

“Do Recent PhD Economists Feel Prepared to Teach Economics?”

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Introduction

Colleges and universities face increased scrutiny from Congress and State government. These organizations and others are concerned about the quality of education that students and more particularly undergraduate students are receiving. At the same time many state universities are facing funding cuts due to the recent economic downturn. Previous research has indicated that economics doctoral granting institutions make extensive use of graduate students to conduct recitation sections as well as teach their own stand alone classes. Funding cuts are likely to further enhance the role of teaching assistants in the classroom. It appears that formalization of pedagogical training is increasing in recent decades in economics doctoral programs, and while doctoral program directors have self evaluated their pedagogical training programs, we know of no reported research which has asked economics doctoral students about their perceptions of the teacher training they may have received during their doctoral programs. In this paper we examine if recent doctoral students in economics feel that the pedagogical training they received during their economics doctoral programs was effective in preparing them for the classroom. We also inquire about their training after they received their Ph.D. and their current attitudes and ratings (both student and self) as teachers.

We begin with a brief literature review, followed by a discussion of our data collection and survey results. The paper concludes with a summary of our key findings and some thoughts about future possible research in this area.

A Brief Review of the Literature

In the late summer of 1978 a Teacher Training Resource Manual and accompanying tapes were published in an attempt to enhance the teaching effectiveness of economics graduate students. Hansen et .al. (1980) outline the process of how this 438 page Resource Manual was developed. This paper also contains a description of the contents of the chapters in the Manual and the topics covered by the video tapes. The paper also notes that “as of 1980 upward of twenty departments are known to be engaged in some kind of formal effort to improve the preparation of their graduate students to teach , both as graduate teaching assistants and as beginning assistant professors.”(p.1)

Before the Teacher Training Resource Manual and the supplemental tapes were released, a pilot Teacher Training Program (TPP) sponsored by the Joint Council on Economic Education was offered at the University of Nebraska during the spring semester of 1974. One of the participants presents his views about the workshop (Hansen, 1976). “I felt strongly that I had benefited from the seminar.” (p.237) Some of the areas that Hansen highlights include: the need to establish course goals and communicate these to the students, telling the students what they

are expected to learn and how they are expected to demonstrate this learning, exposure to learning theory, learning that lecturing is a skill that can be developed, and test construction. Hansen notes (p.259) that “I have become more interested in teaching as a result of taking this seminar” and encourages every Ph.D. granting department to consider instituting this kind of program.

Lewis and Becker (1976) discuss the program for training graduate student instructors in economics at the University of Minnesota. This program requires graduate teaching assistants to participate in both a series of nine teaching seminars and a three part teaching performance process which involves classroom videotaping, classroom test analysis, and student evaluations. The participants may receive graduate course credit for participating in this program. Many of the elements of this program are discussed in the Teacher Training Resource Manual published in 1978.

Walstad and Becker (2003) conducted a survey of the 100 U.S. Ph.D. granting economics departments in August 2002. Their survey results note that “Among the departments that employ graduate instructors, only about a quarter require them to attend a graduate level course in undergraduate teaching. A common requirement for about half the departments was to have them attend a noncredit program in undergraduate teaching.” (p.451) In about two thirds of the cases these for credit courses are sponsored by the economics department. For the Universities that offer the noncredit program, most of these are made available by another unit on campus. However when they are offered by the economics department a much higher percentage of graduate students attend them. In either situation the results reported here seem to indicate that more programs are helping to prepare their graduate students to teach than indicated in the 1980 paper by Hansen et. al. Walstad and Becker conclude that “Even economics departments that do not use graduate students for instruction still have a responsibility to provide them with a solid preparation in teaching, because these future Ph.D. economists are likely to be teaching during their careers.” (p.454).

Berberet (2008) reports the results of a survey of faculty across all disciplines in the first five years of their careers at twenty Associated New American Colleges (ANAC) member colleges and universities. The survey was conducted in the summer of 2007. These schools are midsize private Carnegie Masters institutions in the U.S. The survey results indicate that of the faculty surveyed only 31% felt that they were very effectively prepared to teach undergraduates after graduate school. (The percentage for women was 29%, while the percentage for men was 33%). The survey also notes that 76% of these same faculty currently feel that they are working very effectively in teaching undergraduates. For this question the percentage for women was 71%, while the percentage for men was 82%. The paper notes that “In spite of the clamor for reform in graduate education in recent years, graduate schools do not appear to prepare candidates well for their future faculty responsibilities...early career faculty ‘learn on the job’ assisted through institutional performance evaluation and feedback.” (p.21)

Data Collection

To explore how recent economics doctoral recipients feel about the pedagogical training they may have received during their doctoral programs, we prepared a survey and sent it via email to the 2007 membership list of the American Economic Association (AEA) that is posted on the AEA website. We surveyed only those AEA members who received their degree from a U.S. University during or after 2000 and who also indicate in their profile that they are currently employed as faculty at a college or university in the United States or Canada. Using these criteria the original mailing list contained 666 email addresses. A link to the on-line survey was sent via email to the 666 potential participants fitting this profile on October 7, 2008. Many of these emails bounced back due to invalid addresses and automatic responses indicating that the recipient was not available at this time. Invalid addresses were investigated and attempts were made to find valid addresses for all, but we were unsuccessful in finding current addresses for 50 of the originally identified potential respondents. We identified ten respondents that did not meet our criteria so these responses were discarded. There were also 6 “out of office messages” returned from the emails. Exactly one week after the original email, we resent the request for potential respondents to complete the on-line survey. As a result of these efforts, we received usable responses from a total 124 people, a response rate of about 20% from our targeted population.

Description of Respondents

A list of the 65 different doctoral degree granting institutions of our respondents along with the number of respondents with a degree from each school is listed in Appendix A. Respondents’ year of degree received was fairly evenly distributed at with a yearly average of 21 in years 2000-2004, with only two receiving their degree in 2005, 14 in 2006, and only 3 since 2006. The average and median number of years spent teaching since leaving their doctoral granting institution is 5. Universities and Colleges currently employing our respondents are listed in Appendix B. Using Carnegie classifications, 19% of our respondents are currently employed at Associate/Bachelor’s institutions, 27% at Masters granting institutions, and 53% at Research/Doctoral institutions. The larger number currently employed at Research/Doctoral schools likely reflects the method by which we obtained our potential email address list (AEA membership) as well as the fact that these schools typically employ more faculty than Bachelor’s or Masters granting institutions.

Ninety-three percent of our respondents are in tenure track positions, but since they are generally relatively early in their careers (they received degrees since 2000), only 25% are currently tenured. They report spending an average of 45% (median of 45%) of their time teaching in their current position.

Ninety-six percent of our respondents reported having teaching or teaching assistantship responsibilities during their doctoral program. Thus it appears that use of graduate students in teaching remains widespread. The majority of our respondents taught both recitation classes as well as standalone classes during their doctoral programs, while 27% taught only standalone courses and 21% taught only recitation courses. Those teaching standalone courses taught on average 3.85 classes (median of 3) classes during their program, while recitation sections taught during their programs averaged 4.54 (median of 3).

Results

Only 14 of our respondents (less than 12%) indicated that they had taken a graduate credit course on undergraduate teaching. Of those 14, eleven took the course because it was required, and of those 11, nine indicated it was required specifically because they were assigned teaching responsibilities in their departments. These credit courses averaged two semester credit hours, but six were only one hour and six were 3-hour courses. Half were taught by economics faculty while half were taught by faculty/staff outside the department. These 14 respondents were also asked to rate “How well this graduate credit course prepared you for teaching.” Two responded “very well,” four responded “well,” five responded “adequately,” three responded “poorly,” and one indicated “very poorly.” On a five point scale with “very well” being five, the average rating of these 14 respondents to this question was 3.1.

Consistent with the earlier results of Walstad and Becker (2003), we found that a larger number of our respondents had attended a non-credit program on teaching during their undergraduate programs. Specifically, 46 (or about 38%) of our respondents attended such a program, for 24 of whom the program was required. For 19 of those 24, the non-credit program was required because they were assigned teaching responsibilities in the department. The non-credit programs attended by our respondents averaged about 11 total contact hours (a median of 8), with a minimum of one contact hour and a maximum of 80 contact hours. Teachers of these programs for our respondents were roughly evenly split between faculty members in the economics department (29%), faculty members from other departments (33%), and non-faculty members (38%).

Respondents who attended a non-credit teacher preparation program were also asked to rate “How well this graduate credit course prepared you for teaching.” Four responded “very well,” seven responded “well,” twenty-five responded “adequately,” eight responded “poorly,” and two indicated “very poorly.” No significant differences were found between the distribution of the responses to this question by males and females, native and non-native English speakers, different age groupings, and Carnegie classification of respondent’s current university or college. Again on a five point scale with “very well” being five, and similar to the average response to the same question concerning credit courses, the average rating of these 46 respondents to this question concerning non-credit preparation was 3.1.

Consistent with the earlier results of Walstad and Becker (2003), only 52% of our respondents who taught a standalone course during their doctoral programs had any formal teacher preparation training (for credit or non credit) and only 46% of those who conducted recitation sections had any such training. For those respondents who taught both standalone and recitation classes, 53% had some formal teacher training preparation. Surprisingly, the percentages were not any higher for respondents for whom English is not the first language. While twenty eight of our respondents for whom English is not the first language taught either stand alone or recitation classes during their doctoral programs, only 12 of these respondents (43%) attended either a credit or non credit teacher training course during their doctoral program.

All respondents were next asked “Overall, how well prepared for teaching were you at the completion of your doctoral program?” Again using the same 5-point scale described above, 33% responded “very well,” 32% responded “well,” 25% responded “adequately,” 9% poorly, and 2% very poorly, for an average response of 3.84. The mean response of those who had no training was 3.72, while the mean responses for those who had a graduate credit course was only slightly higher at 3.86 and those respondents who had attended a noncredit training averaged 4.00. We found no significant difference in the probability distributions of the responses of these groups to this question. Similarly, we found no significant differences in the distributions of the responses by males and females, native and non-native English speakers, age, and classification of their current institution.

We also asked respondents to self report how students rate them as a college/university teacher and as well to rate themselves using the same 5-point scale for both questions, where “very good” is a 5, “good” is a 4, adequate is a 3, “poor” is a 2, and “very poor” is a 1. Fifty-six percent of our respondents indicated that their students’ rate them as very good, 38% indicated “good,” and only 7% indicated adequate. No one indicated that their students rate them as “poor” or “very poor,” for an overall mean response of 4.49. The responses of those respondents who had completed a credit course averaged 4.79, while those who had completed a non-credit course averaged 4.61 and those who had completed neither averaged 4.37. Using Mann-Whitney we found significant difference in distributions of the responses between the “Neither” and the “Credit” groups, but not between the “Neither” and the “Non-Credit” group or the credit and the non-credit groups. The average response for those for whom English is the first language averaged 4.57 while non-native speakers averaged 4.23, again with a significant difference in distributions. No significant differences in distributions were found between the responses of males and females, different ages, and classifications of current institution. When asked to rate themselves as a teacher, the average response was just a bit lower (4.32), with no significant differences in the distributions of the responses of our subgroups.

We then asked respondents to rate their enthusiasm for teaching, with a similar scale of “very enthusiastic” being 5, “enthusiastic” a 4, indifferent a 3, unenthusiastic a 2, and very unenthusiastic a 1. About 34% of our respondents indicated that they are “very enthusiastic,” 53% indicated “enthusiastic,” 11% said they are “indifferent,” and 2% indicated that they are

“unenthusiastic” about teaching, for an average response of 4.20. The responses of those respondents who had completed a credit course averaged 4.50, while those who had completed a non-credit course averaged 4.37 and those who had completed neither averaged 4.08. We found significant differences in the distributions of the responses between both the “Neither” and the “Credit” groups and the “Neither” and the “Non-Credit” group. We also found that older faculty members were actually a bit more likely to have higher enthusiasm (39 years old and over averaged 4.42) than those under 39 (an average responses of 4.14) and not surprisingly those teaching in doctoral institutions were less enthusiastic (average of 3.93) than their colleagues in masters (4.40) or bachelor’s (4.70) institutions.

Our final structured question on the survey asked respondents to indicate the types of and rate the teaching professional development activities in which they have participated since the completion of their doctoral programs using the same five point scale where “very good” is a 5, “good” is a 4, adequate is a 3, “poor” is a 2, and “very poor” is a 1. Sixty- five percent of our respondents have attended training at their current institution with an average rating of 3.68. About 13% have attended training sponsored by the AEA with an average rating of 3.87, while about 22% of our respondents have attended some other teaching development activities with an average rating of 4.04.

The survey concluded with the open ended prompt “If you have any additional comments covering the teaching preparation you received during your doctoral program, please provide them here.” While it is not practical to share all of these comments here, many of them can be summarized into the following paraphrases: “I had no training. I learned on the job” and “Faculty mentoring and supervision was critically important to my development as a teacher” and “I believe that graduate programs must offer instruction in instruction...”

Summary

While the use of doctoral students for teaching not only recitation courses but stand alone courses remains widespread, the provision of formal instructional training to these students during their doctoral programs, either for credit or non-credit, is much less widespread. Only about half of our respondents who taught a standalone course during their doctoral programs had any teacher preparation training (for credit or non credit) and only 41% of those who conducted recitation sections had any such training. Those who did attend training during their doctoral programs generally felt that it “adequately” prepared them for teaching (as opposed to “well” or “very well”). Also as a general rule, our respondents felt that they were well prepared for teaching at the completion of their doctoral programs, but we did not find significant differences in the responses of those who had completed formal pedagogical training during their doctoral programs and those who did not. Thus it appears that their preparation is at least sometimes occurring in other ways. Those respondents who completed a credit course or non credit training during their doctoral programs appear to currently be more enthusiastic about teaching, but of course assigning causation to this relationship would be unwarranted.

We recognize that given the nature of our target population, the results of this survey may not reflect what is currently occurring in doctoral programs, but is more likely to reflect what was occurring three to eight years ago. However, these results do indicate that doctoral programs in economics still may have work to do in terms of the quantity and quality of instructional training for doctoral students.

One possible area for future research would be to identify exemplary programs and do a case study of these programs to identify best practices. This would assist universities in enhancing their training programs and might also give universities that do not have teacher training programs for their economics TAs guidance in establishing one.

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Appendix A: Respondents' Degree Granting Institutions

Institutions	Number of respondents
University of Wisconsin, Madison	8
University of California, Berkeley	
Massachusetts Institute of Technology	7
Harvard University	4
Iowa State University	3
Michigan State University	
Ohio State University	
Stanford University	
University of Chicago	
University of Kentucky	
University of Maryland	
University of Michigan	
University of Minnesota	
Brown University	2
Colorado State University	
Cornell University	
Duke University	
Georgia State University	
Kansas State University	
New York University	
North Carolina State University	
University of California, Riverside	
University of Connecticut	
University of Houston	
University of Pittsburgh	
University of Southern California	
University of Wisconsin, Milwaukee	
Washington University	
West Virginia University	
Yale University	
American University	1
Boston University	
Carnegie Mellon University	
Clemson University	
Columbia University	
Florida State University	
Indiana University, Bloomington	
Louisiana State University	
Northwestern University	
Pennsylvania State University	

Princeton University
Purdue University
Rensselaer Polytechnic Institute
Southern New Hampshire University
SUNY Binghamton
Texas Tech University
University of Arizona
University of California, San Diego
University of California, Santa Cruz
University of Florida
University of Georgia
University of Illinois, Urbana-Champaign
University of Iowa
University of Massachusetts, Amherst
University of New Mexico
University of North Carolina, Chapel Hill
University of Notre Dame
University of Oregon
University of Pennsylvania
University of Texas, Austin
University of Utah
University of Virginia
University of Washington
Vanderbilt University
Wayne State University

Appendix B: Current Employers of Respondents

Institutions	Number of respondents
Yale University	3
Georgia State University	2
Louisiana State University	
Naval Postgraduate School	
New York University	
University of Chicago	
University of Houston	
University of Minnesota, Duluth	
Washburn University	
Albion College	1
American University	
Bentley University	
Berry College, Rome, Georgia	
Bowdoin College	
Brigham Young University	
Brigham Young University (On leave at Princeton)	
Case Western Reserve University	
Central College	
Central Connecticut State University	
City University of New York, Baruch College	
City University of New York, Hunter College	
City University of New York, Queens College	
Clark University	
Clarkson University	
Coastal Carolina University	
Colgate University	
Columbia University	
Davidson College	
Drexel University	
Duke University	
Eastern Connecticut State University	
Fitchburg State College	
Florida State University	
Fordham University	
Framingham State College	
Georgetown University	
Harvard University	
Hope College (MI)	
Illinois State University	
Indiana University, Northwest	
Indiana University, South Bend	
Indiana University, Southeast	

Kansas State University
Kenyon College
Knox College
Lafayette College
Lakeland College
Louisiana State University
Louisiana State University, Shreveport
Louisiana Tech University
Maryville College
Mercer University
Millsaps College
Missouri State University
Missouri University of Science and Technology, Rolla
Montana State University
Mount St Mary's University
National Defense University
New Mexico Highlands University
Northern Virginia Community College
Northwestern University
Occidental College
Oklahoma State University
Princeton University
Ramapo College of New Jersey
RAND Graduate School of Public Policy
Salisbury University
Shippensburg University
Siena College
Smith College
Southern Methodist University
Southern New Hampshire University
Susquehanna University
Union College
University of Alabama, Birmingham
University of Arkansas
University of California, Davis
University of California, Irvine
University of California, Riverside
University of California, Santa Cruz
University of Colorado, Boulder
University of Connecticut
University of Denver
University of Georgia
University of Hawaii, Manoa
University of Illinois, Urbana-Champaign
University of Kentucky
University of Massachusetts
University of Massachusetts, Dartmouth
University of Michigan, Ross School of Business

University of Missouri
University of Pennsylvania, Wharton School
University of Phoenix San Antonio Campus
University of Pittsburgh
University of Tampa
University of Texas
University of Texas, Dallas
University of Texas, El Paso
University of Toledo
University of Toronto
University of Virginia
University of Washington
University of Western Ontario
University of Wisconsin, LaCrosse
University of Wisconsin, School of Medicine and Public Health
Washington and Lee University
Wesleyan University
Western Michigan University
Westminster College
Wichita State University
