The Case for Teaching to Literacy

- Americans know little about economics.
- The Principles Course is a missed opportunity to enhance economic literacy.
- Teach to the Voluntary National Content Standards in Economics.
- Jettison some traditional content …to make room for exercises where students practice working with concepts.

Americans Know Little About Economics

NCEE Test of Knowledge of Basic Economics
Conducted by Louis Harris and Associates
Parade Magazine, April 18, 1999
Americans Know Little About Economics

• Only one-third of those tested knew that money does not hold its value in times of inflation.
• Only one-third of adults understood that people who borrow money at fixed rates of interest will likely be helped by inflation.

The Principles Course is A Missed Opportunity to Enhance Economic Literacy.

The Profession sets Two Goals for the Principles Course

• The Literacy Goal is that students should gain a usable level of economic understanding.
• The Foundation goal is that students should secure a viable foundation on which to base further study in economics.

McConnell (Walstad and Saunders, 1998)

Over-Pursuit of the Foundation Goal Has Led To

• Fuller Principles Course Syllabi
• Larger Texts
• More Technical Texts and Courses
• Few Applications to Real World Settings
• Preponderance of Lecture
**Enrollment Data Support A Literacy Focus**

- Undergraduates: 10,000
- Principles Students: 4,000
- Economics Majors: 200
- Ph. D. Enrollments: 7
- Ph. D. Economists: 3

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**Teach to the Voluntary National Content Standards**

**How Do the Standards Define Literacy?**

**National Content Standards**

- Productive resources are limited. Therefore, people cannot have all the goods and services they want. As a result, they must choose some things and give up others.

- Effective decision making requires comparing the additional cost of alternatives with additional benefits. Most choices involve doing a little more or a little less of something; few are “all or nothing” decisions.

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**National Content Standards**

- Interest rates, adjusted for inflation, rise and fall to balance the amount saved with the amount borrowed, which affects the allocation of scarce resources between present and future uses.
Substitute Exercises for Some Traditional Material

• The binding constraint on learning is the students' ability to learn material, not the instructor's ability to cover it.

• What matters is how well students can apply their learning now and long after their schooling.

Teaching to Literacy
Opportunity Cost

• What are the Learning Objectives?
• What are the Learning Strategies?

Learning Objectives
Students Should…

• Know that “choosing is refusing”.
• Know the difference between opportunity cost and trade offs.
• Know the definition of scarcity.
• Know the definitions of marginal cost and marginal benefits.

Learning Objectives
Students Should…

• Explain why scarcity of resources implies that all choices entail opportunity costs.
• Apply opportunity cost to a personal budget decision.
• Apply marginal cost and marginal benefit to a personal budget decision.
• Apply opportunity cost, marginal cost, and marginal benefit to an analysis of the use of public resources.
Teaching Strategy
Snack Ranking Exercise

- A student ranks a selection of candy bars, cookie packs, and chips and chooses a snack as a reward.
- The class identifies tradeoffs and opportunity cost.
- Students write a sentence explaining the difference between tradeoff and opportunity cost.

Teaching Strategy
Cookie Buy-back Exercise

- A hungry student chooses one pack of cookies.
- The student must eat the cookies in 10 minutes.
- The instructor offers to buy back a cookies and negotiates a price.
- The instructor buys back a second, third, …
- Students explain why the price of cookies rose.

Teaching Strategy
Personal Budget Decision

- You are a sophomore with classes each day from 9:00 to noon.
- You can go to a party on Thursday night.
- What is the opportunity cost of attending the party?
- If you decide to go to the party, how should you use marginal analysis to decide how long to stay?

Teaching Strategy
Case Analysis

The City of Milwaukee owns an old pier next to a lake front park. A local politician has proposed converting the pier into a landscaped walk-way that would permit a view of Lake Michigan. The politician proposes paying for the project by raising the hotel occupancy tax by one-quarter of one percent. (S)he argues that the project will be free because it is paid for by visitors.
Teaching Strategy
Case Analysis

• Use the concept of opportunity cost in a written reply to the politician.

• Suppose that the City Council decides to build the walk-way. How should marginal analysis be used to decide how much money to spend on it?

Teaching Strategy
Discuss “How Much for a Life?”
NY Times, 1/29/95

• How, according to Peter Passell, should government safety regulators use the concept of opportunity cost?

• Why, according to Passell, do risk experts believe that some safety laws are “not worth it”?

• How would Passell answer a skeptic who says “A life is priceless”?

Teaching to Literacy
The Real Rate of Interest

• What are the Learning Objectives?

• What are the Learning Strategies?

Learning Objectives
Students Should…

• Know that the real rate of interest is the “price of patience”.

• Know that the real rate is the nominal rate minus the expected rate of inflation.
Learning Objectives
Students Should…

• Explain why the real rate is a better measure of the price of patience than the nominal rate.
• Compute an estimate of the real rate using data on nominal interest rates and inflation rates.
• Explain the incentives for investment and saving caused by an increase in the real rate.
• Explain how the real rate should be used in evaluating the claim that “…there is no evidence that increases in federal fiscal deficits raise interest rates.”

Teaching Strategy

Participate in an experiment such as “The Effects of Real vs. Nominal Interest Rates on Investment”


Teaching Strategy Experiment

• Every student has an opportunity to undertake a productive investment project.
• Only students with the lowest-valued projects have sufficient funds.
• Students with the higher-valued projects can borrow from students with lower valued projects.
• The interest rates that students negotiate generate the aggregate interest rate data that they analyze.

Teaching Strategy Experiment

The key to the data analysis is to see the connection between rising real interest rates and falling aggregate investment. Because students negotiate their loans in nominal terms, they must disentangle the effects of changes in the nominal and real rate.
Teaching Strategy
Discuss News Articles

“The Price of Profligacy,” Economist (1/23/2003) suggests that “...the evidence that deficits affect interest rates becomes clearer once a measure of expected future deficits is included.”

“No Budget Deficits Raise Long-Term Interest Rates?” Cato Institute (February, 2002) argues that there is no clear connection between government deficits and long-term interest rates.

Teaching Strategy
Data Analysis

Students gather data on nominal interest rates, inflation rates, and deficits from Fred, the data client at the Federal Reserve Bank of St. Louis.

Teaching Strategy
Data Analysis

• Use data to compute ex post real rates.
• Find a period when the nominal rate was high but the real rate was low.
• Find a period when the nominal rate was low but the real rate was high.
• Write a paragraph explaining how incentives differed in the two periods.

Real Rate Strategy
Data Analysis

Write a one page paper that answers the question “Do data on real interest rates and deficits for the United States support the hypothesis that higher deficits imply higher real interest rates?”
Teaching Economic Literacy

1. The Case for Teaching to Literacy in the Principles Course.
2. How Might the Principles Course Help Students Attain Working Mastery of:
   a. Opportunity Cost
   b. Real Rate of Interest

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