



“Economic Literacy for High Schoolers”

Donald H. Dutkowsky
(dondutk@maxwell.syr.edu)
Professor of Economics
Syracuse University

Jerry M. Evensky
(jevensky@maxwell.syr.edu)
Professor of Economics and
Laura and Douglas Meredith Professor of Teaching Excellence
Syracuse University

Gerald S. Edmonds
(gedmonds@syr.edu)
Director, Syracuse University Project Advance

The Importance of Economic Literacy

- Gary Stern (President: Federal Reserve Bank of Minneapolis), “I am convinced that ... the invisible hand works better when participants in the economy and its myriad of markets – when consumers, business people, elected officials, investors, policymakers, and so on – when they are economically and financially literate. Going one step further, the economy performs better when its participants are well-informed because well-informed participants make decisions that enhance resource allocation, and thus contribute to rising efficiency, productivity, and living standards.”

The Importance of Economic Literacy

- Robert Duvall (President and Chief Executive Officer, National Council of Economic Education), “Educating young people in economics and personal finance is vital to our nation’s future. Indeed, it is a key to building a nation of knowledgeable investors and savers, informed consumers, productive members of the workforce, responsible citizens, and effective participants in the global economy.”



New York State High Schools and Economic Literacy

- **New York State** – requires a course in Economics as a high school graduation requirement.
- One of only 17 states with this requirement (Council of Economic Education, *Survey of the States*).
- Although some students take an Advanced Economics course, most fulfill requirement through the Regents Economics course.

The Economics Course Requirement: Benefits to Students

- High school students taking an Economics course come out with greater economic literacy than students who receive Economics only from inclusion in other Social Studies courses.
- Evidence on this assertion comes from national norms based upon the Test of Economic Literacy.

The Test of Economic Literacy (TEL)

- Authors: William Walstad and Ken Rebeck.
- Published under National Council of Economic Education (third edition).
- Widely accepted nationally normed test of economic literacy for high school students.
- Norming results published for average percentage correct for four groups.

AP/Honors Economics
AP/Honors Social Studies
Basic (Regents)Economics
Basic (Regents) Social Studies



The Spillover Model:

Results from Research

Rationales for Spillover Effects

- Increased knowledge from training for teaching the Advanced Economics course filters down to more knowledgeable presentation in the Regents/Basic Economics course.
- Some course materials developed by the teacher for the Advanced Economics course tend to be used in the Regents/Basic Economics course.

Design of Research: Testing Spillover Effects

- Our Project Advance teachers administered the Test of Economic Literacy (Form A) to both their CEP classes and their Regents Economics classes at the end of the same semester.
- Four participating high schools: 118 Regents Economics students and 136 CEP Economics students.



**A Multiple Regression Model
 to Test for Spillover Effects**

- Model estimates the effect of the performance of the teacher's Advanced Economics (i.e. CEP) students on a given TEL question on the performance of the same teacher's Regents Economics students on the same TEL question (**spillover effect**).
- Control variables: individual school and teacher effects, difficulty of question based upon performance of national peer group, and innate ability of students in Advanced Economics course.

**Table 2 – Sample Means, Percentage Correct on TEL
 (Form A of Exam)**

	TEL Norming Sample	CEP Schools
Regents/Basic Economics		
Overall Exam	60.7	54.9
Fundamentals	64.3	55.8
Microeconomics	62.2	56.2
Macroeconomics	58.2	55.4
International	54.4	50.0
CEP/AP Honors Economics		
Overall Exam	71.0	78.4
Fundamentals	74.1	80.7
Microeconomics	71.7	79.2
Macroeconomics	69.9	77.0
International	64.5	74.3

**Summary of Multiple Regression Results
 (Paper available upon request)**

- Spillover Effect – positive and statistically significant.
- Estimates indicate that for every 10% that the Advanced Economics students score on a given TEL question, the corresponding score for the same teacher's Regents Economics students increases by approximately 2%.
- Performance of Regents Economics students would be worse without the spillover effect.



**Advantages of CEP as
“Advanced Economics Course”**

- Higher teacher training requirements – completion of courses in Intermediate Microeconomics and Macroeconomics.
- Greater interaction among economics teachers of different high schools as well as economics professors, greater exchange of ideas and materials.
- CEP course is more accessible to high school students – targets college-bound students rather than the elite. Greater probability of achieving college recognition than AP. Therefore more students can take the “Advanced Economics” course.

The Training Model:

**A Program for Teachers of
Regents Economics**

**A Quick Review:
Challenges to NY High Schools**

- All high schools must offer Economics courses for all their graduating seniors.
- Courses must be staffed, generally by the high school’s Social Studies teachers.
- Secondary Social Studies (Grade 7-12) teachers tend to lack sufficient training in Economics.



Economics Training of High School Social Studies Teachers

- Arguably a minimum appropriate level of training should be completion of Principles of Microeconomics and Principles of Macroeconomics.
- Typically offered by colleges and universities in a two-course sequence (generally 6 credit hours).
- Some institutions of higher education (e.g. SU, NYU) offer a combined Principles of Micro and Macro course.

Some Evidence: Economics Training of High School Social Studies Teachers

- Gathered data from colleges and universities in New York State which grant degrees in Secondary Social Studies Education (Grade 7-12), on the minimum number of courses in Economics required for degree.
- Sample = 76 institutions of higher education.
- Includes the set of colleges and universities where 30 or more students passed Certification Exam in Social Studies (2006-07) – over 50% of total certifications.

Table 3
Minimum Credits in Economics Required for Degree in Secondary Social Studies Education: Colleges and Universities in New York State

Minimum Credit Hours Of Economics	Number of Colleges and Universities	
	Total Sample	30 or More Students Passed Certification Exam
0	35	5
1.5	1	1
2	1	0
3	23	6
4	2	1
6	11	3
9	3	0



Key Results (Full Sample)

- *35 colleges and universities have no requirements for Economics courses for the Secondary Social Studies degree.*
- Although 27 colleges and universities have a one-course requirement, this course is a Principles of Micro-Macro course only at SU and NYU.
- 11 colleges/universities require the Principles of Micro – Principles of Macro sequence; 3 institutions (NY Institute of Technology at its 3 campuses) require 9 hours.

**More Evidence:
 Deficiency in Economics Training**

- Students in Secondary Social Studies Education programs tend to avoid taking Economics courses beyond the minimum. Economics is “different” from other Social Science subjects such as History or Political Science, more analytic and quantitative.
- Students in Secondary Social Studies Education programs tend not to major or cluster in Economics. Economics majors enjoy relatively greater alternative career opportunities.

**Improving Teacher Training in
 Economics – A Free Course**

- We offer a course for 3 graduate credits in summer 2010 for Secondary Social Studies teachers who teach the Regents Economics course in their high schools.
- The course consists of content from the SU Principles of Micro-Macro course along with pedagogical ideas for incorporating material into Regents Economics courses.
- The course is free to the teachers and districts.



**Improving Teacher Training in
Economics – A Free Course**

- Teacher training program made possible by the Council of Economic Education through funding from the United States Department of Education Office of Innovation and Improvement.

Facts About the Course

- Runs (tentatively) from July 1, 2010 through August 15, 2010.
- Taught by Professors Don Dutkowsky and Jerry Evensky.
- Begins with a one-day orientation at SU.
- Continues with completion in online format of content from SU's Principles of Micro-Macro course.
- Ends with two days of seminars at SU on wrapping up content and planning for teaching Economics in high schools.

**Expenses Covered
for Teachers Taking the Course**

- Course Tuition
- Textbook
- Hotel Room for stays at SU.
- Vouchers given for meals/related expenses during stays at SU.



Applying for the Course

- **Eligibility Requirements**
 - New York State Teaching Certification in Secondary Social Studies Education.
 - Full-time teaching contract.
 - Must be teaching the Regents Economics course during the upcoming academic year.
 - Preference given to applicants with limited or zero background in Economics.
- **Need completed form, photocopies of transcripts from previous college courses, and recommendation letters from district administrator and department chair.**

Website For Application

- **Given during conference presentation.**

- **Also available upon request (please e-mail dondutk@maxwell.syr.edu).**

Related Issues: Improving Economic Literacy

- **Mandate statewide minimum Economics course requirements for programs in Secondary Social Studies Education offered in New York State colleges and universities (or at least SUNY) -- completion of Principles of Micro and Macroeconomics.**
- **Introduce a Regents exam or statewide end-of-course exam in Economics?**
- **The role of Personal Finance?**
