



Analysis

Teaching (un)sustainability? University sustainability commitments and student experiences of introductory economics



Tom L. Green*

Stockholm Resilience Centre, Stockholm University, Kräftriket 2B, SE-114 19 Stockholm, Sweden

ARTICLE INFO

Article history:

Received 13 December 2012

Received in revised form 4 June 2013

Accepted 1 August 2013

Available online 27 August 2013

Keywords:

Economics education

University

Sustainability commitment

Student

ABSTRACT

The three largest public universities in British Columbia, Canada have signed the Talloires Declaration, committing themselves to promoting sustainability and creating expectations that they will integrate sustainability across the curriculum in order to improve students' environmental literacy and stewardship. About 40% of North American university students take a mainstream introductory economics course; few of these students take economics at more advanced levels. As such, introductory economics courses are an important vehicle for students to learn economic theory; they have the potential to contribute to the knowledge that students can mobilize to foster sustainability. Interviews were held with 54 students who had recently completed an introductory level mainstream economics course at one of the three universities. Students reported that introductory economics courses place little emphasis on the environment and sustainability, they recalled course content with normative connotations that are problematic from a sustainability perspective and they described how discussion of the limitations of mainstream theory was set aside. Student reports of the insights introductory economics offers into environmental problems imply that these courses are failing to substantively increase students' understanding of sustainability and linkages between the environment and the economy. Findings suggest that current introductory economics curriculum undermines the universities' sustainability commitments.

© 2013 Elsevier B.V. All rights reserved.

1. Introduction

Ecological economists have long expressed frustration with how the theory taught in mainstream economics courses, especially at the principles level, fosters in students naive understandings regarding biophysical constraints to the economic process and relationships between the environment and the economy (Daly, 1992, 1995; Nelson, 2009). This study examines student perspectives on the extent to which principles level economics courses—offered in the form of semester-long courses, one on the principles of microeconomics and the second on the principles of macroeconomics¹—prepared them to understand the environment–economy nexus and sustainability.

Recognizing the role they can play in addressing the deteriorating state of the environment and the implications this deterioration has for human wellbeing, most universities in British Columbia, Canada,

Abbreviations: ECON, A student majoring in economics or business; SOP, A student majoring in a sustainability-oriented program; NES, A student who is neither ECON nor SOP.

* Tel.: +46 70 336 3474.

E-mail address: tom.green@stockholmresilience.su.se.

¹ In this study, “introductory economics” and “principles level” are used interchangeably to denote a first year course in mainstream (i.e., orthodox neoclassical) economics, whether the course be principles of microeconomics or principles of macroeconomics. Where it is important to distinguish the course (i.e., micro or macro), the actual course descriptor is used. Some North American universities offer a two-semester principles of economics course that covers both microeconomics and macroeconomics; that was not the case at the universities included in this case study.

and more than 400 universities worldwide, have made sustainability commitments, such as signing the Talloires Declaration.² Points three and four of the declaration's 10-point action plan involve an explicit commitment by signatory universities to graduate environmentally literate students who will go on to become ecologically responsible citizens. Since universities are expected to provide their students with skills relevant to meeting society's needs, curriculum should be designed to equip students for informed participation in decisions that have sustainability implications (Moore, 2004).

For many scholars, effective implementation of sustainability commitments implies the integration of sustainability across the curriculum (Haigh, 2005; Lukman and Glavič, 2007; Wright, 2002). The UN declared a Decade of Education for Sustainable Development (2005–2015), while the UNESCO implementation scheme for this decade stresses that sustainability should be embedded in the curriculum rather than included as a separate topic (Owens and Moore, 2008). While universities could develop and require students to complete a sustainability module prior to graduation, such add-ons are seen as ineffectual. One reason for this view is that students tend to see add-ons as covering irrelevant knowledge that must be mastered to meet degree requirements, but can subsequently be forgotten; they can quickly become token courses (Haigh, 2005). Further, what students learn in ecoliteracy “bolt-ons” is

² The declaration and the signatories can be viewed at the website of the secretariat for the declaration, the Association of University Leaders for a Sustainable Future (ULSF): www.ulsf.org (accessed May 17, 2013).

often contradicted by content in the core curriculum that countenances unsustainability (Sterling, 2004), leaving students on their own to deal with such incoherence.

1.1. Purpose and Significance of the Study

What do sustainability commitments made by universities imply for first year economics courses taught in mainstream economics departments at North American universities? Are mainstream introductory economics courses helping the academy meet its sustainability commitments, or should curriculum be revised to better support the fulfillment of these commitments? The research reported here is part of a larger research project based on a case study of the three major publicly-funded universities in British Columbia, Canada.³ The overarching project involved content analysis of introductory economics textbooks (Green, 2012a) and analysis of data generated from three sets of interviews. The first population interviewed involved 11 mainstream economists who teach first year economics. The second involved nine professors who work in sustainability-oriented programs (SOPs)—such as natural resource management or environmental studies—that encourage students to take one or more introductory level economics courses.⁴ The third involved 54 students who had recently completed such a course. This paper reports on findings from the interviews undertaken with the third population.

Each year, about 40% of first year university students in North America—over a million students—study mainstream economics at the introductory level. Of these students, the majority take no upper year economics courses, while less than 2.5% of all students major in economics (Salemi and Siegfried, 1999). As such, for a large proportion of university students, introductory economics courses are one of the few venues where they are expected to learn economic theory from an economist with the highest level of academic credentials. These courses are therefore an important conduit for diffusing mainstream economic theory to society (Benton, 1990; Fourcade, 2006; Fourcade-Gourinchas and Babb, 2002; Marglin, 2008; Sleeper, 2007). Indeed, Paul Samuelson explained that in writing his seminal principles textbook, his priority was “...not so much in dollars as in influencing minds” (cited in: Gottesman et al., 2005).

There is evidence that authors of principles level economics textbooks have sought to assuage potential concerns that students might have about the environmental impacts of economic activity. Shortly after the Club of Rome's *Limits to Growth* report was published (Meadows et al., 1972), Samuelson included graphs from the report in the ninth edition of his principles text accompanied by the dismissive annotation “What mixture of pseudoscience and common sense do studies like this one by the Club of Rome represent?” (Samuelson, 1973). Previous studies have questioned how the environment–economy nexus is addressed in principles textbooks and addressed the fact that these textbooks take normative positions that favor consumerism and downplay environmental concerns (Folsom and Brauer, 1998; Green, 2012a; Nelson, 2009; Northrop, 2000; Reardon, 2007).

1.2. Some Attributes of Introductory Economics Courses

Introductory economics courses are highly standardized across North American universities and rely heavily on textbooks (Boulding, 1988; Colander, 2000, 2003). The Since Samuelson's classic textbook (Samuelson, 1948) set the mold for contemporary principles textbooks, a rotating cast of a half-dozen textbooks have tended to dominate the market and shape curriculum; leading texts have consistently avoided heterodox content (e.g., work representing Marxist, institutionalist,

feminist or ecological approaches to economics) (King and Millmow, 2003; Knoedler and Underwood, 2003). Indeed, few undergraduate students encounter heterodox theory in mainstream economics programs (Knoedler and Underwood, 2003; Lee, 2009; Skousen, 1997).

A considerable body of literature from both inside and outside the orthodox tent acknowledges that students show low levels of satisfaction with principles courses, recognizes that learning outcomes are disappointing and calls curriculum and pedagogy into question (Becker, 2000, 2004, 2007; Colander, 2000, 2003, 2005; Laurenceson, 2005; Round and Shanahan, 2010). The use of heroic assumptions is particularly acute at the principles level (Hill and Myatt, 2010; Keen, 2011, Chapter 8; Nelson, 2009). Such courses have also been criticized for avoiding controversy, failing to raise the moral dilemmas associated with economic theory and policy and presenting economics as a largely settled body of theory (Becker, 2003, 2007; Colander, 2003; Moseley et al., 1991). Principles courses appear to alienate many students because the worldview they present largely excludes dilemmas of wealth distribution, inequality and ethics from course content, despite the fact that students are frequently exposed to such issues (Saunders, 2008). The walkout staged in the fall of 2011 by 70 students who protested that bestselling principles textbook author Gregory Mankiw's year-long introductory economics class at Harvard was imbued with an ideology that justifies an inequitable socioeconomic order is just one illustration of student dissatisfaction.⁵

2. Methodological Approach and Research Methods

My approach was informed by literature on qualitative research methods (Berg, 1998; Creswell, 2003, 2007; Marshall and Rossman, 2006; Willis et al., 2007). Qualitative research is considered appropriate in instances where researchers are seeking to generate data about perspectives, experiences and opinions. I used purposive sampling; the three universities selected for my case study were chosen because their characteristics aligned with my research needs. All three have an economics department, offer sustainability-oriented programs and have made sustainability commitments. I used semi-structured interviews as this format ensures key research questions are attended to while allowing for unanticipated data and themes to be uncovered. Such interviews were advantageous because they helped generate dense, detailed (or “thick”) descriptions of issues, concerns and motivations (Becker, 2001). I also included exercises aimed at seeding more in-depth discussion about specific topics covered in principles courses; showing what the students had learned in terms of environment–economy linkages and sustainability; and discovering how well the students could analyze a contemporary environmental public policy issue using the theory they had learned.

My theoretical framework was informed by the ecological economics literature as this literature directly addresses the nexus between sustainability and economic theory. Ecological economists seek to ensure that economic theorizing incorporates a more realistic specification of the economy's material and energy stocks and flows while stressing that natural capital and ecosystem services enable economic activity. Ecological economists believe movement towards sustainability is impeded by an economic worldview focused on growth in economic output and per capita consumption, and that downplays the linkages between economic activity and the state of the environment. Accordingly, to mainstream economics' traditional preoccupation with allocation, and to a lesser extent distribution, ecological economists add the issue of scale, which is to say the size of the economy in biophysical terms relative to the encompassing biosphere (Boulding, 1966; Daly, 1992; Georgescu-Roegen, 1971; Illge and Schwarze, 2009; Spash and Ryan, 2012; Victor, 2009). Mainstream economists' assumptions that

³ The University of British Columbia, Simon Fraser University and The University of Victoria.

⁴ Some of these programs do not require that their students take principles of macroeconomics.

⁵ “Know what you are protesting.” New York Times December 3, 2011. Online edition: http://www.nytimes.com/2011/12/04/business/know-what-youre-protesting-economic-view.html?_r=1&ref=business (accessed December 13, 2011).

Download English Version:

<https://daneshyari.com/en/article/5049858>

Download Persian Version:

<https://daneshyari.com/article/5049858>

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