"Revitalizing Economic Education"

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ABSTRACT

Course redesign can be utilized to attain a variety of goals in undergraduate education: cost savings, improved learning outcomes and a reduction of the failure and withdrawal rate. This paper is about a successful redesign of a basic economics course: The Economic System. It is a course for non-majors offered for general education credit in the Social Sciences at Buffalo State College. The Course Redesign was part of a broader collaboration between SUNY and the National Center for Academic Transformation. This paper will analyze how this transformation took place, what was attained and how it could be used as a model for other courses and programs. The authors will highlight the unique features of economic education for college freshmen.

INTRODUCTION

The survey of economics course for non-majors has often been the grab-bag course in Economics departments. Typically it is a service course, often a general education course and quite often the last course thought about in schedule planning. There are departments in the economics community that use this type of course as a marketing tool to recruit majors to the field of economics. Yet many – maybe most – do not use the course in this manner.

In fact, these courses in basic economics are often the only course in economics students will ever take. This makes them the core foundation of economic education and economic literacy. It is not unusual to assign a brand new faculty member, a part-time lecturer or someone hired as the semester starts to teach the course. At best, an experienced faculty member who is willing to teach the course is given the assignment on a regular basis. Economics departments usually spend a significant amount of time on what the principles and intermediate theories courses ought to cover. Much less time is usually devoted to what this basic Economics 101 or survey course should include as a core curriculum. This is the state of basic economic education in higher education in the U.S. in the 21st century.

BACKGROUND

The course redesign project was initiated through a partnership between the National Center for Academic Transformation and the State of New York. It was created in 2008. The basic concept was to facilitate new thinking about the learning process for undergraduate education, especially at the

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introductory course level. All SUNY campuses were invited to participate in a dialogue to identify course and academic programs that could benefit through an NCAT guided evaluation of how to improve student learning outcomes in courses which had a record of low grades, high failure or high withdrawal rates. Simultaneously, the cost effectiveness of the delivery of courses was considered a second feature of course redesign. In other words, were there new instructional techniques that would improve student learning outcomes? Finally, the cost of course delivery would be considered in terms of how to use instructional resources more effectively in introductory courses.

The National Center for Academic Transformation is an internationally recognized nonprofit organization with over twenty years of experience in the use of information technology to transform the learning process in higher education (Graves and Twigg 2006, p. 2). Originally funded by a grant from the Pew Charitable Trusts, the Center initiated and consulted with 30 colleges and universities on course redesign between 1999 and 2000 (Twigg, 1999, pp. 3-4). Since the early programs, the Center has been engaged with hundreds of higher education institutions to redesign courses in order to improve student learning outcomes, lower the cost of instruction and more effectively engage students in the learning process. NCAT has provided a variety of redesign models, all of which have assessment models incorporated into the redesign planning and implementation. The NCAT redesign approach is focused on large enrollment introductory courses that experience high failure and withdrawal rates (Powers 2007, p. 2).

Each SUNY campus announced the NCAT-SUNY partnership and solicited the interest of academic programs and departments. At Buffalo State College, the Office of Academic Affairs identified a series of courses in a variety of departments that might benefit from the NCAT Redesign approach. What was proposed was the following: each campus should encourage course redesign proposals from eligible programs and departments. The goal was to identify significant course redesign proposals on various campuses with successful proposals awarded two year, \$40,000 grants.

Buffalo State College's Office of the Provost constructed a list of courses that could potentially benefit from the NCAT Course Redesign process. The appropriate academic deans held discussions with department chairs with courses on the Provost's list. The Department of Economics and Finance had a general education course, Economics 101: The Economic System, which was a survey of economics for non-majors with a high freshman enrollment. Econ 101 is not a Principles of Economics course, although economic terms, concepts and principles are taught as part of the course. After a department discussion about the potential of a redesign of this course, the Chairperson of the Department at the time, Ted Schmidt, indicated to the Dean of the School of Natural and Social Sciences that a proposal to redesign Econ 101 would be submitted.

THE REDESIGN PROPOSAL

Traditionally two or three sections of The Economic System were offered every semester, with 100-150 students per section. Three faculty members rotated teaching the course. They used similar formats, the same text and agreed that the course should use economic history and the history of economic ideas to teach students fundamental concepts, economic literacy and an understanding of economic problems and policies, past and present. Some online study guides, quizzes and in-class games had been developed by the individual instructors.

After discussion with the administrator of the instructional technology used at the College, Meghan Pereira, the key elements of the redesign were identified. The decision was to propose a course that would follow the NCAT hybrid model with a substantial part of the course online, a once-a-week traditional lecture and the utilization of undergraduate teaching assistants. The proposal argued that the online components of the course ultimately would be guided and supervised by the ULAs (Undergraduate Learning Assistants). The online components would include chapter quizzes, practice exams and study guides. The ULAs would carry out in-class activities, such as a "Jeopardy" game and others that had been created by one of the regular instructors. The class instructor would use traditional classroom lectures in the once-a-week class lecture. In addition, an online text would be written.

The proposal stated that the first year of the implementation would be used to create additional on-line components, such as online forums, which would pose broad-based economic questions and issues. In that first year the ULAs would experiment with in-class activities. It was understood that by the time the full redesign was ready the course would be 50% online and 50% in-class, which is the definition of a hybrid course at Buffalo State College.

NEW COURSE SYSTEM: ECON 101

Economics 101 and its new course system is a precursor to what can be done with classes for the future. This new course system takes traditional in-class lectures and combines them with online activities. There are two key components to how this system works. The first is ANGEL, Buffalo State College's online learning tool and bridge between teacher and student, and the second are the Undergraduate Learning Assistants. These two components combined are the driving force for Economics 101.

This class hybrid uses ANGEL as the medium for these online activities, which help facilitate student learning. On ANGEL the students have numerous weekly assignments. One such assignment is an online discussion forum where they answer topic questions and respond to other students regarding the current week's material. On ANGEL there are also required weekly chapter quizzes and optional review quizzes before each exam to be used as a study aid. The quizzes can be taken as many times as needed. The Power Points from the in-class lectures are also posted on ANGEL for the students to review or print out as needed. In addition to the online activities, ANGEL is also used for communication. If they have any questions, the students can talk to other students in the class, the professor or an Undergraduate Learning Assistant through email. There is also an open forum that is monitored by the ULAs where students can post their questions. This is a great feature of ANGEL because it allows

students to see other questions already asked and their answers. This leads us to the second key component.

The second key component of this system is the use of knowledgeable Undergraduate Learning Assistants, otherwise known as ULAs. ULAs are students chosen from previous semesters that did well in the class. This is important, because they know the class material well and are better able to convey these ideas to the students. This is also a great way for the teacher to receive feedback regarding what activities were beneficial to the students while taking the class. This allows the instructor and ULAs to revise anything that was not beneficial. The ULAs go through a training process before the semester starts on using ANGEL, class procedures/policies and FERPA. After the semester begins, each ULA is assigned a small group of students to work with. It is then that the ULA's job is to monitor the online activities and the students' progress in their group. Other duties include running the in-class reviews and tutoring. They are a large part of why this system works.

ANGEL and the ULAs work in unison to make this new course system possible. In this hybrid course, the instructor has a better idea of how the students are performing. The traditional teaching style in a huge lecture hall with 300 students cannot only be overwhelming for the teacher but for the students as well. It is almost impossible to know every student by name. It is easier for students who are not doing well to fall behind and feel lost, and by the time the instructor notices, it is usually too late in the semester. In this system, each ULA is given a small group of students. This is important for freshmen especially, because they have someone they can go to for help with a shorter response time. In this system there is always someone available that can help, if not the teacher or the ULA, then ANGEL with its online study material.

In this new class system, ANGEL and the ULAs are the keys to success, along with the professor, of course. Economics 101 combines traditional class lectures with online activities to facilitate student learning to form a hybrid class. This has many positives, including more study aids for the students and quick response time from teaching assistants for any questions. Both of these components work in unison with the professor to ensure the class material is being convey properly. This course system can be used in many other settings and classrooms, for not only economics but other subjects as well. This is a first of its kind, but will be beneficial as a template for other professors in years to come.

ULAS: THEIR ROLE AND RELEVANCE

Undergraduate Learning Assistants are the key to the new course system. All the ULAs have previously taken Econ 101. This is important, so they know what is expected of students in the course. They also know the material and have a perspective on which activities were beneficial and which were moot. It is also the ULAs' job to use this knowledge to cease those activities that were not valuable to the students in the class. ULAs then create another activity to take its place or they revise it for the upcoming semester.

The ULA's main job is to help facilitate student learning through these online activities, but since this is a hybrid course they also do face-to-face learning. To make this a little more personal for the students, each teaching assistant is given a small group of students. If there are 200 students in the class and 10 teaching assistants, then each assistant is given 20 students to work with personally. The students then go to their TA for tutoring help during office hours, or for assistance with ANGEL so that they can complete their online assignments. In addition, it is the ULA's job to keep track of how their students are doing and to see who is and is not doing well on tests or completing their assignments. Also, the ULA determines who is doing extremely well and considers the possibility that these individuals could be TAs for the next semester.

There are other face time activities as well. In the beginning of the semester, the teaching assistants hold an ANGEL instruction class for the students. This is where they cover what is required for the class and how to use ANGEL to complete their assignments. The assistants go over how to complete discussion forums, from where to find them, when they are open, how to post an initial response answering the topic questions from that week and how to reply to other students. They are taught how to complete quizzes and how to communicate with their TA through the communication tab by sending an email. A large number of the students are freshmen and ANGEL is new to them, so this is a perfect time to show them how it is used in Econ 101.

Another important duty is the in-class test reviews before each examination, with the help of the turning point clicker system. We use it to take attendance in every lecture and it is key to these review sessions. The teaching assistants make up questions using the text and class lectures for the students to use as a review. The ULAs then run a report at the end of the session. They use this report to see how the students did and then put up the review on ANGEL for the students to use as a study guide. The ULAs also proctor every exam. These are all opportunities for students to meet the teaching assistants, which make them more approachable if the students do need extra help.

The ULAs have many responsibilities, including monitoring of online activities, monitoring their group of students and being available for extra help as well as face-time activities. The assistants are a big part of why this new course system works. Their relevance speaks for itself. Without them, 300 students can be overwhelming for both teacher and students. In this system, the ULAs, with the help of ANGEL, bring it all together by being a support system for the students in the class and for the teacher. They are there to catch problems the students might have before it is too late and to help the teacher convey the course material in a way that their peers would understand.

ECO 101 AS A MODEL

The Buffalo State Econ 101 Course has the potential to serve as a model for other relatively high enrollment introductory courses. Many instructors create written or online materials for their courses. These may range from written narratives, exercises, problem sets, quizzes, study guides or review materials. A lot of this material could be put online to construct the framework for a hybrid course.

Furthermore, in many introductory courses, such as principles of economics, publishers have produced similar course materials used with the adoption of one of their textbooks. In most cases these materials are used to create an ongoing framework for a course.

In recent years many publishers have developed the capacity to customize courses in order to blend materials created by instructors with publisher course materials. Everything from the preparation and grading of course examinations, grade books, access to economic data and information sources, online and YouTube videos, homework problems and game simulations already exist, from publishers. Instructors have the option to use the publishers' materials directly or blend them with their own materials.

The use of Undergraduate Learning Assistants is one of the critical components. Our experience in their recruitment, training and supervision has been an evolutionary one. The very first year, just getting a sufficient number of ULAs was a major challenge. It was not until the second year that a well-defined training program was created, with the role of the ULAs effectively designed with a specification of their roles. One aspect of the Buffalo State experience is useful for other programs: many students decide they would like to serve more than one semester as a ULA. Our Course Redesign Program has had students interested in serving for as many as three semesters. This gave us the opportunity to have the experienced ULAs assist in the training of new student teaching assistants. From the experienced ULAs, a lead ULA was selected to serve as coordinator of the entire ULA tam. This allows the instructor the opportunity to communicate more frequently with the lead TA who reports back on the team's progress and problems.

CONCLUSIONS

The Course Redesign of the Economic System (Economics 101) attained its major goals: (1) increase the class size with an actual improvement in learning outcomes for students; (2) a greater engagement for the students; (3) instructional cost reductions and (4) long-term sustainability of course redesign for Econ 101.

Over the course of an academic year the number of sections of Econ 101 went from five to two. Overall enrollments for an academic year are at 550 to 580 students, with the learning outcomes maintained as measured by test scores. The online activities monitored and supervised by the ULAs require each student to participate in the class through quizzes, games and forums. The Economics and Finance Department has been able to offer additional graduate courses and upper division courses for undergraduate majors. The three faculty members who were originally three faculty teams to redesign the course will continue to offer the course in its present format. The Department of Economics and Finance will consider the need to find new faculty members who would maintain this approach. This will be done through the standard recruitment process in future years. In general, there is a strong faculty consensus that supports the Course Redesign Program.

There were some unanticipated results from the Course Redesign. The educational-learning experience of the students who serve as Undergraduate Learning Assistants has been outstanding. Most

ULAs want to continue beyond the first semester. There is also a true *espirt de corps* among the ULA Team, so that most socialize outside the classroom. These students are exposed to the learning process in a very unique manner, with substantial interaction with faculty and professional staff in Instructional Resources. Many of the ULAs have ultimately decided to minor or even major in Economics and Finance.

Other departments at Buffalo State College have begun to explore course redesign options. Noteworthy among them have been the Biology and Computer Information Systems Departments. This past Spring semester, the College and the National Center for Academic Transformation cosponsored a Course Redesign Conference for the Social Sciences. There were faculty, Instructional Resources staff and administrators from several dozen colleges and universities in the Middle Atlantic States, as well as many faculty and administrators from Buffalo State College. The results from the Buffalo State Course Redesign and a course redesign basic psychology course at Frostburg State College in Maryland were very successful. Among many results from the day-long conference was a sense that Buffalo State College, in a few short years, has become a leader in revitalizing economic education for the average student.

REFERENCES

Graves, William and Carol A. Twigg. 2006. "The Future of Course Redesign and the National Center for Academic Transformation." *Innovate*. 2(3): 1-5.

Powers, Elia. "Introductory Course Makeovers." Inside Higher Education.

Twigg, Carol A. 1999. "Improving Learning and Reducing Costs: Redesigning Large-Enrollment Courses." Pew Learning and Technology Program: Troy, New York.