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Abstract: Instructors hope their students retain an understanding of course material beyond the end of the term; in agricultural economics courses, improved retention may take the form of increased economic literacy. This paper offers practical ideas for improving the economic literacy of students in agricultural economics courses. Specific suggestions for implementation of these ideas is also provided.
Promoting Economic Literacy: Ideas for Your Classroom

Teachers hope that students leave their classes at the end of the term with the ability to retain the material presented in the course. Agricultural economists are no exception. In many agricultural economics courses, this improved retention may take the form of increased economic literacy which has drawn attention recently as the focus of a National Council on Economic Education Campaign for Economic Literacy. The purpose of this paper is to motivate the goal of improved economic literacy, and to offer several practical ideas for improving the economic literacy of students in agricultural economics courses.

Why Promote Economic Literacy?

Economic literacy is a term used to describe the ability of individuals to recognize and use economic concepts and the economic way of thinking in order to improve their well-being. For example, knowing that in times of inflation money does not hold its value is important because it can help individuals become better consumers, investors, savers, and members of the workforce. As economists are well aware, the economy affects every component of our lives; improved economic literacy will facilitate the understanding of those interactions.

The National Council on Economic Education, a nonprofit organization working to improve the understanding of economic concepts in K-12 education, has begun a Campaign for Economic Literacy on the national level. The motivation for the campaign is based in part on the results of the most recent Standards in Economics Survey implemented earlier this year, which found that almost half of adult respondents (49%) received a failing grade when asked questions
testing their economic literacy (NCEE). College educated adults didn’t fare much better: only 60% of those received a score of C or better. Not surprisingly, the majority of high school students and adults surveyed were best able to identify those economic principles that have the greatest impact on their daily lives (NCEE; see www.nationalcouncil.org for complete results and to take the survey).

**Economic Literacy As a Tool to Increase Student Retention**

There are two possible explanation for the dismal survey responses reported above: either individuals haven’t had exposure to economics or they have been introduced to economics but haven’t been able to retain the material. It is likely that the lack of exposure plays a significant role, since only 13 states require economics education in schools (NCEE). However, it is the second possible explanation that has implications for our classrooms.

What allows a student the ability to retain the material they have learned? Some might suggest that a good course with content particularly interesting to students may have students retain more material for a longer period of time--you’ll likely remember the content in Natural Resource Economics if you plan to pursue a vocation in forestry, for example. Similarly, experiments suggest that requiring students to actively use the material they’re learning may lead to improved retention (McKeachie, p.282). Supplementing presentation of agricultural economics content with regular opportunities to forge their own links *with* the content will prove beneficial for many students, and may contribute to the retention of the material in the longer run.

As instructors, many of us are pursuing the goal of increased student retention of course material but aren’t sure how to best achieve that goal given our scarce time resources. Improved
content retention in many agricultural economics classes may take the form of increased economic literacy, which is the ability to recognize and use fundamental economic concepts and tools of analysis in out-of-classroom experiences. A student’s economic literacy improvement as a result of taking agricultural economics courses would be demonstrated by her ability to understand the economic implications of a change in farm policy, for example, or by his ability to understand the pros and cons of a “command and control” type of environmental regulation versus a permitting scheme when one is proposed 10 years following a course in environmental economics.

The basic idea follows the premise that Meyers and Jones (p.20) use to motivate a pedagogy for active learning: “the process of education is about self-development...learning is truly meaningful only when learners have taken knowledge and made it their own.” By familiarizing students with the process of applying knowledge to everyday situations, then requiring them to practice the skill, instructors can help to improve the economic literacy of their students.

**Ideas for Your Classroom**

“There is only one way to acquire [academic] skills and abilities, and that is to practice them” (Bouton and Garth, p.79). Though there are many pedagogical techniques and learning activities that can be used to promote economic literacy, some may require a change in teaching style. Considering the constraints on academics’ time, each of the ideas presented in this paper is designed to be easily integrated into existing pedagogies as supplemental activities. These include the use of cartoon analysis in the classroom, directed writing assignments such as journaling and short analysis papers, and case study analysis.
The use of cartoons to link classroom material to nontraditional applications is not new; Principles of Economics textbooks present them alongside traditional presentation of material (Stockman, Mankiw), and McGoldrick and Battle have used them in the classroom to increase economic literacy. McGoldrick and Battle’s basic idea has been slightly modified and successfully implemented in three of courses at UNC Asheville--Principles of Microeconomics, Principles of Macroeconomics, and Land Economics--but the concept is transferable to most agricultural economics courses. Specifically, a cartoon is used to introduce a new topic to students and to generate initial discussion about the ideas and concepts surrounding the economic concept involved. For example, “Mick Jagger: The Early Years” (Deering, 1998) is used at the beginning of Principles classes to introduce the concept of scarcity (see attached). A cartoon depicting “Navigator Greenspan” (MacNelly, 1998) can be used in Principles of Macroeconomics to introduce monetary policy and to foreshadow the discussion of the important role of the Fed Chair in economic stability. “Brave New World” (Horsey) can be used to discuss externalities, and “Save the Environment” (Dunagin) can be used to introduce the Tragedy of the Commons in Environmental or Natural Resource Economics. Instructors in Agricultural Policy courses can use Duffy’s cartoon depicting a member of Congress with arms outstretched to a farmer inside a burning barn in an election year to discuss the role of political cycles in policy outcomes.

At the outset, the instructor may provide the cartoons and prompt discussion; as the course goes on, students can be required (or given an extra credit option) to facilitate this component of the class, which can include responses to a series of questions on the economic issue addressed in the cartoon, its importance, what the cartoonist trying to say about the issue,
etc. In addition, a lengthy series of (20+) cartoons can be used to review a semester’s worth of macroeconomic concepts and ideas in a surprisingly entertaining format.

**Directed Writing Assignments**

Journaling and short analysis papers may also be used to improve economic literacy of students in agricultural economics courses. Though many of us already use writing as an important component of our classes, not all writing assignments are designed with specific objectives in mind. For example, an assignment that entails writing “on a topic related to Land Economics” is different than writing a paper “linking the work of von Thunen and modern city planners in a specific setting.” In many cases, the second assignment will lead students to research and write a much more directed paper; in the process, they will be forced to swallow the economic idea and reinterpret it in a different context. It is this process of reflection and integration that is useful to promote economic literacy, and to improve retention of material. In other courses, students in Principles of Microeconomics can write short (five page maximum) analysis papers on the Archer Daniels Midland price fixing case or the US sugar program and its links to the course content and discussions.

Journals can serve a similar function. Meyers and Jones note that journals can be used to encourage more reflection on classroom ideas (p.31); Fulwiler provides a thorough analysis of using journals in this manner (chapter two) and McKeachie provides an example of how to structure such assignments for students (pp.121-123). For example, students may be assigned to free-write on the association between class content and current events and/or outside reading of the *Wall Street Journal*, the *Economist*, or *Choices*. An instructor-provided question or idea for
students to ponder as they write may facilitate the journaling exercise; assigning students two weekly entries into a notebook collected once a month by the instructor can minimize the transaction costs associated with the assignment while providing the instructor with adequate feedback on how students are faring with the assignment.

Journals, analysis papers, and other structured writing assignments will provide students with the opportunities to “make their own sense out of things” (Meyers and Jones, p.14) and help students to develop what Whitehead referred to as “the art of using knowledge” (p.1). Perhaps more importantly, McKeachie (p.280) suggests that the process of structuring the material for themselves (rather than by the teacher) may improve their retention and ability to use the knowledge.

Case Study Analysis

Case studies are used extensively in management education, and are increasingly being used in agricultural economics classrooms. Most case studies are written to reflect an actual event with the purpose of providing classroom fodder for an examination, discussion, and analysis of how things work in the real world. Christensen and Hansen provides an introduction to teaching with the case method; in practice, classroom use of the case method requires thorough preparation on the part of both the instructor and students in order to ensure their maximum benefit. Typically, reading of the case is assigned ahead of time along with discussion questions written to guide students to describe, reflect on, and provide solutions to the dilemma or scenario described in the case. Many cases are written as decision cases where a specific problem is presented; the class collectively discusses the appropriate outcome and its associated costs and
benefits.

Case studies provide students with a very specific application for their reflection and analysis; as a result, they are forced to link classroom concepts with real situations. For example, the presentation of a case discussing zoning as a land control option in a Western North Carolina county is invariably more interesting and more thought provoking than the textbook treatment of how zoning can be used for planning purposes. Students can draw on their personal experience and the information provided in the case in order to delineate the winners and losers associated with zoning; in particular, the class may decide if zoning is an appropriate option for Western North Carolina, or if other options should be pursued. Case studies in agricultural economics are becoming increasingly available as outlets such as the *Review of Agricultural Economics* regularly publish them. Those published recently have included the issue of open space preservation (McLeod *et al*), farmer financial decisions (Carter *et al*), and consumer benefits from community supported agriculture (Cooley and Lass), among others.

**Discussion**

A useful way to facilitate the design of cartoon assignments or directed writing assignments or the selection of case studies for classroom use is to think about what you want students to get out of your classes. What do you want students to remember as the “take home message”? What do you want them to be able to *do* when they leave your class? Answering these question will go a long way to assist instructors with designing appropriate assignments and activities that provide students with the tools to perform these activities, promote economic literacy, and improve student retention of material.
There are opportunity costs involved with the use of cartoons, directed writing assignments, and case study analysis. With cartoon and case study analysis in particular, class time must be devoted for their implementation which implies less time for other coverage. However, instructors may find that the time is well spent on these activities since students’ understanding of the material can be improved, or that class time is more enjoyable as a result. Similarly, there are time costs associated with the design of each of these activities. Cartoon analysis requires the least preparation time, while case study analysis seems to require the most. Journal and directed writing assignments fall somewhere between the two as far as preparation is concerned, though they may take more time to evaluate and grade. McKeachie indicates that he doesn’t grade journals; he also provides specific suggestions for what goes into the journal that may help to reduce the costs of using journals (p.121-122). The use of specific criteria guides can facilitate the grading of student papers; see LaPree for more discussion on this topic as well as suggested criteria.

Cartoon analysis, directed writing assignments, and case studies are ideas that instructors can easily integrate into existing course preparations, and may be simple extensions of existing course preparations. These ideas are designed to be suggestive and are not exhaustive by any means. Other ideas that may also serve to improve economic literacy include using game shows to explain game theory concepts (Trandel) and using the music industry to teach economic principles (Stamm).
Conclusions

Economic literacy is an important tool for individuals, though many adults lack the level of economic literacy that can help them to become better consumers, savers, investors, and members of the workforce. One way to promote the goal of improved economic literacy while simultaneously improving student retention of material is to structure class activities and assignments so that students use course content in contexts that are familiar to them. The analysis of cartoons, structured writing assignments, and case study analysis can be designed with these mutual goals in mind, while simultaneously promoting a more dynamic classroom environment.
Bibliography


