

# ***Recent Trends and New Evidence in Economics and Finance Education***

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## **ABSTRACT**

The teaching of pre-college economics has been widely researched for over 45 years with studies focused upon teacher training and improving students' understanding. This paper reviews that research base, and reports the results of a new national survey, as well as a summary of several recent developments in the field of economic education. Young people can learn economics best when taught by knowledgeable teachers using well developed curriculum materials. But, to accommodate expanding state requirements, pertinacious state bureaucracies must increase teacher training and curriculum standards.

## **Introduction and Overview**

The teaching of pre-college economics has been highly researched and reported upon since the 1970s dealing primarily with curriculum, materials, demographics, and effectiveness of teaching techniques. Previous studies have focused on how well students are learning economics, how teachers are trained, and other outcomes associated with improved understanding of economics. Several major survey articles have reported upon the current status of financial and economic education and noted several trends. However, almost nothing has been reported regarding the views economics teachers hold regarding the curriculum they teach, how they teach their subject, and their views on public issues. This paper will provide an overview of recent reviews of research in economic education and the results of the recent National Assessment of Educational Progress in economics. The paper will highlight the results of a recent national survey of a random sample of social studies and economics teachers.

## **Recent Reviews of Research**

Today is an excellent time to pause and observe the trends that have emerged in the past several decades. Two recently published reviews of research are very informative in this regard. The first is a chapter by Steven L. Miller and Phillip VanFossen (2008) in the *Handbook of Research in Social Studies Education*. This chapter is designed in part as a starting point for graduate students and other researchers to gain an overview of research that has been completed and what remains to be done. Almost all of the studies cited by Miller and VanFossen address issues related to economic education. However, the authors acknowledge that personal finance has taken on new importance. In their conclusion, they state that, "in spite of the historic distinction between personal finance (or consumer) education and economic education, it appears possible (even likely) that financial literacy will become an increasingly important part of economic literacy and thus, economic education" (2008, p. 300).

Miller and VanFossen draw several important generalizations regarding the current state of economic education, three of which are most relevant to our research. First, it seems clear that the development of the *Voluntary National Content Standards in Economics* published by the National Council on Economic Education in 1997 has played an important role in influencing what economics is taught at the pre-college

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level. The standards were produced largely by mainstream economists and economic educators and represent something of a consensus regarding what content is most important at the pre-college level. While the debate continues, of course, as a practical matter, the *Standards* document remains dominant.

Second, teachers remain poorly prepared to teach basic economics. This presents a problem because studies reveal that students learn more economics from teachers who have more formal preparation in economics. Most economics is taught by social studies teachers who have little formal background in economics. These are teachers with comprehensive social studies certifications. One study found that 80% of social studies teachers had four or less economics courses, while another found that 70% had two or less. Either result is not very encouraging.

Third, research dating back several years shows that children, as well as adolescents, can learn basic economics. The question becomes how should economics best be included in the curriculum? Several studies show that high school students who take high school economics classes score significantly higher on standardized tests than students who had not taken economics as a separate course. Interestingly, students in consumer economics courses and students in social studies courses (with or without economics) scored the same on economics pre- and post tests, strengthening the conclusion that economics needs to be taught independent of other courses.

These findings intensify the debate between those who favor an integrated approach versus those who favor a specialized approach to including economics in the curriculum. We do not find it surprising that improved knowledge of economics is hard to detect in courses like U.S. history where teachers claim they integrate economics into the host subject (history). In order to work, teachers of integrated courses would need to include explicit economics lessons designed for the host subject. When this happens, integration has a much better chance of being effective. One study, for example, found that when this is the case—when explicit economics lessons are taught in U.S. history—statistically significant knowledge gains can be achieved (Schug and Niederjohn 2008). So, we think there is some reason to believe that, under the right circumstance, integration can be an effective compliment to the capstone high school economics course.

A second recent review of research by Michael Watts (2006) is noteworthy, even though it overlaps to some extent the work by Miller and VanFossen. Watts' review was prepared for the National Council on Economic Education under a contract with the U.S. Department of Education and is unique in several ways. For example, it draws upon research studies published since 1990 in six different fields: economic education, studies on long-term behavior effects of economic education, studies from social studies education, studies from business and vocational education, education studies in domain-specific features of learning, and education studies on expert versus novice differences in cognitive understanding. Watts also presents findings from studies that involve pre-college, college, and adult education. For the purpose of this paper, we restrict our analysis of the Watts' review to three highlights he addresses concerning pre-college education.

First, Watts finds that at both the elementary and secondary levels, students of teachers who know more economics, but also spend more time teaching economics and using appropriate instructional materials, are likely to learn more economics. This conclusion may strike many as mere common sense. Nonetheless, we find it reassuring that the research literature is so supportive. Closely related to this point, Watts finds (as did Miller and VanFossen) that the "safest" way to improve student understanding of economics is to take a separate economics course. Even here, however, he notes that taking one high school economics course does not ensure long-term knowledge retention or necessarily qualify students as economically literate.

Second, while social studies teachers tend to dominate economic education, Watts notes that secondary teachers in the fields of business and vocational education typically have a better formal preparation in economics coursework than do teachers in other fields including social studies. This is an important finding that does not receive nearly enough attention in the bureaucratic struggles that go on in public education. It suggests that the high school economics course should not be a social studies monopoly. This is particularly important in states where economics is a required course for graduation.

Finally, Watts notes that some studies suggest that economics itself is a domain-specific field where easy transfers of knowledge may be difficult to make. This same conclusion is also implied by the research he cites involving the expert versus novice studies. Watts goes on to suggest that if, indeed, economics is domain specific, then economic concepts ought to be taught early and often to be fully developed throughout the K-12 curriculum. Heavy reliance on the high school economics course is probably not sufficient to provide young people with an adequate understanding of economics at the pre-college level.

## **Encouraging Results: National State Survey and the National Assessment of Educational Progress in Economics**

The most noticeable trends of the last decade include a continuation of the growth in the number of states in which economics and finance are a significant part of the pre-college curriculum. In a 2007 survey, the National Council on Economic Education reported that economics is now included, at least to some extent, in the educational standards of *all* states. The number of states requiring a formal course in economics to graduate from high school has continued to grow from 13 in 1998 to 17 states today. Surprisingly, however, the number of states requiring the testing of student knowledge in economics has actually declined from 25 in 2004 to 23 today.

The importance of personal finance in the curriculum has apparently experienced significantly larger growth over the last decade than economics. Courses in personal finance were included, to some extent, in the educational standards of 21 states in 1998, rising to 40 states today. In 1998, 20 of those states required implementation of the finance course standards, while that number has increased to 28 today. The number of states requiring a formal course in personal finance to graduate rose from 1 in 1998 to 7 today and the states requiring testing of student knowledge in finance increased from 1 to 9 over the decade.

Late in 2006, the first National Assessment of Educational Progress (NAEP) was reported by the U.S. Department of Education. This national assessment was added in response to the growing emphasis on economics at the high school level. In 2006, about two-thirds of students reported that they had taken either an advanced or a general economics course.

What are the main results of the NAEP economics test? Examining the results by achievement level, 79% of twelfth graders performed at or above Basic, 42% at or above Proficient, and 3% at Advanced. While one must be cautious in comparing the NAEP results in economics to the performance of students on other tests, this level of achievement was much higher than the levels attained in history, geography, or civics. What accounts for this relatively positive outcome? We do not know for certain. We suspect, however, that this may be the result of widespread agreement regarding what economics concepts are most important to teach. We also suspect that economics teachers might be more specialized within social studies departments at the high school level. For example, while nearly everyone is expected to share the duty of teaching U.S. history, we suspect that only one or two teachers are assigned the special responsibility of teaching economics.

### **A National Survey of Economics in the Nation's High Schools**

When it comes to matters regarding economics teachers' views of the curriculum, how they teach their subject, and their views on public issues, almost nothing is reported in the research. Recently, however, a nationally representative random sampling of 1,201 pre-college economics and social studies teachers documented the continuation of several previous trends and added new insight into specifically what concepts are being taught and why, as well as the views, goals, and political orientation of the faculty. To assess recent trends and improve the understanding of the teaching of economics, Schug, Dieterle, and Clark (2009) analyzed data collected by the Center for Survey Research and Analysis (CSRA) of a nationally representative random sample of high school social studies teachers across the nation. The sample of U.S. public high schools, drawn from the National Center for Educational Statistics comprehensive database, was stratified by student body size, region, and urbanicity to ensure representativeness. Telephone interviews were conducted from December 2007 to April 2008 producing 1,201 completed surveys. Of the 1,201 interviews, 300 were with U.S. history teachers, 300 world history teachers, 300 economics teachers, and 301 civics/government teachers. What follows is a summary of some of the results of this survey.

#### **Why Economics Is Important?**

The first major issue of interest from the survey related to why teachers felt economics was an important and growing part of the curriculum or, more implicitly, why learning economics benefited the student. As illustrated in Table 1, when asked the specific reasons why economics should be included in the school curriculum, 87% of economics teachers emphasized that economics enables students to better understand important current economic affairs; 80% of economics teachers also agreed that economics

helps students become well adjusted, productive members of society, and 79% agreed that it enables students to understand basic concepts and generalizations of the discipline. However, only 45% find it important to teach students economics in order to be activists supporting economic policies using market-oriented solutions, and only 41% agreed that it is important to teach economics to help students be activists supporting economic policies that use the power of government to solve social problems.

**Table 1**  
**Reasons to Include Economics in the Curriculum**

*Question: Here are some reasons offered by people as to why economics should be included in the school curriculum. Please tell me if each of the following is very important, somewhat important, not very important, or not important at all as a reason why economics should be included.*

	Very important	Somewhat important
Economics enables students to better understand important current affairs issues such as unemployment, inflation, poverty, and international trade agreements.	87%	13%
Economics helps students become well adjusted, productive members of society—helping them survive in an increasingly complex financial and economic world.	80%	20%
Economics enables students to understand basic concepts and generalizations of the discipline such as the laws of supply and demand, inflation, and fiscal and monetary policy.	79%	21%
Economics helps students become critically-minded, reflective citizens.	76%	23%
Economics teaches students core values regarding economic freedoms such as respect for the advantages of a free-market system which favor private ownership, competition and the profit motive over non-market systems which favor a dominant role for government.	64%	31%
Economics helps students learn about other countries and cultures in an increasingly interdependent world.	52%	42%
Economics teaches students how to be activists supporting economic policies using market-oriented solutions.	45%	48%
Economics teaches students how to be activists supporting economic policies that use the power of government for cleaning up the environment, reducing poverty and correcting social injustice.	41%	45%

### Ranking the Reasons

When economics teachers were asked to rank the reasons in Table 1 in order of importance (most important and second most important), they offered a somewhat different response. Encouraging respondent teachers to assign priorities to their goals contributes an element of opportunity cost into their choices and adds insight into what economics teachers actually think. As Table 2 illustrates, when asked which was the most important reason to include economics in the curriculum, 48% of economics teachers choose forming critically-minded, reflective citizens. Interestingly, 60% of U.S. history teachers and 62% of civics teachers ranked critical thinking as most important, rating it significantly higher than the economics teachers.

As expected, economics teachers tend to stress the importance of mastering basic economic concepts over other goals. Approximately 42% reported that developing an understanding of basic economic concepts was either the first or second most important in their reasoning. Developing activists supporting

either free market solutions or government solutions to social problems were even less important reasons to include economics in the school curriculum identified by the surveyed teachers at 11% and 12%, respectively. Surprisingly, at a time when globalization and international affairs are receiving most of the media coverage worldwide, helping students learn about other countries ranked the very least important at 6% by teachers.

**Table 2**  
**Most Important Reasons to Include Economics in the Curriculum**

	Combined importance	Most important	2 <sup>nd</sup> most important
Forming critically-minded, reflective citizens	48%	28%	20%
Developing an understanding of basic economic concepts	42%	24%	18%
Using economics to better understand current affairs	34%	14%	20%
Developing an appreciation of core economic values and freedoms	23%	11%	12%
Helping students adjust to society	20%	10%	10%
Developing activists to use government to solve current societal problems	12%	4%	8%
Developing activists to use market to solve current societal problems	11%	6%	5%
Helping students learn about other countries	6%	2%	4%

### What Content Is Most Important in Economics?

For decades now, the standard high school economics texts have almost all emphasized core microeconomic and macroeconomic content with consumer issues and/or personal finance occupying only about 10% of the course. In contrast to the textbooks they use, pre-college economics teachers place a much higher value on personal finance and consumer education. As illustrated in Table 3, 62% of teachers ranked personal finance and consumer education as the most important content in the course. This was followed by microeconomic content at 36%, macroeconomic content at 31%, critical thinking about free market institutions at 30%, all far below personal finance and consumer education. Interestingly, while developing general critical thinking skills was the most important *reason* for including economics in the curriculum, the *specific content area* of thinking critically about free market institutions ranks relatively low (30%) with teachers. Another interesting contrast arises from questions 1 and 3 on the survey as well. In question one, teachers ranked the statement that the ability to understand economics enables students to better understand important current affairs issues such as unemployment, inflation, poverty, and international trade agreements as *the most important reason* for including economics in the curriculum. This focus on current economic issues expressed by the teachers might suggest that macroeconomic content and international trade issues are a high priority to them. However, as we see in question 3, when ranking the value of specific course content, macroeconomics and international trade and institutions lagged far behind both personal finance and microeconomics in importance. Perhaps most surprising of all, international trade and institutions, topics of heated debate in the 2008 presidential election, ranked only 13%.

**Table 3**  
**Most Important Topics to Emphasize in the Economics Curriculum**

*Question: Considering all the reasons we have discussed regarding where the emphasis should be in the economics curriculum, which do you think should receive the most/second-most emphasis?*

	<b>Combined importance</b>	<b>Most important</b>	<b>2<sup>nd</sup> most important</b>
Personal finance and consumer education	62%	44%	18%
Microeconomic concepts	36%	14%	22%
Macroeconomic concepts	31%	14%	17%
Critical thinking about free market institutions	30%	15%	15%
How markets create prosperity	13%	5%	8%
International trade and institutions	13%	4%	9%
Injustice in the economic system	11%	3%	8%
Non-market economic systems	0%	0%	0%

**How Do Economics and Social Studies Teachers Teach?**

Economics teachers have, until recently, been regarded as using teaching methods of instruction which are highly similar to those of other social studies teachers because there has been little reason to think otherwise.

The results of the 2008 survey indicate that whole class teacher presentation/discussion is the most widely used activity by social studies teachers. However, there are some differences reported by economics teachers. As illustrated in Table 4, 70% of economics teachers use this technique predominately. Alternatively, 78% of U.S. history and 77% of civics teachers rely on the technique more. When considering their most recent class taught, only 38% of economics teachers used the technique, while over half of the history and civics teachers used it. Economics teachers also spend more class period time working in small groups, on problem-solving activities, and on Internet-based activity in comparison to their social studies peers. This would suggest that economics teachers are somewhat more activity oriented than other social studies teachers. It might also be due to the fact that there are a variety of relatively short and widely used simulations and problem solving activities readily available to economics teachers.

**Table 4**  
**Instruction – By Subject**

*Question: Please tell me the frequency of the following activities in your classes. (Percent saying every class or almost every class)*

	<b>Total</b>	<b>U.S. History</b>	<b>World History</b>	<b>Civics</b>	<b>Economics</b>
Whole class teacher presentation/discussion	74%	78%	69%	77%	70%
Problem solving	61%	57%	57%	63%	69%
Small groups	37%	34%	38%	34%	44%
Internet based	13%	11%	10%	12%	20%

## Are Economics Teachers More Market-Oriented Than Other Social Studies Teachers?

High school economics teachers are responsible for teaching about the private sector and how markets work, as well as the role of government in a market economy. Arising from this responsibility, the authors felt it would be interesting to know if high school economics teachers were more market-oriented in their attitudes than other social studies teachers. Considering the voting preferences reported in Table 5, it appears that economics teachers are not very different from social studies teachers. While 34% of economics teachers planned to vote Democratic in 2008, similarly 35% of the other social studies teachers planned to vote Democratic. On the other hand, 26% of economics teachers planned to vote Republican, compared to 22% of all social studies teachers. Table 5 suggests that if a conservative and/or market orientation among economics teachers exists, it is slight at best.

**Table 5**  
**Anticipated Vote – By Subject**

*Question: In the upcoming national election of 2008, do you anticipate that you will vote mostly...*

	Total	U.S. History	World History	Civics	Economics
Democratic	35%	36%	35%	37%	34%
Republican	22%	22%	22%	19%	26%
Independent	16%	17%	14%	19%	13%
Haven't decided yet	17%	18%	20%	17%	14%

### Teachers' Views on Specific Issues

Tables 6 and 7 report that economics teachers have distinctly different views about economic issues than teachers from other subject areas. Significantly, 74% of economics teachers were more likely to agree that the strength of this country is mostly based on the success of American business, while their peer responses averaged around 65%. However, 47% of economics teachers were more likely to agree that government regulation of business usually does more harm than good with peer responses averaging 35%. Only 51% of economics teachers were likely to agree that the rich just get richer while the poor get poorer, and 49% are likely to agree that business corporations make too much profit, in contrast with their peer responses averaging 64% and 63%, respectively.

A similar pattern is evident in Table 7 which reports on the support of specific policies. As 51% of economics teachers were likely to support government-guaranteed health insurance for all citizens, compared with their peers who averaged 60%.

Tables 5, 6, and 7 provide some evidence that economics teachers may be somewhat more market-oriented than their other social studies colleagues. Given that the content of economics stresses the importance of markets in allocating goods and services, this might be an expected outcome; but, it is also another finding that makes high school economics teachers somewhat distinctive.

**Table 6**  
**Economics Teachers' Opinions on Issues**

*Question: For the following questions, please tell me if you strongly agree, agree, disagree or strongly disagree. (Percent agreeing)*

	Total	U.S. History	World History	Civics	Economics
The strength of this country is mostly based on the success of American business	67%	64%	68%	62%	74%
Government regulation of business usually does more harm than good	38%	30%	40%	36%	47%
Business corporations make too much profit	59%	64%	63%	61%	49%
Today it is true that the rich just get richer while the poor get poorer	61%	65%	65%	61%	51%

**Table 7**  
**Support for Proposals – By Subject**

*Question: For the following questions, please tell me if you strongly favor, favor, oppose or strongly oppose. (Percent favoring)*

	Total	U.S. History	World History	Civics	Economics
The U.S. government guaranteeing health insurance for all citizens, even if it means raising taxes	58%	59%	62%	61%	51%

### Conclusions from the Survey

It is difficult to reconcile the views of economics teachers regarding *why* economics is important as a discipline and *what specific content* within economics is of greatest importance to teach. While most economics teachers appear to regard economics content as an important tool in developing critical thinking skills, they seem to place less importance upon teaching the critical thinking skills of economics. Another surprising finding is that personal finance and consumer education content are regarded as being more important than basic principles of economics. This dichotomy raises several questions.

- Is the emphasis on personal finance a recent development due to increasing economic responsibilities being placed on individual households or has it always been this way?
- Do economics teachers' views imply that personal finance and consumer education should occupy a larger portion of the high school economics course?
- Does the significant difference between the perceived importance of teaching personal finance and consumer education (62%) and other economic topics (36%) imply that personal finance is displacing core economic content?
- Is it true that economics teachers really do not stress basic economics as much as the textbook tables of contents imply? This might help explain the popularity of stock market games and simulations among economic teachers.

It is entirely possible that economics teachers are actually spending the majority of their time teaching basic microeconomic and macroeconomic concepts while viewing personal finance as being of particular importance. Given that most of the content in standard high school economics textbooks remains devoted to basic economic principles and that textbook publishers are not in the habit of publishing textbooks that teachers do not purchase, the chances are good that teachers consider the topic as something of practical and immediate value to students, perhaps different from the more esoteric content offered in the other parts of the social studies curriculum. The emergence of Advanced Placement economics courses in high school also suggests that standard economics content remains dominant even while teachers regard personal finance as being highly important.

It was also surprising to find that, in spite of the rapid globalization of the last decade, economics teachers do not appear to have a strong international economics orientation. Content involving international trade and institutions, as well as helping students learn about other countries, ranked relatively low.

The pedagogy utilized by economics teachers differs somewhat from other social studies teachers. Economics teachers tend to use whole group instruction somewhat less and small group work somewhat more than other social studies teachers. We offer two possible explanations for this surprising finding. First, this result might be related to the fact that many more instructional materials supplementing direct instructional methods, with simulations, demonstrations, and other innovative group and student oriented activities have been published and made available to economics teachers than their general social studies counterparts. It is certainly possible that, due to this increased availability, economics teachers have taken greater advantage of these types of teaching alternatives than have other social studies teachers. Second, in contrast to their social studies counterparts, economics teachers have a distinct appreciation for the fundamentals of their discipline marked by the widespread agreement on definitions and principles. Perhaps this agreement makes it possible to use simulations and demonstrations that demonstrate a specific concept and thus, are regarded by teachers as useful teaching tools.

There appears to be very little difference in the party voting preferences of economics teachers than other social studies teachers. However, they do seem to differ on specific economic issues with economics teachers more likely to support business and the role of profits and more resistant to increased regulations and government-provided health care.

## Overall Conclusions

This paper has presented a summary of several recent developments in the field of economic education. It includes an abundance of good news. We know that young people can learn economics. We know they learn it best when they are taught by knowledgeable teachers using well developed curriculum materials. According to the NAEP results, twelfth graders may know more economics than do most of members of the U.S. Congress. We even have evidence that economics teachers are more likely to be supportive of the private sector and more activity oriented than other social studies teachers.

Economic education, however, continues to be haunted by old ghosts. While economics enrollments and state requirements have continued to expand, it appears that the state bureaucracies (state departments of education and schools of education), which dominate teacher education and teacher certification, will not budge when it comes to two issues. First, teachers, by and large, remain poorly prepared to teach economics. There has been no movement to expand the formal training of social studies teachers to include more economics. This helps make the case that economics should be a subject which should also be taught by teachers in business and vocational education who typically have more formal training in economics than do social studies teachers.

Second, the research suggests that relying on the high school economics course alone will not provide the levels of economic and financial literacy required by today's citizens. As a minimum, it is necessary that states establish parity between content regarding how the public sector works—required content in government and civics—to content regarding how the private sector works—content in economics and personal finance. This would involve increasing the amount of specialized as well as integrated economics content offered at the pre-college level.

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