

FACULTY TEACHING CENTER AND  
CONTINUING STUDIES

# REPORT ON WEB- ENHANCED AND BLENDED LEARNING ACTIVITIES

---

AT UMASS LOWELL

MARY BEAUDRY  
JACQUELINE MOLONEY  
STEVE TELLO

With Contributions from the  
Graduate School of Education

## Overview

UMass Lowell faculty have been actively experimenting with emerging technology to enhance their teaching effectiveness for over a decade. It is estimated that approximately 75% of UML's faculty use some application of teaching with technology to enhance their courses, and approximately 25% teach courses that are entirely online. Recently, a new phenomenon called blended learning has emerged. Blended learning may provide new ways to improve student learning by replacing 'seat time' with online activities. Working from what has already been learned, a few UML faculty have begun to explore this phenomenon.

In this report, we will provide some definitions of these strategies as they are evolving in the literature, summarize the usage of the various strategies by faculty at UMass Lowell, review the training and involvement of faculty and departments across the campus and provide a description of three blended learning courses that have been piloted at UMass Lowell. Finally, we will identify some of the future directions the faculty have engaged in to move the agenda forward. Two documents have been attached for consideration. Two national publications are included in an Appendix that describe national perspectives on this emerging approach, Pew Foundation's Road Map 2 Redesign Project and a recent issue of Educational Pathways.

## Definition of Strategies

The definitions below are drawn from the Sloan Consortium's report, *Sizing the Opportunity* (Allen & Seaman, Sloan-C Report, 2003). It should be noted that these strategies are evolving and are sometimes defined differently.

- ✚ Teaching with Technology: Creative use of technologies that enhance presentations, lectures and student learning in face-to-face courses. Includes classroom use of computer projectors, multimedia presentations (e.g., PowerPoint, Astound), software applications (Excel, SPSS), simulation/modeling software and Web Safaris.
- ✚ Web-enhanced: Courses which use web-based technology to facilitate what is essentially a face-to-face course (Sloan-C Report). Strategies include live web surfing, use of a learning management system (such as Intralearn) to augment course materials, posting a syllabus or lecture notes online, or holding an online discussion or chat with students.
- ✚ Blended/hybrid: Courses which blend online strategies with face-to-face teaching where a substantial proportion of the course is delivered online. (Sloan-C Report). Inherent in this definition is the understanding that 'seat time' may be reduced with online instruction.
- ✚ Online education: Online courses occur where the vast bulk of the content and interaction is conducted online with use of a learning management system. Online courses are typically asynchronous and have no face-to-face meetings.

Table 1  
Usage of Various Web-based Technology Methods  
(AY 2002 – AY 2004)

	Web-Enhanced Course	Blended Learning Course	Online Course
Unduplicated Faculty Using Technology	112	7	163
Unduplicated Courses	242	8	221
Departments Represented	31	3	39
Total Student Enrollments	3,694	150	16,743

## **Faculty Development Opportunities**

For over a decade UML faculty have been participating in professional development workshops preparing them to use various instructional technologies. Early workshops focused on effective uses of basic classroom technologies like PowerPoint and multimedia. A natural evolution toward complex web-based technologies, for example, displaying lecture notes, streaming video, and interactive on-line discussion, has followed. Many UML courses now include a web presence or web enhancements. Clearly, progress has been made.

As faculty interest in the possibilities for using technology to increase student engagement grew over time, so too, did the need for more training providers. By the mid 1990's the Faculty Teaching Center, the Council on Teaching, Learning, and Research as Scholarship, and the Online Teaching Institute offered by Continuing Studies & Corporate Education were joined in providing training by the UML media and library staff, the Graduate School of Education, and technology specialists in the various colleges. With this core group promoting, facilitating and supporting faculty adoption, many UML faculty have moved from the Teaching with Technology in the classroom phase, to the Web Presence/Web Enhancements phase. Even without including training offered by the libraries, nearly 1,000 faculty have taken advantage of these opportunities since 1995.

In addition to program support by a core group of experts, this important training effort was sustained by a number of funding sources. The Council on Teaching, Learning, and Research as Scholarship provided faculty incentives in the form of stipends for workshop end products as well as seed grant opportunities for exploring uses of instructional technology. External funding sources included the President's Reserve Fund in 1999 and 2000, the system-wide Technology for Academic Development group, the Web-Based Instruction Project, and the USDOE Transforming Teaching with Technology and Ready to Teach grants. These funding sources, in addition to UML's institutional support, made possible extensive training opportunities for our faculty.

Many informal forums for sharing experiences with instructional technology have also been available to the faculty. These include Conversation Dinners, technology showcases, and luncheon seminars. All of these formal and informal activities have been planned in response to faculty interest in using advanced technologies in teaching. Over the last decade, progress in making use of web technologies has been individual, incremental and -- in terms of this University -- substantial.

## **Examples of Blended Learning**

As can be seen, UMass Lowell is rich with examples of classroom teaching with technology, web-enhanced courses and online courses. The motivating force for most faculty adopters has been to improve student learning and/or access to academic programs. Considering the characteristics of their students and the demands of their curriculum, they select instructional technologies to improve achievement of expected course outcomes. It seems likely that our faculty will continue this thoughtful approach as they investigate effective uses of blended learning.

## **Exploratory Case Examples**

Consistent with past innovations, UMass Lowell has a unique opportunity to draw on the expertise of its own faculty who are currently experimenting with blended learning. Currently, there are only a handful of blended learning courses being taught on campus primarily in the Graduate School of Education. There, faculty have experimented with blending online activities and communication in place of some portion of face-to-face or seat time. The three exploratory cases that follow, have the following common threads:

Motivation: The motivation to move to a blended format occurred to accommodate student needs for flexibility and convenience.

Enhanced Learning: The blended learning strategy enhanced student learning because the students had additional opportunities to interact with each other, the faculty and the materials asynchronously. Participating faculty each plan to revise future courses as a result of this activity.

Using blended learning also helped to build the students' collaboration skills as they worked together in online teams, a skill that is increasingly critical in their professional work as teachers.

Maintenance of Face-to-Face Activity:

All of the faculty felt they needed to maintain some amount of face-to-face activity for pedagogical reasons.

*"The frequent online communication guided by thought-provoking questions for discussion seems to have strengthened a pattern of mutual support and generated useful insight among the cohort that transcends the challenges of conflicting schedules from individual schools and varied instructional responsibilities."* Judy Boccia, Graduate School of Education

## CASE I

Research Planning: Leadership - J. Davidson

This semester I used the hybrid format as a model for our new doctoral student offering: *Research Planning: Leadership*. This course for doctoral students in the Leadership in Schooling program provides them with a structured experience for conducting and completing the program's Qualifying Paper, an exam at the end of the program preceeding the development of the dissertation. In the new course, students come together at three-week intervals to share the stages of their paper development, working online in the in-between times. The course, instituted this semester (Spring 2004), has garnered strong votes of approval from class participants, who have indicated it provides much needed support for achieving a difficult goal.

In the upcoming year (2004-2005), the Leadership program faculty will offer this course with other blended courses. To serve the needs of doctoral students at the end of their doctoral program, we will create "Super-Wednesday"—a weekly medley of supports for students beginning, conducting, or completing their dissertation work. This exceptional new innovation for the Leadership program, will allow students to attend face-to-face classes approximately every three weeks, coming together in like-need and cross-need groupings that will be taught by individual faculty and/or faculty teams. The new "Super-Wednesday" program will allow a leaner faculty to provide more and better support for end-program doctoral students, as we meet students' critical needs for individual support and community. The "Super-Wednesday" program will only be possible with the blended learning options that online education provides.

In considering blended learning, one traditionally assumes that the instructor is moving from a face-to-face format to an online format. In the Graduate School of Education at UMass Lowell, however, our early experience jumping into the development of the online educational administration program has put us in the position of blending in both directions. The master's level class *Planning, Technology, and School Improvement* is an example of a course that had been developed solely in an online format, moving to a face-to-face format. This course teaches prospective school leaders how to conduct a Needs Assessment and develop an Action Plan to support technology integration across an organization. It requires an intensive semester-long project that includes hands-on data collection and collaborative peer review, which culminates in a polished presentation of findings and recommendations. In moving from online to face-to-face, rather than shifting back to a traditional

weekly meeting structure, I created a hybrid course that called for class meetings every three weeks. In the interim, students work on-line and on individual course assignments. This new off-line workshop-style course meets our graduate students' desire for personal contact, as it meets their needs for more time on learning activities and less time stuck in traffic. The new course will be offered Fall 2004.

## **CASE II**

### **The Capstone Project - Judy Boccia**

The Capstone Project (04.524) is the culminating course in an M.Ed. in Curriculum and Instruction, a program of classroom focused professional development for teachers in the Lowell Public Schools. As a practicum course, it centers around implementation of action research-based change in the school setting, using the skills and strategies of curriculum design and assessment developed throughout the program. Eleven students participated in the course, which consisted of six face-to-face sessions, interspersed with eight on-line sessions. The face-to-face sessions focused on group interaction to clarify goals and strategies for individual project completion. The weekly on-line sessions were dedicated mainly to threaded discussion dealing with issues of implementation. The frequent online communication guided by thought-provoking questions for discussion seems to have strengthened a pattern of mutual support and generated useful insight among the cohort that transcends the challenges of conflicting schedules from individual schools and varied instructional responsibilities.

Typically in the Graduate School of Education, practicum courses that are not connected to certification are treated as independent study projects with about 3 meetings between student and professor, as well as a site visit during the course of the semester. Since the Capstone Course involves a cohort group, I decided to continue the regular communication between group members during their project implementation but without the burden of weekly on-campus classes. The online discussion board was an excellent tool for maintaining the group energy, morale and mutual help in between face-to-face sessions. It also produced the high level comments and reflection I have previously seen in virtual communication forums. When students have the time to consider and craft responses to questions, the results are markedly better than the usual off-the-cuff talk that so often passes for class discussion. In addition, the public and archived nature of the postings to a forum motivate students to construct responses that are professional and thoughtful.

Next time, I would have fewer face-to-face classes. The three early sessions were important in helping the group get launched on what for many was a daunting task. But as the semester unfolded, we found we had done the important work online and meeting face-to-face was a largely social experience. I will continue the final face-to-face, a Poster Session of Capstone Course work to be attended by GSE and Lowell School officials.

## **CASE III**

### **Perspectives and Vision II - Anita Greenwood**

Perspectives and Vision II enrolled 36 doctoral students ages 25-60+ this semester. I had never taught this course before. To be honest, I did it as practice for my totally online course this summer, BUT now that I have done it I think it is the way to go. Also, because I have 9 students in Bridgewater doing the course via 2-way TV, the online classes allow me to group them in teams with students that they never meet normally.

Class notes are posted each week, and students tend to print them out. I hold two fully-online sessions during the two school vacation weeks so that no classes are missed by anyone. We use teams

for the group projects and the students use online communication to conduct their interactions. I have just finished a chat session tonight with eight students.

There is absolutely no doubt from my perspective that this enhanced my course. I believe that the students enjoyed the convenience, but I know that they only want a blend for this type of course. Almost unanimously they told me that they would not want this type of course fully online.

First time teaching the course means that I did not have all my materials ready ahead of the course, and I needed to make sure I uploaded week-by-week in a timely fashion. Once uploaded for the online sessions, my work that week was a lot less stressful. I believe it is easier to teach online. When I prep for a face-to-face class, I go through all the material, then I think about the best ways to teach it and to assess learning. When I prep for online, I go through all the material, but the thinking about best way to present it is different. When you know you will have 36 people in a face-to-face class for 2.5 hours, your presentation had better be good. Online, the presentation is different. I don't want that to be misconstrued, but it was not as taxing as preparing for face-to-face. Finally, I will NOT go back to non-blended now. I will add one more this summer and one more in the spring.

## **Next Steps for Blended Learning**

There are numerous initiatives in place designed to explore the wide range of options available to faculty. Here are just a few:

---

### **SUMMER '04 FACULTY INSTITUTE FEATURES BLENDED LEARNING**

---

As UML faculty explore applications of the blended learning approach and its appropriateness for their students and curricula, they will need the same kind of ongoing support and training as they had in developing web-enhanced and/or online courses. To that end, two Summer Institute workshops will help faculty to advance their instructional technology skills; one workshop will introduce participants to less complex web-based teaching tools; the other workshop is dedicated to the advanced topic of blended learning.

If the administration and faculty wish to accelerate widespread adoption of effective applications of blended learning, more training and discussion forums will be needed to address faculty and student concerns about the strategy.

---

### **FACULTY SURVEY OF CURRENT PRACTICES**

---

At the request of the Provost, the Teaching with Technology Task Force (TWT) of the Council on Teaching, Learning and Research as Scholarship, is developing and administering a survey which will examine the perspectives of all UMass Lowell faculty regarding their use of technology in the teaching process. This survey, which will be released to faculty in the beginning of May 2004, examines faculty use of Web-Enhanced, Blended, In-Class and Online technology methods. It also examines their perspectives regarding the contributions and challenges this technology use poses for faculty and for students. The TWT plans to collect this data during May, prior to the end of the Spring semester, and will tabulate and summarize the results during the summer break. The TWT will then provide the Provost with a written report summarizing both quantitative and qualitative aspects of the survey.

---

### **IDENTIFY STRATEGIC PROJECTS FOR FUTURE PILOT STUDIES**

---

Since the UMass Lowell administration is interested in using the blended learning format to transform the campus, identification of strategic courses or projects will aid in expansion/experimentation with this new pedagogy in selected courses. Once faculty conduct those experiments and assess the impact on student learning, further training can be developed and rolled out to other courses.

---

## FACULTY WORKLOAD AND POLICY CONSIDERATIONS

---

As these pilots evolve, the University may have to give some consideration to implications for the current contract. There are several questions facing the University, including:

- ✚ Are the faculty allowed to teach their courses completely online as part of their workload?
- ✚ Can full-time day students opt to take all their courses online, part of their courses, etc. ?
- ✚ Should there be guidelines about how much seat time is required, should it be alternate classes, alternate weeks, once per month, 3 times per semester?
- ✚ There are so many options, yet there is little research which documents which of these approaches has the greatest impact on student learning. The University may wish to examine these issues in more detail as it considers the broader use of a blended learning methodology.

## SUMMARY

Since preliminary explorations of blended learning on campus have been conducted by a small group of graduate faculty with graduate students, it may be time to experiment with applications of this pedagogy with other courses. Strategic selection of courses and projects would help to focus the initiative. Should the University decide to expand this approach, extensive research and training around effective practice will enhance the potential impact of such an endeavor. Further discussion on faculty workload and contract provisions would also help to deepen the involvement of faculty in the development of this initiative.