Online Education in a Traditional University

A department's successful online program ran into insurmountable barriers at the university level; from the ashes comes a proposal for developing a university-wide infrastructure

By **Bud McClure** and **Sandy Woolum**

During the past five years we built a sizeable online program in the Psychology Department at the University of Minnesota Duluth. During that time we learned a great deal about how to administer such a program. Our experience also led to the proposal described here for creating an infrastructure to support online programming in a traditional university.

Our program began in 2000 with 4 courses (100 students) and grew to 18 courses (1,200 students) by 2005, with tuition revenue of $790,000. To put that into perspective, the total online revenue for 2003 for the University of Minnesota's other three campuses, Twin Cities, Morris, and Crookston, was just over $800,000.

During the 2004–2005 academic year, our program reached its enrollment capacity, as measured by our ability to effectively administer it at the department level. We lobbied the administration to develop a university-wide online program of which our program would then become a part, but we failed to convince them of the value of online education at the institutional level.

Our Program

The Psychology Department at the University of Minnesota Duluth online program began inauspiciously in the summer of 2000 with an effort to make four popular courses more available to students than was possible in the regular curriculum. The Continuing Education department supported and funded

development of these courses. At the same time, we developed a course management system (CMS) that cobbled together a number of software packages using a template created with Dreamweaver. When completed, the four online courses were offered through Continuing Education; income from those courses augmented faculty salaries. The courses were an immediate success and filled quickly during registration. At that time there was no intention to create more online courses.

Shortly after the first four online courses launched, we assumed leadership of the Psychology Department, with Bud McClure serving as chair and Sandy Woolum as associate chair. Historically, the department had offered independent study courses created by individual faculty and administered through Continuing Education. These courses mirrored those we offered in the regular curriculum and required that students read a textbook and take a series of tests. These self-paced courses produced a large number of incomplete grades. We saw potential in updating these independent study courses to an online format and began encouraging faculty to do so.

A month or two after assuming our new roles, we hired an information technology specialist to assist in integrating technology into the department and classrooms. Student technology fees paid his salary. As it happened, the new hire was equally facile with building hardware and writing software. He quickly became involved in developing and writing an online CMS for the department. His work greatly facilitated our efforts to move courses online.

As we began to convert the independent study courses to an online format, some faculty questioned both the efficacy of teaching online and the quality of online courses. Other faculty were not interested in, or were unwilling to commit energy to, this project. But with support from several tenure-track faculty and a number of contract faculty, we forged ahead.

Because Continuing Education handled registration, tuition collection, and accounting for the online

classes, we created a revenue-sharing system to fund the program. As with the earlier independent study courses, faculty teaching the online courses received a salary argumentation. With faculty approval, we established a system wherein 30 percent of the faculty income from the online courses was distributed into two equal accounts, one to support professional development and the other to fund the online program. The professional development account was available to all departmental faculty, staff, and students regardless of whether they participated in (or supported) the program.

As the number of online courses and subsequent revenue began to grow, we created an Office of Online Education within the Psychology Department, dedicated physical space, and hired a director. She set about putting systems in place for student advisement, enrollment management, quality control in course development, and most importantly a means to facilitate student understanding of our CMS. Anyone who has worked in online education knows that most of the students' questions concern the logistics of online education; very few have to do with course content.

As time went on, we created more courses and experimented with having one course developed by an outside contractor. That project was not successful, and the course had to be substantially rewritten internally. As the online program evolved, the online education team grew to include the director, half-time assistant director, IT specialist, part-time graphics designer, and a number of undergraduates who functioned as "online learning assistants." Funding to support the program, including staff salaries, came from monies generated by the online courses. The online program became self-supporting.

We developed an extensive model for evaluating the courses, began collecting data and conducting research, and presented at national conferences. Our overall completion rate rose from 50 percent in 2000 to nearly 99 percent in 2005. Course evaluations showed that students reported no significant differences between traditional classroom and online experiences.

The program grew locally and also began to enroll more students from around the country without national advertising. In a search of Google online courses in psychology, our program often appeared at the top of the list, and we began to realize the potential for deploying it nationwide. As faculty and staff developed more courses, we focused on fulfilling requirements for the psychology degree. The chancellor expressed a strong interest in offering an online degree in psychology to a consortium of five community colleges with which the university had a relationship.

Challenges

During the first four years the program grew steadily until we reached a point—within one course—where a student could complete the psychology major online. During that time we faced four major challenges.

First, many of our administrators seemed at best neutral toward online education. Most embraced the idea of a traditional brick-and-mortar university and resisted developing a university-wide online education program. For us, this attitude proved to be the proverbial double-edged sword. In the vacuum their neutrality created, we were left alone and thrived, but when we reached our capacity to administer the program and sought university support, very little was available.

Second, the funding method we cobbled together through Continuing Education used an old faculty salary model based on the original independent study courses. As the online program grew, the model became increasingly unsuited to our needs. While it provided substantial revenue, the system was not intended for the purposes for which we used it. The revenue-sharing model we developed was entirely internal to the Psychology Department and dependent on faculty donating part of their salaries to fund most of the online education program.

Third, the university administration decided to use WebCT instead of the psychology department's in-house CMS. They had a legitimate concern from the university perspective, and the decision to use a commercial system made fiscal sense. From our perspective, we valued having complete control of our system. We could readily adapt it to changes requested by faculty, and it simplified conducting research on all aspects of the program, from how students navigated the courses to time spent on each task to course evaluations. Form and function were intimately related, and our online courses and management system co-evolved through constant interaction.

Fourth, we disagreed with the university administration over intellectual property rights and course ownership. Throughout our relationship with Continuing Education, we understood that courses were the property of the faculty who developed them. The university had not obtained written agreements to the contrary, so online course ownership ultimately did remain with the faculty.

When we began the online program, we did not anticipate these issues, with obvious consequences for the program once it outgrew the original model and seemed ready for wider adoption. In retrospect, these four challenges were manifestations of the larger problem we faced—how to integrate an online program into a traditional university.

Proposed Model for Online Education

The online education model we outline here combines several guiding principles while addressing the four challenges we identified. The model preserves the values found in the traditional university yet integrates some innovative ideas drawn from for-profit colleges.

Guiding Principles

From our experience we developed four guiding principles of how to develop an online program in a traditional university:

- Each online course should reflect the passion and personality of the faculty member who developed it. The course should remain the intellectual property of the faculty member and

should be recognized as an achievement deserving of merit, promotion, and tenure.
- Online education requires a centralized team of professionals who work together to coordinate and manage the online education initiative for the university. Part of that mission would be to educate faculty and staff, mentor faculty, and recruit new and talented faculty to participate in the online initiative.
- Online education programs should be entrepreneurial and that revenue generated from such programs should be shared among faculty, departments, and colleges.
- Online education faculty and staff need a degree of autonomy, along with institutional support and a strong academic identity within the institution.

Centralizing Online Education

Foremost, online education should be centralized on campus in its own physical space. Staff should include dedicated instructional technology personnel, and the office should hold the same academic position as the other colleges in the university, preferably named the College of Online Education to indicate its academic status. A dean who has educational expertise in an academic discipline, is conversant with technology, and has an understanding of the cyber classroom should lead the online education office. The dean should have tenured rank in a home department. This affords the dean the institutional freedom and support to deal with difficult issues while bringing academic credibility to the online education office.

The online office should be staffed with distance education professionals who provide for the daily needs of students and assist in the delivery of courses. While the office should employ regular full-time staff, it could also hire undergraduate or graduate students assigned to each course as online learning assistants (OLA) representing their respective departments. These OLAs can coordinate the course with the faculty member, respond to messages from students, post announcements, update links, and even respond to student discussions and weekly assignments. They would be affiliated with the online education office rather than being assigned to a faculty member.

Our own department's success with OLAs has convinced us of their importance to the success of these courses, and research also has demonstrated their value. Effective online courses require ongoing attention to the needs of students. OLAs can monitor the courses on a daily basis.

Technology Support. The technology support staff responsible for the management and operation of the CMS should be integrated within the online college. In addition, this staff would maintain software and hardware integral to the program, respond to student problems, and work directly with faculty in the development of new courses. Moreover, they would act as liaisons between the online office and university computing services to respond to the technical problems that arise between the university and the student. We believe this is an often overlooked but critical component of a successful program.

Evaluation. The online office also needs to take responsibility for ongoing evaluation of the online education courses. This could include typical course evaluations with additional features related to technology and delivery.

The online environment provides the opportunity for far more extensive evaluation and research studies, however, including:
- Student demographics
- Inventories of learning styles
- Test scores
- Qualitative analysis of written assignments
- Course satisfaction
- Link usage

Link usage is a way to understand how often and at what times students use the course. This data can be compared to other variables such as performance in the course and course satisfaction.

The online office should also evaluate the program, considering variables such as course completion rates and how often students sign up for an additional course (and how this might relate to successful outcomes from the previous course), link usage in various courses, and how courses compare in terms of features like streaming and online discussion forums. Since an online program is far more than a collection of courses, the evaluation can also consider features such as faculty satisfaction, tuition generation, and student retention. As the online program expands, staff or faculty would probably take responsibility for the evaluation, but it could also provide excellent research opportunities for faculty or graduate students in departments such as education.

Presentations and Publications. The online college should use its resources to engage in the national forum on online education by conducting research, presenting papers at conferences, and publishing in the field. This is easier to do when the online education unit has an academic status comparable with other colleges on campus.

Faculty

Like other university courses, online education courses can be as weak or as strong as we make them. To create exemplary courses, faculty need support. Additionally, those faculty with expertise and a passion for their fields should be recruited to develop online courses. The College of Online Education can provide a support infrastructure that frees faculty to concentrate on developing course content and then interacting effectively with students online to promote an excellent educational experience. All other administrative and technological issues related to the creation and delivery of courses should be the responsibility of the online college.

Faculty from across disciplines who show a strong interest in online education should be recruited first, as opposed to initially developing a curriculum and then trying to recruit faculty to develop it. With our model, faculty do not need to have technological exper-

tise but should be innovative educators with an interest in online education. Faculty who teach large sections of high-demand courses are also good candidates for online course development. In some cases, a course could be built around a faculty-authored book or research project.

The online education environment should be open, allowing other faculty interested in developing online courses to view existing courses. Tapping faculty passion, and then sharing the creative fruits of that passion with other faculty, can create a contagion of energy that might engage even the most reticent faculty. This means encouraging faculty who have developed courses to share them with other faculty through workshops or mentoring. In this way the curriculum for the program will develop spontaneously and take on a life of its own.

Finally, faculty who teach through the College of Online Education would earn an appointment in that college as well as their home departments and would constitute the faculty of that college. They would assume the academic leadership in setting and maintaining the university's standards for the online curriculum. We believe this new college, because of its diverse makeup, would be more likely than other colleges within the university to develop interdisciplinary courses.

Faculty Rights and Responsibilities. Online education presents many challenges for faculty in a traditional university. These are so prevalent in the literature that EDUCAUSE devotes an entire section of its annual conference to faculty issues. Intellectual property rights, as well as how online education courses fit into issues of evaluation, merit, promotion, and tenure must be addressed. Foremost, we need to guarantee that time spent creating an online course is not a detriment to the career of creative young faculty and that it becomes an accepted and rewarded mode of engagement for established faculty. The online education college can take the lead in advocating for faculty who participate in online education.

Intellectual Property. We strongly believe that faculty who develop the course own the intellectual property rights and may at their discretion assign them to the university or another third party. Many universities have acknowledged the importance of giving faculty the intellectual property to their own courses because they realize this will result in better courses, in keeping with other university expectations for professional writing and research.

Courses

Online education courses should be exemplary, with requirements that at least match those of their classroom counterparts. Online courses should be interactive, bright, colorful, and engaging for students. We have found that the aesthetics and presentation of online courses is very helpful in maintaining student interest. While online education may lack face-to-face interactions, the online environment offers more opportunity for different kinds of interaction. Courses should be approved by the faculty of the College of Online Education and reside in that college curriculum. If a course already exists in a department and is being converted to an online format, it can be cross-listed.

Course Management Systems

Whether the CMS is an in-house creation, an open source option, or a commercial product, it is essential to an online program's success. The main benefit of developing in-house software is control over the system, but it can be time-consuming, costly to maintain, and not a wise investment of university resources. The pros and cons of the different approaches should be discussed and the choice of CMS made before the online program begins. Our experience clearly shows the importance of involving other members of the university community, including the administration and information technology department, in the initial discussions. Doing so not only educates the program initiators on the options but also provides an opportunity to garner support and perhaps resources for the new program.

Regardless of the source, a good CMS should evolve along with innovation in online course development. The intersection between courses and delivery systems should be a creative space in which both the courses and software mutually influence each another.

Conclusion

Our experiences in developing an online program for the Psychology Department at the University of Minnesota Duluth have led us to appreciate the enormous potential for online education in a traditional university. Online education offers an innovative approach to meeting the educational needs of a diverse population of students. Traditional universities should be leading the way in developing this new pedagogy and institutional infrastructures to support it.

Although the online program we developed no longer exists, the Psychology Department continues to offer online courses and independent study courses, and the chancellor continues to support an online degree in psychology.

Unfortunately, our endeavors to build an online program did not lead to an integrative, university-wide initiative that would encompass the diverse needs of an online education program within a traditional university system. In retrospect, after the initial four courses were developed, we should have begun a campaign to build support for the broader online program that we envisioned. This could have included involving other departments, working more closely with our university IT people, and most importantly having direct conversations with the chancellor, who was an early champion of our program. To develop a comprehensive program requires that core administrators, faculty, and technology experts work as a team. Only with such broad participation can a traditional university create the infrastructure necessary to support an extensive online education program. *e*

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