

The World's Largest Open Access Agricultural & Applied Economics Digital Library

# This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<a href="http://ageconsearch.umn.edu">http://ageconsearch.umn.edu</a>
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

#### PROCEEDINGS OF A SYMPOSIUM

ON

### THE FUTURE ROLE OF AGRICULTURAL ECONOMISTS

and the

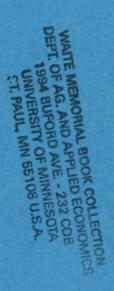
#### AAEA IN ECONOMIC EDUCATION



Sponsored by the

Committee on Economic Education

American Agricultural Economics Association



AAEA Organized Symposium Held August 10, 1992

Baltimore, Maryland

December 1992

### DO AG ECONOMISTS HAVE ANY COMPARATIVE ADVANTAGE IN ECONOMICS EDUCATION<sup>1</sup>?

## E. Bruce Godfrey, Associate Professor Department of Economics Utah State University

No summary has been made of the primary activities (e.g., teaching, private business or research) emphasized by the membership of the American Agricultural Economics Association (AAEA). But, a sample of the membership as reflected in the 1991 membership directory suggests that a large percentage (>50%) are involved in research and/or teaching at some university or college. A small portion of the members of AAEA are involved in economics education outside the classroom---this work is primarily associated with adults as part of the cooperative extension service. Thus, a large portion of the membership is involved with economics education to some degree. However, economics education of the general population has never been a major function of AAEA<sup>2</sup>. This differs significantly from the American Economics Association (AEA) where economics education was one of the primary, if not the primary, reason for the formation of AEA. This is reflected in two statements made by Richard D. Ely who was one of the founders of AEA more than 100 years ago (in 1885).

"The ideal of this new society, as it presented itself to the minds of its projectors, was to seek light, to bear light, to diffuse light---ever the highest aim of all true science." (cited in: Hinshaw and Siegfried)

<sup>&</sup>lt;sup>1</sup>The author gratefully recognizes the input of several colleges on the staff at Utah State University who reviewed earlier drafts.

<sup>&</sup>lt;sup>2</sup>The American Farm Economics Association was formed in 1919 and it was not until 1925 that any articles appeared in the Journal concerning teaching and education. In addition, the number of teaching/education articles that have appeared in the Journal (JFE or AJAE) have been very limited in comparison to the articles that have emphasized research findings.

"The aim of our association should be the education of the public opinion in regard to economic questions and economic literature. In no other science is there so much quackery and it must be our province to expose it and bring it to merited contempt.

....We are resolved to form an American Economic Association to do something towards the development of a system of social ethics." (cited in: Leamer)

This commitment to economics education was also reflected in the paper written by Leamer which summarized the history of economics education in the AEA.

"...serious thought must be given to a program which might make it [economics education] a more effective and enduring instrument in behalf of economics in general than have been the writings and discussions of the past. Failing to do so, the economist (scholar and teacher alike) will have failed in his reason for being. For the ultimate function of economics and economists is to help people learn how to live in a free society---and how to maintain and perhaps improve it."

As a result of this strong commitment to economics education the AEA has, with very few exceptions, had a special session on this topic at each annual meeting<sup>3</sup>. This activity has not however, been widespread amongst the membership. Furthermore, this activity is apparently not as popular today as it was in the past.

"Although the association [AEA] has had a long term commitment to economic education, it is clear that today this interest is located to a greater extent among "specialists" in economic education. Has the pressure to publish, the fragmentation of research interests, and the ever increasing specialization within the profession contributed to the apparent decline in the association's desire to "diffuse light"? Through the associations early history and until as recently as World War II, the teaching of economics was regularly a central topic for discussion and debate *among the leaders* of the association. That is rarely the case today." (Hinshaw and Siegfried, page 379)

<sup>&</sup>lt;sup>3</sup>This is the first year, as far as I have been able to determine, that the general topic of economics education has been part of the meetings of AAEA. Teaching symposia and special sessions on teaching have periodically been held but these sessions have focused on teaching in the classroom and not on economic education in general.

Given the above, one can begin to question why this activity has declined, what role might Ag Economists have in the area of economics education and what influence this decline in activity has had on the demand for economists<sup>4</sup>? While answers to all of these questions is beyond the scope of this paper, some insight on the possible role of Ag economists is suggested below.

## The comparative advantage of Ag Economists in existing Educational Activities

Before one can determine what role Ag Economists might have in the area of economics education, one needs to determine what activities are happening today.<sup>5</sup> Almost all of the economic education that is being done is "second hand"--i.e., by non economists who work with pre-college students.

#### Economics classes in high schools

A fairly large portion of the high schools nationally offer classes in economics. While there is considerable variation in the course offerings, most of these classes emphasize two general areas--- consumer economics and the free enterprise system. These two areas could be taught be Ag Economists but it is not clear that members of AAEA have a comparative advantage in either of the areas being emphasized in high schools in America today. In addition, most people who teach economics classes at the high school level rarely have training beyond

<sup>&</sup>lt;sup>4</sup>While many factors have an influence on the demand for the services of a particular discipline, one has to conclude given the market signals of today that the demand for economists has declined (it is a "buyers" market and funds available for economics research has declined).

<sup>&</sup>lt;sup>5</sup>This list is not intended to be exhaustive but only indicative of the most common activities. This list is also restricted to those activities that are primarily associated with those members of society who are too young to attend college (K-12).

principles of economics or perhaps intermediate micro and/or macro (Walstad and Soper). As a result, most of this training is not oriented toward the areas emphasized by most Ag Economists (Ag, Regional, Development and Natural Resources).

#### Integration of Economics in other curricula

While the teaching of economics is the most common method viewed by economists to increase the level of understanding of economic principles, integration of economic principles in other curricula offers even greater opportunities. These could be incorporated in numerous curricula but it is unlikely because most teachers have limited (or no) training in economics and there has been little (no) reward for economists to prepare materials for teachers that incorporate economic analysis in existing curricula and classes.

The above may change however, if the recommendations contained in a recent report from the National Research Council are implemented. This need is illustrated in the following statements from the National Research Council report:

"Most Americans know very little about agriculture, its social and economic significance in the United States, and particularly, its links to human health and environmental quality." (page 9)

"All students should receive at least some systematic instruction about agriculture beginning in kindergarten or first grade and continuing through twelfth grade." (page 10)

"Teacher education programs in agriculture should continue to stress applied learning, but should strengthen instruction in science, technology, economics, agribusiness marketing and management, international agriculture and public policy." (page 47)

It takes little imagination to recognize that Ag economists have a comparative advantage in providing training for teachers and materials for instruction in some of these areas. This has

become known as "Ag in the classroom" and represents an area where Ag economists have a distinct comparative advantage. Most of the work that has been done in this area in most states has been done by individuals whose formal education is in Ag Education. Many of these individuals have limited training in economics. This is an area where Ag Economists could contribute and have a comparative advantage.

#### Youth programs

4-H programs have long had a close association with colleges of agriculture. As a result, on would expect ag economists to have input into these programs. However, a review of the programs that are available nationally suggest that very little is being offered in the general area of economics. Most of the available programs that include an economics component emphasize entrepreneurship and sales which generally do not emphasize the application of economic principles.

One of the required merit badges that must be "passed" by any boy scout who obtains the rank of eagle is personal management. This merit badge emphasizes consumer economics and provides training in the areas of planning, budgeting and record keeping. Instruction in these skills are, however, not unique to ag economists<sup>6</sup>.

#### Vocational Agriculture

While the number of students who take classes in vocational agriculture is limited, this is an area where ag economists not only have a comparative, but perhaps an absolute, advantage.

<sup>&</sup>lt;sup>6</sup>Ag economists do have a comparative advantage with respect to some merit badges (e.g., farm and ranch management) but these are earned be a very small portion of those enrolled in scouting and therefore offer very limited opportunities for economics education.

But, it is an area where more could be done. For example, the Ag Sales and Farm Business Management contests are heavily oriented towards economics. Unfortunately, most individuals who teach vocational agriculture have limited training in economics and commonly view economics as being difficult, "too theory oriented" and not applicable to every day problems. These opinions are often formed from classes taken from ag economists that were taught primarily for majors<sup>7</sup>. Vocational agriculture represents an area where ag economists have a greater comparative advantage in affecting economic literacy but, this advantage may not be captured<sup>8</sup>.

Readers should recognize that all of the above areas represent areas of curricula where economics have little <u>direct</u> interaction with students. As a result, it is imperative that strong working relationships be developed with educators in other disciplines (e.g., Ag Education, Biology, Social Studies) to improve their level of economic literacy because this is the only way economists will be able to effectively reach large numbers of students in these areas.

## The comparative advantage of Ag Economists by area of expertise

Ag economists typically receive training in both micro and to a more limited degree in macro economics. As a result, they do not generally have either an absolute or comparative

<sup>&</sup>lt;sup>7</sup>One can teach a class as if it was the "last" class a student would have in economics rather than one of a series. This perspective alone has a profound effect on what topics are covered and how they are presented.

<sup>&</sup>lt;sup>8</sup>Numerous reasons which are beyond the scope of this paper could be given. The most important reasons however, are likely associated with competition for students and FTE's, the lack of rewards for cooperative teaching efforts and use of quantitative approaches (primarily math) by economists when many ag education majors chose this option because it does not emphasize the use of quantitative skills.

disadvantage to most economists in most of the subdisciplines of economics. They are at a comparative disadvantage in some areas (e.g., history of economic thought, economic history) but they may also have a comparative (not absolute) advantage in some areas.

As the name of the association implies, ag economists are supposedly trained to have a comparative advantage in the economic aspects of agriculture. However, one could question this to some degree. For example, some students could graduate in Ag Econ or Agribusiness at some schools with little (if any) background or training in agriculture per se. However, those who work on problems associated with agriculture (production as well as marketing) soon gain knowledge of the important relationships. This expertise also becomes evident in other areas (e.g., natural resources, regional/rural economic problems<sup>10</sup>). This suggests that ag economists may have a comparative advantage in economics education in those applied areas where they are actively engaged and not as a result of their academic training in economics. This application orientation has been one of the strengths of Ag Econ for some time and has also lead some members of the profession to be active in policy analysis and formulation<sup>11</sup>. This represents one of the applied areas of economics where Ag economists may not only have a comparative

<sup>&</sup>lt;sup>9</sup>A review of most principles of economics texts indicates that most have a chapter on the economics of agriculture. However, the coverage of these issues is generally little more than the concepts needed to show the impact of subsidies associated with price support programs. This suggests that some education of general economists concerning the broader issues (e.g., who gains and who bears the cost from technological advances) associated with agriculture may be needed.

<sup>&</sup>lt;sup>10</sup>See the areas of comparative advantage outlined by James Houck in his 1992 presidential address to AAEA.

<sup>&</sup>lt;sup>11</sup>The Association's decision to publish "Choices" represents one decision that illustrates the "felt belief" that members of the profession have expertise in policy analysis---particularly in the area of agriculture. However, this venture has not, to date, met a market test and it is likely that it is primarily being used by adults.

advantage but they may also assist many general economists who are not involved in policy analysis on a regular basis.

If the areas outlined in the Hansen report (see the article by Fels and Table 1 below) are valid today, ag economists have a very limited role in economics education at the pre-college level because most of the "important" areas of economic literacy are not in areas where ag economists have a comparative advantage. Furthermore, their role will likely be limited to providing materials for other teachers to use as part of a broader curriculum (e.g., Ag in the Classroom, Vocational Agriculture, Environmental Economics). This however, presents a challenge that will likely not be met under the current reward system that is faced by most ag economists for several reasons. First, those who are employed in academia currently receive few (if any) rewards for the preparation of writings that are not published in a refereed journal<sup>12</sup>. Secondly, a very limited set of economists will be paid by private firms to prepare materials (e.g., Chicago Board of Trade) and these materials will likely have a limited focus (e.g., use of futures markets). Third, most extension programs still focus on production oriented or rural development problems. In addition, materials prepared for extension audiences are primarily designed for use by specialists in working with adults. Thus, one has to conclude that the reward systems<sup>13</sup> of today will likely result in very limited activity by ag economists in the area of economics education for pre-college students even if they have a comparative advantage.

<sup>&</sup>lt;sup>12</sup>The likelihood of educational materials for non economists being published in any of the econ journals is remote at best.

<sup>&</sup>lt;sup>13</sup>Several reasons may be given for why the system does not reward teaching. One of the most important stems from the fact that measures of output are lacking (Godfrey). As a result, it is impossible to measure the effectiveness of an input (e.g., economic materials developed for teachers) when the output (changes in economic literacy) is not measured.

While ag economists may not have a comparative advantage in the area of economics education for pre-college students, they may have a comparative advantage for adults. This advantage is probably due to the experience gained in conducting extension programs and not in subject matter. This suggests that while the "payoff" for economics education may be higher in the long run if conducted for pre-college students, ag economists may have a comparative advantage for adults. Furthermore, it is likely that improvements in education may have a higher return for adults in the short run because they are the individuals who have the resources needed to affect decisions today. This suggests that Ag economists have a role in the economics education of adults that will allow them to use their expertise but it is also likely that the "payoffs" are fairly high, especially if a relatively high discount rate is used to evaluate the benefits of these types of activities.

Table 1. Concepts or clusters taught in high school economics classes.

#### Concept of cluster taught

- 1. Scarcity
- 2. Opportunity costs and tradeoffs
- 3. Productivity
- 4. Economic Systems
- 5. Economic institutions and incentives
- 6. Exchange/Money/Interdependency
- 7. Markets and Prices
- 8. Supply and Demand
- 9. Competition and Structure
- 10. Income Distribution
- 11. Market failures
- 12. Role of Governments
- 13. Gross National Product
- 14. Aggregate Supply
- 15. Aggregate Demand
- 16. Unemployment
- 17. Inflation/Deflation
- 18. Monetary Policy
- 19. Comparative Advantage/Trade
- 20. Balance of Payments/Exchange Rates
- 21. Economic Growth

From: Walstad and Soper

#### References

- Becker, William, William Greene and Sherwin Rosen. 1990. Research on high school economic education. *J. of Economic Education* 21(3):231-245.
- Fels, Rendigs. 1977. What economics is most important to teach: the Hansen committee report. Am. Economic Review 67(2):101-104.
- Hansen. W. Lee. 1986. What knowledge is most worth knowing---for economics majors. *Am. Economic Review* 76(2):149-152.
- Godfrey, E. Bruce. 1987. A management approach to teaching and curricula. In: *Proceedings of the American Agricultural Economics Association Teaching Workshop*. (Edited by: Josef M. Broder). American Agricultural Economics Association, Ames, Iowa.

- Hinshaw, C. Elton and John J. Siegfried. 1991. The role of the American Economics Association in economic education: a brief history. *J. of Economic Education* 22(4):373-379.
- Leamer, Laurence E. 1950. A brief history of economics in general education. In: teaching of undergraduate economics, ed. H. Taylor, supplement to *Am. Economic Review* 40(December):18-33.
- National Research Council. 1988. *Understanding Agriculture: New Directions for Education*. Committee report on Agricultural Education in Secondary Schools, Board of Agriculture, National Research Council. National Academy Press, Washington, D.C.
- Walstad, William B. and John C. Soper. 1988. A report card on the economic literacy of U.S. high school students. *Am. Economic Review* 78(2):251-256.