



The value of a redesigned program and capstone course in economics



Ishuan Li^{a,*}, Robert D. Simonson^b

^a Minnesota State University, Mankato Department of Economics, 122 Morris Hall, Mankato, MN 56001, USA

^b Minnesota State University, Mankato Department of Economics, 123 Morris Hall, Mankato, MN 56001, USA

ARTICLE INFO

Article history:

Received 4 November 2015

Received in revised form 16 May 2016

Accepted 20 May 2016

Available online 24 May 2016

JEL classification:

A12

A14

A22

I29

Keywords:

Undergraduate curriculum

Capstone course

Assessment of program outcomes

Hansen proficiencies

ABSTRACT

This paper describes an undergraduate program in economics which redesigned its curriculum to include a required capstone research course. The outcomes of this program are noteworthy for several reasons. To assess the impact of the high-stakes capstone research course and the redesigned program, the authors provide evidence of labor market outcomes of its graduates. Further, student learning and program outcomes are measured using direct, objective, and indirect measures, among them the ETS MFT Economics scores, awards and recognitions in undergraduate research competitions, and Senior Exit Surveys. The overall evidence suggests the redesigned economics program improved research quality among its best students, and raised median hourly wages of its graduates within two to four years of graduation.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction and background

This paper describes the structure of a redesigned undergraduate economics program and the outcomes of its graduates at a public university in the Midwest. A unique aspect of this redesigned program is the inclusion of a high stakes and rigorous capstone course, Senior Research Seminar (SRS). The capstone course was implemented during a period of a rapid increase in the number of economics majors. This increase was due mainly to the increasing number of pre-College of Business majors who did not meet the minimum Grade Point Average (GPA) requirement for admission to the College of Business. In 2015, data on labor market outcomes for all college graduates in the state of Minnesota since 2006 became available. This database, *Graduates Employment Outcomes* (GEO), provides an important measure by which the value of the program redesign is assessed.

In many ways, the economics program which created the capstone course is representative of the majority of undergraduate programs in economics in comprehensive universities (Carnegie classification L4R, or large, four-year,

* Corresponding author.

E-mail addresses: Ishuan.li@mnsu.edu (I. Li), Robert.simonson@mnsu.edu (R.D. Simonson).

comprehensive, and mostly residential). Yet, in other aspects, the program is an outlier compared to institutions surveyed by Becker et al. (2012) on the use of teaching evaluations for curriculum assessment and pay increases. Its curriculum was missing a course that would effectively teach and attain the Hansen proficiency level (6) involving a writing intensive project.¹ As a department in a large comprehensive public university (14,000 full time equivalent or FTE), its resources are fairly limited compared to institutions of similar size and faculty lines. Ultimately, it was the faculty members in the department who desired a more integrated degree program similar to others in the same University system. However, the final impetus to carry out the program redesign was an institutional decision to retrench tenured/tenure-track faculty in the program by 40%.

The institution is a member of the Minnesota State Colleges and Universities system (MnSCU), which comprises seven four year universities and 24 two-year community and technical colleges. The department is housed in the College of Social and Behavioral Sciences (CSBS). It offers the Bachelor of Science and the Bachelor of Arts degrees in economics. The BS degree is essentially the same as the BA in economics, except for an emphasis in business courses instead of a minor requirement. The BA in economics degree requires a minor and a six-credit foreign language requirement. During the period of assessment, the majors were evenly divided between the BS and BA programs. The department also had the College's third highest number of full time equivalent students per faculty (FTEF) as a result of teaching Business Statistics, Microeconomics, and Macroeconomics, which were required courses for students in the College of Business (COB). It had a fairly large number of majors for a bachelor degree program of similar characteristics, growing from 94 in 2007 to 153 in 2013. The department graduated 20–33 students each year from 2007 to 2014.²

Similar to most other economics programs, the economics major is not a destination major at this institution. In 2007, the College of Business established a minimum 2.7 GPA entrance requirement. Due to its B.S. in Economics with an emphasis in Business, the economics program benefited by serving as a “placeholder” for students who did not meet the minimum GPA requirement for COB majors. Since the BS degree in economics course requirements included most business foundation courses, students who failed to improve their GPA defaulted into the economics major. Transcript analysis of juniors and seniors in the economics program provided evidence that roughly 50% of these students did not intend to major in economics.³

Compared to a national benchmark of similar programs, the students in the program were diverse in their academic proficiencies in economics as measured by the individual ETS MFT Economics scores, ranging from the 3rd percentile to the 97th percentile. These students progressed through the economics curriculum, which included Business Statistics, Quantitative Methods, Econometrics, Principles of Microeconomics, Principles of Macroeconomics, Intermediate Macroeconomics, Intermediate Microeconomics, and a Senior Portfolio course.⁴ Beyond the core courses, the BA degree in economics also required four upper level elective courses. The BS degree in economics consists of the core requirements, three upper level elective courses, International Economics, and ten additional business courses (Financial Accounting, Managerial Accounting, Legal, Political and Regulatory Environment of Business, Business Finance, Introduction to Information Systems, College Algebra, Introduction to MIS, Principles of Management, Principles of Marketing, and Production and Operations Management).⁵ In the fall of 2009, the program replaced Senior Seminar with the Senior Research Seminar (capstone) course.

Like most economics programs serving students in the College of Business, the program taught a significant number of students every academic year (900 students in Principles of Macroeconomics, 900 students in Principles of Microeconomics, and 900 students in Business Statistics) with ten (tenured/tenure-track) faculty members. The new capstone course in the economics program imposed additional demands on the department, which was partly resolved by increasing class sizes in principles sections.⁶ The capstone course was designed to be completed in one semester, and was taught by one faculty member. Given the intensity of instructor time-use by students in the capstone course, the program capped the enrollment in this course at 15, while offering two sections of the course every semester. No new financial resources were afforded to the department, except for one-time monies: \$1900 (from the College) to purchase 15 Stata software perpetual licenses; \$189 for data software StatTransfer; and \$7000 (from the University) to develop a course pack of topic outlines for the course.

¹ Until 2009, the only other writing intensive course was a survey course open to non-majors (Current Economic Issues), which was offered sporadically. The predecessor course to the capstone was Senior Seminar. This was a portfolio course that entailed some writing, but was not officially designated as a writing intensive course.

² The number of majors in the programs increased dramatically from 94 in 2007 to 175 in 2013 due to an increase in the minimum required GPA from 2.5 to 2.7 for students desiring admission to the College of Business.

³ These students were allowed to take up to 24 credit hours in the COB. A student declaring a major degree in BS Economics is by default a minor in Business.

⁴ There is no Calculus requirement for the BS and BA in Economics. Instead, the Quantitative Methods course content is equivalent to that of a course in Applied Calculus. Nevertheless, the curriculum in this program was very similar to those surveyed in a recent national survey among public BA degree programs of departments housed in Arts and Sciences Colleges (Siegfried and Walstad, 2014).

⁵ In most undergraduate programs, the institution's BS degree would be described as Business Economics. For students in the BS degree program, there are no additional minor or language requirements.

⁶ Class sizes were capped at 135, 88, 55, 50, and 35. The student faculty ratio in the department is still among the highest in the university.

Download English Version:

<https://daneshyari.com/en/article/357487>

Download Persian Version:

<https://daneshyari.com/article/357487>

[Daneshyari.com](https://daneshyari.com)