Practical strategies for reducing the time spent teaching economics online

Joseph Cavanaugh
Wright State University - LC

Abstract

Although the online teaching format continues to grow in popularity, faculty members teaching these courses are finding that this type of course places much larger demands on their time then a traditional format course. The subject matter covered and methodology used when instructing economics courses make them particularly difficult to teach in an online format. This paper outlines a number of ways to reduce the time demands of teaching economics online while not sacrificing the quality of the instruction or the student experience.

1. Introduction

Compared to traditional in-class coursework, teaching online has been found to provide numerous advantages to the student, instructor, and institution. This has resulted in a dramatic increase in the number of online courses offered and the number of students enrolled in online courses. From 1998 to 2001 enrollment in distance education courses increased by over 100% and the number of courses offered increased by more than 200% (NCES 2003, Kieman 2003). Overall undergraduate enrollment from 2003 to 2004 grew by about 1% while over the same period online enrollment grew by over 18%. As of the the Fall of 2004, 2.3 million students took at least one online course. (Allen and Seaman 2005). This dramatic growth largely arises from the ability to provide access to students who could not previously enroll due to time, geographical, or location constraints (King 2002). However, the popularity and success of online teaching has not come without significant challenges. Compared to in-class courses, students taking courses online procrastinate, have been found to experience high levels of anxiety and need a greater quantity of timely feedback (Hillesheim 1998, Beaudion 1990, Taylor 2002). Many studies also have found that online courses require significantly larger workloads and that instructors think teaching online is more difficult than teaching in-class courses. For example, Hartman, Dziuban, and Moskal (2000) investigated 32 online courses and found that 90% of the instructors believe online courses are more difficult to teach as a result of workloads increasing due to increased interaction with students. Sellani, and Harrington (2002) discussed many of the unique challenges that administrators and faculty face when teaching online, and found that, "Faculty complained that the online delivery was more labor-intensive in the amount of time to grade papers and respond to questions." The increased time commitment has also been found to be a major barrier to faculty participating in distance education (Berge and Muilenburg 2000, Schifter 2000, O'Quinn and Corry 2002).

This paper investigates the reason for why online economic courses are more difficult to teach then traditional in-class courses and then offers specific suggestions about how to reduce the time teaching online while maintaining the quality of the instruction. There are three major reasons why teaching online is more time demanding 1) Online courses require additional up time to initially develop and to set-up each and every term, 2) It is more difficult to communicate with students in an online course, and 3) There is a greater amount of time required to grading exams and assignments when teaching online.

2. Setting Up The Course

The initial development time required for teaching an online course is significantly larger then the time involved in preparation of an in-class course. Among the many tasks involved in creating an online course includes; converting of the course materials (presentations, pictures graphs and data handouts, syllabus…) to electronic versions, creating online versions of test questions and exams, and developing examples of problems and solutions that can be accessed online. Baring a major revision to the content of the textbook used in the course, the majority of the course content only needs

to upload and set-up once. However, even after the course has been developed there are ongoing time demands that are much larger for online courses. The online content is inevitably added to, reworded, or eliminated each and every term. For example test questions are added, changed and deleting every time the course is taught. (Kaiden 2002) in a detailed review of WebCT specifically describes the time-consuming process of creating a multiple choice question using WebCT.)

Before an online course is taught each term the all time specific and class specific items are revised, updated, and uploaded. These items include the calendar, discussion group, and syllabus. Students taking the course online need to be contacted to explain how the course will proceed. For example they will need to know; how to obtain any course materials not online like the textbook, how to contact their instructor, and how to obtain their log on password information. After the course has been completed in order to make it available for the next term the course must be re-set, the grades and student evaluations downloaded, and a zipped copy of the course saved.

3. Communication

Arguably the most time consuming aspects of teaching online is the time spent communicating with students. Communication is significantly more difficult is because students are contacted in a written form and usually individually. Answering individual emails require more time then answering questions in a classroom because question answered orally require less time. In an in-class course the entire class is present to hear not only their questions and the instructor's answer but also the entire class also is available to hear the context in which the question was asked. Specifically when teaching economics courses, online communication with students is difficult. Economics uses many technical concepts, often using math, and graphs, to illustrate models and theories. Being able to help students by using a formula, or sketching a graph, or figure is much easier face-to-face then when communication is via email or telephone.
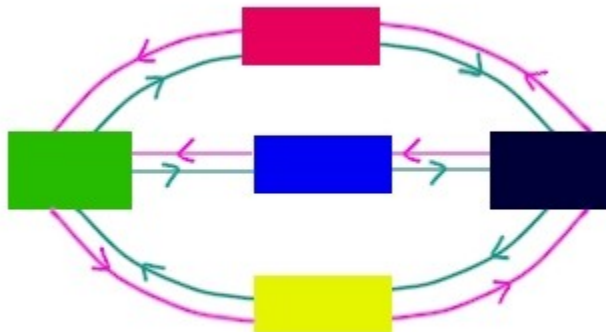
4. Grading

The time spent grading is another important part of teaching that often requires more time when teaching online compared to teaching in-class. Although objective questions can be graded automatically in an online course, any subjective or essay questions are more difficult to grade compared to an in-class course. One reason for this is that the questions on quizzes and tests are often selected randomly from a testbank so each student receives a different test. When teaching an in-class course each student receives the same questions and the questions are in the same order. This allows the instructor to anticipate the questions, and the answers that students provide (often even the incorrect answers they provide) which will allow for the exams to be quickly graded. In addition, the feedback that the professor gives is also more difficult to provide when teaching online compared to in-class. For example a student can be asked to provide a circular flow diagram and use it to name and explain the three main economic markets and label it to

describe how you might participate in each one as a consumer or owner of a carwash. Since the student can not answer the question by drawing online the same question as given on the online test might be converted to the following question and Figure 1:

Use the circular flow diagram below to name the three main economic markets, and describe how you might participate in each one as a consumer or owner of a carwash by defining each of the rectangles and arrows.
a.   The left rectangle is:
b.   The top rectangle is:
c.   The middle rectangle is:
d.   The right rectangle is:
e.   The bottom rectangle is:
f.   What flows along the bottom arrow from the left rectangle through the top rectangle and to the right rectangle?
g.   What flows along the top arrow from the right rectangle through the bottom rectangle and to the left rectangle?
h.   What flows along the bottom arrow from the left rectangle through the middle rectangle to the right rectangle?
i.   What flows along the top arrow from the right rectangle through the top rectangle and to the left rectangle?
j.   What flows along the bottom arrow from the left rectangle through the bottom rectangle and to the right rectangle?
k.   What flows along the top arrow from the right rectangle through the middle rectangle to the left rectangle?

Figure 1

Because the instructor can not just look and correct a diagram labeled by the student, the grading of this question and providing corrections is significantly more difficult online. Similar difficulties arise when trying to type solutions to questions that use mathematical formulas or when explaining how graphs change.

5. Time Reducing Modifications

To have a significant impact on the amount of time spent teaching economics online the course should be developed, or modified, so that it anticipates and then provides help where students struggle, minimizes the amount of individual instruction, and standardizes the course to make the to set-up and teaching more streamlined. The goal is to do this while also minimizing any potential adverse effects the quality of the course. Table 1 provides a list of issues that are commonly encountered when teaching online. Specific modifications and suggestions are provided that can help reduce the amount of time spent teaching economics online.

Table I

Issue	Modification/Suggestion
Initial Development of Course	Choose a textbook with an online course pack already developed.
Setting up calendar and syllabus.	Keep due dates, assignments, policies the same for every online course taught.
Answering Commonly Asked Questions	Provide a FAQ and provide incentives for the students to read it and the Syllabus by including questions about them on the first quiz or exam.
Answering Non-commonly Asked Questions	1. Encourage use of email vs. phone contact. 2. Ask students to put the course name and section number in subject line of email. 3. Ask for all questions to site the source of the confusion. (Page numbers, problem numbers…) 4. Have students state in the body of the email what is attached and their name. 5. If student is local set up an office meeting.
Grading Assignments and Quizzes Every Day	Avoid stop-and-start grading by providing deadlines. Then explain in syllabus that exams and assignments will not be graded before the deadline so they can all be graded at one time.
Providing Corrections	Have solutions for every question automatically posted so providing the grade is usually sufficient.
Providing Practice and Feedback	1. On quizzes, provide students with a

	choice of essays to answer. They end up seeing the solutions for all the essays but you grade one. 2. Provide sample essays and multiple choice questions some with and some without solutions.
Moderating Discussion Groups	Recycle Discussion Group Questions and Answers
Using a Chat room	Encourage students to chat with each other about course content by providing extra credit but do not attempt to grade quality of chat or attend lengthy sessions.
Dealing with Large Amounts of Email Contact	Provide timely responses to email but for students that email excessively take increasingly longer to respond as the frequency of emails increases.

6. Conclusion

One way to minimize the amount of time taught teaching economics online would be to provide students with little or no practice opportunities, reduce or eliminate any contact with the instructor, and make the student's grade solely dependent on computer graded multiple choice questions. An extreme alternative would be teaching an online course that tutors each student individually, relies completely on writing assignments, and has only essay question exams. The quality of a course that provides individual tutoring is without a doubt superior, but it would require a tremendous amount of time to instruct. Recognizing this time/quality tradeoff there are still ways to reduce the amount of time required to teach online while not significantly reducing the quality of the instruction. For example, the time teaching online can be reduced by providing FAQs and sample problems with solutions, by outlining specific instructions to students about how to email questions, by giving students plenty of opportunity for graded and not graded practice, and by structuring the course to minimize the time spent grading. Taking into consideration the time involved in instruction when developing or setting up an economics online course is well worth the effort.

References

Allen, E. & Seaman, J., (2005) "Growing by Degrees: Online Education in the United States 2005" *Sloan Center for On Line Education at Olin and Babson Colleges and The Sloan Consortium*. http://www.aln.org/resources/survey.asp

Beaudoin, M., (1990) "The instructor's changing role in distance education." *The American Journal of Distance Education* **4**, 21-48.

Berge, Z. L., Muilenburg L.Y., Haneghan, J. (2002) "Barriers to distance education and training" *Distance Learning Administration* **3***,* 409-419.

Hartman, J., Dziuban, C., & Moskal, P. (2000). "Faculty Satisfaction in ALNs: A Dependent or Independent Variable?" *Journal of Asynchronous Learning Networks,* **4**, 155-179.

Hillesheim, G., (1998) "Distance learning: Barriers and strategies for students and faculty" *The Internet and Higher Education* **1**, 31-44.

Kaiden, R. (2002) "Product Review A review of WebCT" *Internet and Higher Education* **5**, 399-404.

Kiernan, V., (2003) "A Survey Documents Growth in Distance Education in Late 1990s" *Cronicle of Higher Education* **49**, A28.

NCES, National Center for Education Statistics. (2003) "Distance Education at Degree-Granting Postsecondary Institutions: 2000-2001" *U.S. Department of Education, National Center for Education Statistics Report* http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2003017

O'Quinn, L., & Corry, M. (2002) "Factors that Deter Faculty from Participating in Distance Education" *Online Journal of Distance Learning Administration* **5**, 1-18.

Sellani, R. J., & Harrington, W., (2002) "Addressing administrator/faculty conflict in an academic online environment" *Internet and Higher Education* **5**, 131-145.

Schifter, C. C. (2000) "Compensation Models in Distance Education" *Online Journal of Distance Learning Administration* **3**, 1-7.

Taylor, R. W., (2002) "Pros and cons of online learning – A faculty perspective" *Journal of European Industrial Training* **26**, 24-37.