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The Economics Major and Liberal Education

FEATURED TOPIC

Much more discussion is needed about the content and focus of the economics major as well as how that content is taught

THE SUCCESS OR FAILURE of a liberal education, or an undergraduate major, depends far more on how the educational process influences students' passion for learning than it does on what specifically they learn. A successful liberal education creates a lifelong learner, and classroom instruction is as much a catalyst for education as it is the education itself. Because passion for learning carries over to other fields and areas, the catalyst function of education does not depend on content.

Academic departments tend to focus on both the need for depth in the field and the need for specialized training as a component of liberal education. The push for depth over breadth by disciplinary scholars is to be expected. Just as a Shakespeare scholar is unlikely to be passionate about teaching freshman composition, a scholar of classical game theory is unlikely to be passionate about teaching general economic principles within the context of an interdisciplinary consideration of broad themes. Because breadth is not usually associated with research passion by disciplinary specialists, and because a college is a collection of disciplinary specialists, breadth often gets shortchanged; it is interpreted as "superficial."

But in reality, breadth pertains to the nature of the questions asked. It involves asking questions that are unlikely to have definitive answers—"big-think" questions that challenge the foundations of disciplinary analysis. By contrast, depth involves asking smaller questions that can be answered—"little-think" questions that, too often, involve an uncritical acceptance of the assumptions upon which research is built.

Questions and areas of study have two dimensions: a research dimension and a teaching dimension. The disciplinary nature of both graduate education and undergraduate college faculties leads to an emphasis on "research questions," which tend to be narrow and in-depth, and a de-emphasis on "teaching questions," which tend to involve greater breadth. Economics has its own distinctive set of teaching questions: Is capitalism preferable to socialism? What is the appropriate structure of an economy? Does the market alienate individuals from their true selves? Is consumer sovereignty acceptable? Do statistical significance tests appropriately measure significance? It is worthwhile to teach such "big-think" questions, but because they do not fit the disciplinary research focus of the profession, they tend not to be included in the economics major. This is regrettable, since struggling with "big-think" questions helps provoke a passion for learning in students and, hence, can be a catalyst for deeper student learning.

It is similarly worthwhile to expose students to longstanding debates within the field. For example, Marx considered the alienation created by the market to be a central problem of western societies; Hayek argued that the market was necessary to preserve individual freedom; and Alfred Marshall argued that activities determine wants and, thus, wants cannot be considered as primitives in economic analysis. Such debates are highly relevant for students to consider as they study economics within the context of a liberal education. But these kinds of debates are not actively engaged as part of cutting-edge research, which instead tends to focus either on narrow questions that can be resolved through statistical analysis or

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on highly theoretical questions that exceed the level of undergraduate students.

General education and the major

College education was once divided between general education, which was provided in the first two years, and the major, which was the focus of the last two years. The importance of the major has increased significantly, however, and this division is no longer reflected in the structure of undergraduate education today. Many students are now required to start their majors in the first year of college or, at the latest, in the second year. And too many faculty members are not directly concerned with achieving the overall goals of a liberal education, which they view as tangential to the disciplinary major. Few, if any, professors are devoted to teaching general education courses exclusively. Instead, these courses are provided by departments and often seen as a draw on the teaching resources of the major.

Instead of serving to strengthen liberal education by providing depth in one area, the undergraduate major has become more vocational. Viewed as preparation for graduate school, the disciplinary major channels passion for learning to a small group of future researchers and professors. Providing a liberal education and instilling a passion for learning in undergraduate students who do not wish to go on to graduate school is a secondary goal of teaching, and it is incorporated only to the degree that it fits the needs of the departmental major.

As the power bases for individual disciplines have been reinforced by faculty training and institutional structures, the power base for general education has shrunk. And as disciplinary majors have become more deeply entrenched, the disconnect between the major and the goals of liberal education has widened. The result is that often students with generalist interests are not provided with the catalyst for further learning and engagement, despite continual attempts by colleges and universities to achieve that end.

The freshman seminar, for example, was designed to achieve greater focus on communication and integrative skills as well as to provide students with more intimate contact with faculty early on. Math, science, and economics professors have little training in general writing and communication skills, yet they are expected to teach these skills in

freshman seminars. If economics professors succeed in instilling a passion for learning during the freshman seminar, it is due to their individual commitment to the ideals of such courses and their ability to draw on training beyond what they received in graduate school.

The role of graduate education

All this is not to say that undergraduate programs are devoid of professors committed to the ideals of liberal education. Just as study in the major is only a part of an undergraduate student's education, so too is graduate training only a part of a graduate student's education. Students with broad interests make it into

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graduate school, and some make it through; others develop broad interests afterwards. But those who are most passionate about undergraduate teaching are unlikely to make it into a top graduate program in economics. In part, this is because the training offered by top graduate programs is unattractive to these potential graduate students. But even more, it is because these are not the type of students that graduate programs are looking for; training students to be good teachers is not what graduate programs in economics see as their goal. In lower-ranked graduate programs, the focus on training researchers as opposed to teachers is less pronounced, but it still exists—in part, because these programs are staffed by graduates of the top programs.

The problem of the relationship between the major and liberal education does not derive solely from the structure of the major or the specific courses included as part of that structure. The specialized, disciplinary structure of graduate education in the United States also contributes to the problem. Graduate education is designed to produce cutting-edge researchers who may teach undergraduates as a sidelight. As graduate programs become more specialized and more focused on preparing researchers rather than teachers, and as research outlets also become more specialized,

the research and teaching focuses of the professoriate pull even harder in different directions.

The economics major and liberal education

The economics major includes technical aspects drawn from mathematics and the natural sciences as well as humanistic aspects related to history, philosophy, literature, political science, and public policy. Thus, in some ways, the problem of the relationship between liberal education and the economics major is a microcosm of the problem of the relationship between liberal education and the undergraduate curriculum as a whole.

Economics today neglects to foster certain liberal education outcomes on which it could, and once did, focus. Moral reasoning, for example, was once part of economics education but is no longer a focus of the discipline today. A recent survey of undergraduate economics majors found that only 21 percent believe that economics is highly successful at teaching moral reasoning (Jones et al. 2010). Similarly, teaching students about "living with diversity" and, depending on how it is interpreted, providing "breadth of interest," are not specific goals of the economics major.

The same holds true for the development of other skills associated with a liberal education. Economists are trained in specialized forms of critical thinking that focus on technical issues and analytics rather than on how to arrive at a reasoned judgment by considering all aspects of a problem. Economists are not especially known for their communication skills, and they receive little training in writing or communication while in graduate school. It is, therefore, unlikely that the economics major will be effective in teaching these skills. And indeed, in the survey cited above, only 28 percent of majors said that economics is highly successful in teaching communication skills.

An influential report on the purpose and structure of the undergraduate economics major helped establish, or at least codify, the general structure of the undergraduate economics

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major that almost all economics departments currently follow (Siegfried et al. 1991). The central goal of the major, according to the report, is to teach students to "think like an economist." This goal—which encompasses deductive reasoning skills, decision-making techniques, understanding complex relationships, creativity, acquiring and using knowledge that cuts across disciplinary boundaries—overlaps significantly with the outcomes of a liberal education.

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Teaching students to "think like an economist" is a relatively uncontroversial goal insofar as it allows each professor to think of the training they provide as, essentially, getting the student to think like him or herself. But the goal has been pushed further by some who favor teaching a particular set of proficiencies. For example, Hansen (2010) argues that the goal of the economics major should be to teach students to *act* like economists: "instructors want students to be able to demonstrate at various levels their ability to perform the various proficiencies, culminating at graduation with their ability to demonstrate mastery of every one of the proficiencies." Almost everyone would agree that proficiencies should ground what is taught; the disagreement centers on how broadly or narrowly the proficiencies are defined. Should they be reflective of liberal education goals—for example, the ability to read, critically analyze, and write effectively—or should they instead be reflective of narrower skills that are more directly relevant to the field of economics, such as the ability to understanding opportunity cost, to run regressions and interpret "t" statistics, and to explain the connection between money supply and inflation?

Precisely what it means to "think like an economist" changes over time, mirroring changes in the training of economists. Through the 1960s, both graduate and undergraduate training was focused on broad-based skills that integrated critical thinking, historical knowledge, and statistical analysis. Since then, graduate training has become more technical, more reliant on mathematics and statistics. Initially there were debates within the field about this change, but technical mathematics and statistical training have won out. The reality today is that economics is a highly technical field, and anyone who is not comfortable with high-level mathematics and statistics is not advised to pursue graduate work in the field. The focus on general economic problem solving within a broad setting—a focus that characterized economics training through the 1960s—is now greatly diminished. Economics professors today are more prepared to make important technical inputs into policy analysis than to develop policy questions within a broader framework. Graduate training is intended to develop technical expertise, not to focus on policy design or on the moral or ethical aspects of economic policy. Graduate students learn to translate problems into formal models and to study those problems empirically by using high-level statistical techniques.

The fact that "thinking like an economist" is now associated with the narrower, more technical proficiencies of the modern approach to the field does not mean that the economics major no longer contributes to the liberal education of students. It simply means that the economics major now contributes in a slightly different way. The typical economics professor is not well trained to guide students through moral reasoning or civic engagement activities, for example. His or her interests are likely to center on problems that are susceptible to formal modeling and statistical testing, rather than on policy questions that involve complicated ethical or moral issues. As a result, undergraduate education in economics now contributes more directly to the development of quantitative literacy. The role of the economics major is becoming more like the role currently played by mathematics and the sciences. Students round out their skill development through other components of their education.

The increasingly technical and specialized nature of the economics major needs to be kept in perspective. Relative to history, English, or the other social sciences, economics is indeed technical and specialized. But the same pressures for specialization are at work within those other fields as well. Relative to the undergraduate science majors, the economics major is nontechnical and general. The economics major also typically has far fewer required

courses than the science majors and, unlike most natural science majors, it is still designed for students who do not intend to continue their formal education beyond graduation.

Two distinct constituencies

Largely because of its connections to business, the undergraduate economics major has to satisfy two constituencies. The first is the very small group of students who intend to pursue graduate study in economics; professors of economics are well trained to teach these students. The second, much larger constituency is comprised of students who view the economics major either as a stepping stone to business and public policy, or simply as a foundation for a strong liberal education. Integrating the needs of these two distinct groups is a major problem for undergraduate economics faculty, and the decisions they make regarding how best to meet the needs of both constituencies will significantly influence the nature of the economics major in the future.

Students who perceive the economics major as a stepping stone and do not plan to pursue further study in the field—the second constituency—comprise the larger group. While 10 percent of economics majors consider going on to graduate school (Jones et al. 2010), the reality is that less than 2 percent actually do so—and an even smaller percentage complete it. Nonetheless, professors are often led by their own interests and research focus to teach to the much smaller group. Current graduate training in economics is focused on preparing researchers who have a narrow focus and who avoid asking "big-think" questions. These graduates will determine the future of the economics profession, and their natural tendency will be to train majors in the same way in which they were themselves trained. It is likely that they will continue to design the major around, and focus their passion on, courses that prepare undergraduates for graduate school, rather than devote their time and passion to "generalist" courses.

Some undergraduate programs address the dual constituency by creating two separate tracks within the major. The mathematical or economic-science track is appropriate for those students intending to go on to graduate school in economics and for those interested in using economics to develop a quantitative foundation within the liberal arts. This group comprises approximately 20 to 40 percent of current economics majors. The general economics track is more relevant to applied policy and provides a combined humanistic and quantitative liberal arts foundation. Other programs leave the two constituencies integrated, and attempt to design a single approach to the major that caters to both groups of students. Regardless of the program format, however, the major curriculum is being populated with an increasing number of technical course offerings as younger, more technically trained economists replace older, more generally trained economists. In short, the economics major is becoming less appropriate for students interested either in business and public policy or in a combined humanistic and quantitative liberal arts foundation.

Economics faculty are teaching students to think like economists, but it is not clear that "thinking like an economist" is the appropriate educational goal for these generalist students. Instead, for them, the goal should to be to develop their ability to use broader reasoning tools in ways that are consistent with the economic way of thinking. Ideally, by the time they graduate, undergraduate economics majors should be familiar with the broad outlines of the economic method and the technical tools used by economists. They should not think that the economic way of thinking is the only right way, however. They should also be familiar

About the Report

The American Economic Association (AEA) does not take formal positions on issues. Instead, members of AEA committees prepare reports that reflect their own positions, rather than those of the AEA itself. This practice allows authors more freedom to be controversial and helps generate discussion. When the AEA received a grant from the Teagle Foundation to investigate how the economics major and economics coursework taken by students in other majors can more effectively support the goals of a liberal education, the association assigned two members of its Committee on Economic Education to do the report; those members are identified here as the authors. The report generated much discussion within the economics profession, some of which is presented in other published versions of the report (Colander and McGoldrick 2009, 2010).

Recommendations

The authors issued a series of specific recommendations for improving the economics major. These can be found in the full report, which is available online at www.teaglefoundation.org/learning/publications.aspx.

with scientific and humanistic ways of thinking, and they should understand how, when combined with these other ways of thinking, the economic way of thinking can lead to a reasoned solution to a problem.

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Conclusion

In order to enhance economic education in ways that are consistent with the liberal education perspective, the catalyst function of education needs to be supported more fully. Reports or mandates from above that tell professors to do something different from what they want to do will undermine their passion and, thus, the catalyst function of the education they provide. It is better to teach the "wrong" content passionately than to teach the "right" content perfunctorily. The content of what is taught will, and should, be determined by individual professors and schools. Ideally, of course, the "right" content will be taught passionately. But this is unlikely at present, if the goal is to prepare liberally educated students. The current structure of graduate programs and of colleges and universities themselves ensures that the content taught with passion is driven by narrow research interests rather than by general teaching priorities. Only major institutional change at both the graduate and undergraduate levels can affect that.

In the absence of such major institutional change, marginal improvements can be made by modifying incentives and institutions so that more emphasis is placed on pedagogy and teaching. While there is no one set of "best practices" in economics pedagogy that are especially suitable for a liberal education, there are better and worse practices. Such practices should be an important part of the regular discussion at any college or university.

The bottom line of this report is that if the economics major is to make the best possible contribution to the liberal education of undergraduate students, then much more discussion is needed about the content and focus of the economics major as well as how that content is taught. It is beyond the scope of this report to identify precisely what that "best contribution" may be. Positive change in any discipline does not come from the top down; it comes from the bottom up, and major change builds on the initiatives of individual schools. The goal of this report is to open up a conversation, rather than to generate a set of specific recommendations. There are many ways in which the economics major can contribute to the liberal education of students. Thus, there are many ways in which the major can be structured to promote this objective. But the best economics major will not develop from bottom-up discussion unless departments are sufficiently concerned about the major and have appropriate incentives to ensure it contributes in the best way possible. We hope this report will help generate that concern. □

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