own all courses regardless of their classification in SPIRE.
- As the number of online courses continues to rise, the administration should develop broader productivity metrics to include off-load instructional activities in the assessment of faculty, programs, departments and colleges.
- Departments and/or programs should develop policies regarding the percentage of online courses allowed in the completion of an undergraduate or graduate degree program.
- Storage and delivery mechanisms of all online courses should be hosted on the same server and use the same learning management system (LMS).
- All instructors teaching online courses should receive the same level of support regardless of whether the course is delivered through CPE or the campus.

Investment in Resources

To position the University of Massachusetts Amherst as a leader in quality online educational programming and delivery institution-wide, the university shall commit a sufficient investment in infrastructure and resources commensurate with the national reputation of the university and acknowledged industry standards. To execute this goal the Task Force recommends a fully integrated campus approach that addresses at least five functions: pedagogy, training, assessment/evaluation, technology support, and, research.

Pedagogy:

- Invest in an instructional designer who can provide pedagogical expertise to online instructors and course developers
- Provide strategic direction to the evolution of online education
- Assist faculty in staying aware of online educational innovations
- Assist faculty in adopting best practices from online and in-person courses
- Integrate online instructional design support with current campus support for instructors

Training:

- Provide pedagogical and technical training to instructors as they design their courses
- Assure that faculty possess current knowledge of LMS technology
- Support the incorporation of educational web tools
- Develop and present tutorials/workshops for faculty on best practices
- Create and provide tutorials/workshops for students regarding online learning

Assessment/Evaluation:

- Evaluate the implications on university culture (residential students and adult learners)
- Monitor results and impact of online courses, methods, learning, and teaching
- Evaluate LMS effectiveness and capability to meet UMass Amherst needs
- Evaluate quality of design of courses and programs
- Assess cost effectiveness of online courses/programs
- Provide and support a Testing Center and secure online testing tools

Technology Support:

- Provide 24/7 Help Desk dedicated for student use
- Provide 24/7 Help Desk dedicated for faculty use
- Update/upgrade a unified LMS Platform and other online instructional tools
- Identify, acquire, support and maintain the necessary hardware infrastructure

Research:

- Validate best practices in online education
- Translate educational research into online course delivery
- Secure and provide research funding
- Incubate new online educational tools and strategies
- Disseminate new knowledge to the global online educational community

APPENDIX A

Definitions

SPIRE Course definitions adopted by the campus from the Ad hoc Committee on Online Learning:

- In-Person (All activities and instruction delivered in-person; may include optional online activities.)
- In-Person Plus (Some required online activities but most contact hours are in-person.)
- Blended (A combination of required online and in-person sessions with approximately equal contact hours in each mode.)
- Online Plus some In-Person (Some required in-person activities but most contact hours are online.)
- Online (All activities and instruction delivered online. May include optional in-person activities.)

Learning Management System (LMS):

- A computer software system that permits online presentation of pedagogical material to students, student-instructor and student-student interaction and collaboration, testing and other forms of evaluation, and delivery of feedback to students

APPENDIX B

FACULTY SENATE AD HOC COMMITTEE FOR ONLINE LEARNING'S ONLINE TEACHING AND LEARNING TALKING POINTS

STRENGTHS

Learning management systems allow for more diverse approaches to content delivery and assessment.

Students can be more active in an online learning environment than in a traditional classroom. For instance, students can be given a reading assignment that is followed by a short quiz. Upon successful completion of the quiz, a video lecture can be released to the student that asks students to stop the lecture and search for materials online (e.g., websites, library resources) and then continue the lecture. Students may also be asked to conduct online research and then use the information they have gathered to participate in an online discussion with their classmates or make an online presentation to the class. Finally, the OWL assessment tool gives students the opportunity to practice problems, get immediate feedback (with explanations), and retake the assessment with slightly modified problems. These examples also demonstrate how face-to-face courses can be augmented with online components.

Online discussions are often richer than face-to-face discussions.

Instructors who have moderated online discussions agree that the quality of these discussions is noticeably superior to face-to-face discussions. Two possible reasons may account for this result. First, online discussions can be designed to encourage more depth and unanimity of discussions than in traditional classroom setting, thereby increasing the engagement of students and faculty. Second, students may be more fully prepared to participate in an online discussion because they have the opportunity to review their thoughts and edit their words before engaging in the discussion.

Online tools help keep students current with course material.

Quizzes, or other assignments, designed into every learning module keep students on task and up-to-date. Quizzing, in particular, is less disruptive to the course when administered online because finite class time does not have to be used for distribution, completion, and collection activities. Moreover, online quizzes can be created to provide immediate feedback to the students (versus waiting until the next class period (or more) for their results).

Peer-to-peer learning is enhanced through online discussions and working groups.

Students often help, correct, and teach each other in online classrooms. They provide great examples and answer questions using different words than the instructor. Their alternative perspectives may be the key to helping one of their fellow students understand a new concept. Also, creating groups in an online classroom provides students, particularly those in 100% online courses, with a sense of community. They become a collective that help each other learn the material and share the class experience.

Learning management systems offer a broad range of assessment options.

Learning management systems can be used to administer more types and more instances of assessment than may be practical in a traditional classroom setting that is limited to 150 minutes of class time per week. In addition, students can use resources while completing assessment, which more closely mirrors real life decision making.

Course material can be tailored to fit varying needs of students.

Classes may be tailored online to provide specific information for subsections of a course. For example, an accounting course made up of students from sports management and hospitality and tourism management could be given the same introductory lecture, but directed to different examples that are relevant to their particular fields of interest.

Learning management systems facilitate group work.

Group work is easily facilitated by learning management systems. Instructors can create private chat rooms and discussion areas for groups. Students can use these tools to facilitate their interactions. For instances, they can post documents, discuss assignments asynchronously, or set up times to chat. They can also submit group assignments and be assessed as a group.

Online education provides greater access to the university.

Adult students with families and work schedules have greater access to the university when online course options are available.

CHALLENGES

Platforms are changing regularly.

While this statement is true, these constant changes reflect the improvements to learning management systems that create new functionality or enhance existing functionality. The time lost when these transitions occur can be minimized by designing content that is portable. For example, instead of creating assignments in the learning management system, an instructor can create them in MS Word or the like. When the learning management system changes, these files can be migrated more easily to the new system than files created in the old system.

Preparing the learning management system for an online course is labor intensive.

Teaching online for the first time takes a fairly large commitment of time and energy. Instructors must learn to navigate the learning management system, decide which tools are most appropriate for their course content, and make sure that the investment in the chosen technology makes sense in terms of the real gains in student learning.

Learning management systems are always available.

While students may find the availability of materials and discussions much more convenient, using online tools to augment or teach a course can mean more contact time between instructors and students outside of the normal class time. While this unlimited availability may be daunting to instructors, student expectations can be managed. For example, an instructor can post the minimum frequency that s/he plans to access the online course content.

Ramping up 100% online courses at the start of the semester takes longer than ramping up traditional courses.

The online course calendar mirrors the traditional course calendar with respect to administrative deadlines, etc. Students who add the class on the last day of the two week add period will have to wait 1-3 days for course access and then another 3-7 days for their textbooks. With this schedule, students are unable to fully participate in the course for the first three weeks. For classes with early assignments and/or group work, this late entry poses scheduling difficulties.

COMMON CONCERNS

Weaker students will be lost online.

Reaching and connecting successfully with weaker students may be more difficult in an online setting. Without the face-to-face support structure that a traditional classroom provides, these students may become isolated, fall behind on the material, or worse, operate in denial mode by not logging into the course. While these scenarios are possible, instructors can create their courses in such a way that these situations can be minimized. For instance, students can easily be contacted within the learning management system and encouraged to catch up. Using the learning management system in this manner may seem less intrusive to the student than using home e-mail accounts or calling on the telephone (these more intrusive methods can still be used if the course mail does not work). By assigning students to groups, they can establish a sense of community in the course and get to know a few of their classmates. Finally, discussions may help the weaker students become stronger because they must deal with the challenge of putting thoughts into writing rather than sitting quietly in the back of the class, thereby strengthening their thinking skills.

Online teaching does not fit my teaching style.

Courses with significant online components are reaching into entirely new areas of teaching and learning that rely less on presentation, lecturing and listening skills. These new areas may be less defined and tested, but they have great potential to reach students who have not been accessed through traditional methods. With the vast array of tools available in learning management systems, even instructors who enjoy the performance art of teaching may find some that can augment their performance. Indeed, face-to-face teaching may be augmented by online tools (e.g., posting grades and/or solutions, moderating online discussions) resulting in a spectrum of teaching opportunities ranging from 100% online to 100% face-to-face, with more and more courses falling between the two extremes.

Learning management systems cannot be tailored to fit my course content.

Transitioning hands-on, inquiry-based learning to an online environment may represent the area where the applicability of online learning is most questioned. Even self-proclaimed skeptics about online education, however, are becoming convinced that this type of learning can be adapted online. By providing some materials, having students obtain others, providing directions and assembling good teams, students can try experiments, complete investigations, and prepare group presentations online. Conducting these types of courses online is not easy since a great deal of the front-end loading is required to set the process in motion, but this activity is necessary for any laboratory-type activity.

Exams are impossible because students can easily cheat.

Increasing the types and instances of assessments reduces the risk of academic dishonesty. The best online exams are those that test understanding and application of knowledge rather than fact recall, since enforcing a closed-note, closed-book exam is virtually impossible (pun intended). Moreover, these exams are often a better fit with course goals than more traditional exam formats. Also, quizzes and tests can be constructed to be different from student to student, as well as from semester to semester. Other forms of assessment, such as papers or essay exams, can be scanned by plagiarism checkers.

Instructors cannot get visual affirmation that students understand the material.

An online discussion can be a better source of information about student comprehension than anything in the classroom. Shy students who might be reluctant to speak, particularly in a large lecture, are much more forthcoming when they can write their questions and comments.

Instructors are not involved with students as closely as in a face-to-face setting.

For some students, this statement is indeed true. For fully online courses, an instructor may never correspond with a student beyond the course requirements. In other cases, however, some students thrive in this environment and the instructor has more opportunities to interact one-on-one than s/he would have in a traditional setting. For example, when an instructor provides feedback to threaded discussion postings, an exchange may ensue that continues the discussion. As with face-to-face setting, interaction varies depending on the student.

Online teaching and learning is less efficient than conventional methods.

From an instructor's perspective this statement may be true, particularly the first time teaching an online course. Instructors must formalize lessons because they cannot be augmented during class periods as easily as responding to a student's question or remembering a point that s/he wants to make that is not included in her/his notes. Subsequent semesters, however, are more efficient because the semester's class preparation is completed except for the routine updates of materials that correspond with the updates one would make for traditional classes. Another aspect of online teaching that may seem inefficient is the 24/7 access to the course. For this reason, online teaching is more difficult to compartmentalize for some instructors than traditional teaching.

From the student's perspective, online learning may be more efficient because class time can be scheduled at the student's convenience and the commuting time to campus is saved. These savings are particularly critical for non-traditional students.

Learning management systems cannot address the learning style differences of students.

The array of tools available within a learning management system may in fact allow for better attention to the various learning styles represented in a class.

The teaching assistant role is unclear in online teaching.

In some cases this statement is true. Online teaching, however, provides an opportunity to clarify the respective roles of the instructor and teaching assistant through both conversation and the access granted to the teaching assistant within the learning management system.