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The Interdependence of Economic and Personal Finance Education

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In an increasingly complex financial world, personal finance education is more important today than ever. Nevertheless, the number of states incorporating personal finance concepts into their academic standards is not rising significantly, and students are demonstrating few gains, if any, in their knowledge of those concepts. One reason for this paradox is that personal finance education does not have a home in the American school curriculum. The natural home for personal finance education is in the economics curriculum, which is one of 10 core subjects in the No Child Left Behind law. Economics provides the organizing principles and logic that could be the structure for personal finance education, helping to strengthen it so that K-12 students will learn the concepts and skills of personal finance they need to make informed choices throughout their lives.

Advocacy vs. Results

In recent years, many advocates have argued for improving the financial literacy of young people. Federal Reserve Chairman Alan Greenspan is prominent today among those who argue that we need strong school programs in personal finance to prepare consumers for making wise choices in a new era. New information technologies and financial products have expanded the range of choices available to consumers. Furthermore, people today are called upon increasingly to take responsibility for their financial future. For example, defined-benefit programs are becoming an endangered species as defined-contribution programs, which are directed by individual investors, become more common. This is the context for Mr. Greenspan's statement, in his lead essay for this special section, that "the importance of basic financial skills underscores the need to begin the learning process as early as possible. Indeed, improving basic financial literacy at the elementary and secondary levels will provide a foundation of financial literacy that can help prevent younger people from making poor decisions that can take years to overcome."[1]

The chorus of advocates for more financial literacy grows louder every day. More than 140 corporations, government agencies, educational organizations, and nonprofit organizations have formed the Jump$tart Coalition for Personal Financial Literacy to advocate for more and better programs.[2] Congress has established the Financial Literacy and Education Commission, housed in the Department of the Treasury, to coordinate federal agencies and federal education efforts on financial literacy. The Federal Reserve System has made financial literacy a priority in its educational programs.

It appears, however, that this advocacy is not being translated into results. In responding to a survey conducted by Lewis Mandell for the Jump$tart Coalition in 2004, students answered only 50.3 percent of the questions on personal financial topics correctly. Based on a typical scale used by public schools, 65.5 percent of students who took this exam (it was administered to 4,000 students in 215 high schools across 33 states) would have failed it.[3] The 2004 results represented a slight improvement over results from 2002, when students answered only 50.2 percent of the questions correctly, but results from both years marked a decline from 1997, when the survey was inaugurated. In 1997, students answered 57.3 percent of the questions correctly.[4]

A Homeless Curriculum

Why has widespread advocacy for personal finance education yielded such discouraging results? In large part, the problem is that personal finance education has a weak presence and no obvious home in most school programs. A 2004 survey by the National Council on Economic Education (NCEE) found that only six states required students to complete a course in personal finance, and the number of states with standards in personal finance had fallen from 40 in 2000 to 34 in 2004.[5] These personal finance standards are often embedded in the economics standards but in some cases are stand-alone standards. Although everyone endorses it, few educators take responsibility for making personal finance education a priority, and efforts thus are diffused. In addition, there is no unified set of principles to inform the personal finance curriculum as it is variously formulated. Without the focus and direction that a unified set of principles could provide, personal finance education in practice often comes to little more than pious admonitions and the pursuit of trivial facts. Facts lacking conceptual content have little meaning or utility.

Economics Can Provide a Home for Personal Finance Education

What sort of a conceptual home is needed for personal finance education? First, it should be located in a discipline or area of study that is widely accepted as a core subject in the K-12 curriculum. Second, it should enable teachers and students to view consumers as actors in a broad range of human behavior, providing an organizational scheme for connecting all aspects of personal finance education. Third, it should connect teachers to extensive opportunities for professional development. In respect to these criteria, economics stands out as the natural home, conceptually and institutionally, for personal finance education.

1. *Economics is prominent in standards-based education.* Most states now have standards that define and drive the K-12 curriculum. In 2004, 48 states included economics in their standards, and 14 states required students to take an economics course in order to graduate from high school.[6] About 44 percent of all high school graduates take an economics course in high school as either an elective or a requirement.[7] Economics is one of the 10 core subjects identified in No Child Left Behind. Economics has a home in the K-12 curriculum, and personal finance education is an application of economics.

2. *Economics enables teachers and students to view personal finance in a broad perspective.* Personal finance education could be found in many schools during the 1970s and the early 1980s. It was usually called "consumer education," and it typically was taught in social studies, business education, and family- and consumer-science courses. But the curriculum for these courses very often was trivialized, as students were kept busy, for example, comparing the cost of cans of peas in different grocery stores. Budgeting and saving were typically presented as moral imperatives, not as strategies for making wise choices over the long term. Sacrifice and lower consumption were often presented, similarly, as aspects of a virtuous way of life, not as tactics in a more general strategy for improving one's standard of living over the long term. Gradually, consumer education of this sort faded away in school programs.

By contrast, concepts and principles of economics enable us to view personal finance in a broad perspective within which consumers act also as producers and citizens. Economic reasoning shows that the strategy by which consumers can improve their welfare most effectively is to pursue more and higher-quality education and to develop work habits and skills that employers will pay for.

Economic reasoning also bears directly on knowledge and skills needed for citizenship. Consumer-citizens can be hurt or helped by the economic policies of government. A strong economy helps consumers while a recession or unanticipated inflation harms them. Special-interest groups often try to convince voters that their policies are in the public interest, when economic reasoning can point out major problems with such policies. For example, some special-interest groups promote tariffs and quotas as a means of protecting American jobs while those familiar with the principles of economics can see that tariffs and quotas end up causing job losses and raising consumer prices. Agricultural special interests convince voters that farm supports save the family farm but overlook the economic principles that show they cause food surpluses and raise food prices. Other groups promote wage and price controls as a means to lower prices and improve the standard of living while in fact they cause shortages and foster activity in illegal markets. To succeed in promoting such policies, special-interest groups must convince a significant number of voters that the proposals in question will benefit them directly and serve the public interest. Sound economic education gives consumer-citizens the analytical skills they need to discern the real purpose of proposals of this sort.

In addition to issues related to citizenship, particular topics and themes of personal finance education can be organized and analyzed according to concepts and principles of economics. The possibilities can be illustrated by reference to scarcity, choice, and opportunity cost.

Understanding scarcity is the starting point for both economic and financial literacy. Individuals have wants that are unlimited. But the resources of society—human resources, natural resources, and capital goods—are limited. Therefore, scarcity exists. No society has ever had enough resources to produce the full amount and variety of goods and services its members wanted. In a world of scarcity, producing any one good or service means that other goods and services cannot be produced. Every choice involves an opportunity cost, which is the second-best alternative given up in the act of choosing. For consumers, income and time are scarce resources. Thus consumers must decide what goods and services they want most and what opportunity costs they are willing to pay in order to obtain them. In making decisions, they must (tacitly or more formally) define the criteria and evaluate the benefits and costs of alternative choices.

Economics and personal finance are ultimately about choices and the consequences of those choices. Every aspect of personal finance relates to scarcity. Obtaining additional education means, for most people, sacrificing current consumption. In considering this reality, a wise consumer of education would weigh the benefits against the costs. Budgeting is an exercise in spending one's limited income on what is valued more and giving up at least some spending on what is valued less. Buying on credit involves a decision to obtain more goods and services now while giving up the chance to buy more later, since the loan must be paid back with interest.

Everyone advises consumers to save early and often. Why don't they do so? Economics tells us that the costs of deferring gratification are immediate and high—particularly for people whose incomes are low, as young people's incomes often are. The benefits of saving often seem to be unclear, therefore, in part because they lie far in the future. In this context, explaining the power of compound interest can help to show students that the failure to save also comes with costs and consequences that will be felt in the future. This sort of reasoning can change behavior more effectively than moral lecturing.

3. *Economics education provides an extensive network of sources of teaching materials and professional development.*

Effective education is not teacher-proof. Unprepared teachers of personal finance may inadvertently teach anti-economics, which could be worse than teaching no economics at all. Effective teaching of personal finance requires at the very least that teachers use classroom-tested instructional materials. The materials clearinghouse of the Jump$tart Coalition lists 163 personal finance publications.[8] The National Council on Economic Education (NCEE) has classroom-tested publications of instructional activities that apply economic principles to an individual's decisions about career choices, money management, credit, savings, investment, and insurance. This comprehensive K-12 curriculum covers all aspects of economic education. A student who understands basic economic principles can apply those principles to the entire range of personal financial decisions. Rather than memorizing rules or admonitions, students informed by economics learn why consumers behave as they do and how they can improve their lives by changing their behavior.

Good materials, however, are not enough. Teachers must use the instructional activities enthusiastically and effectively. Professional development for teachers is a key to effective instruction. Otherwise, quality instructional activities gather dust on the classroom shelf.

Fortunately, economic education has a national network of state councils on economic education and more than 200 university centers for economic education. Affiliated with the NCEE, these independent state councils and university centers offer professional development for teachers and use instructional activities and curriculum materials from multiple sources. Many councils and centers also develop their own unique professional-development programs. By incorporating personal finance education into the economics curriculum, personal finance has a natural home for professional development.

Table 1

Financial Fitness for Life: Upper Elementary (Grade 5) Results

	Mean	S.D.	N
FFFL	24.43 (61%)	7.86	498
Control	17.26 (43%)	5.96	317
Mean difference	7.17		
Alpha test reliability	.88		
Number of test items	40		

Source: *Upper Elementary Financial Fitness for Life: Examiner's Manual* (New York: National Council on Economic Education, 2005).

Table 2

Financial Fitness for Life: Middle School (Grade 8) Results

	Mean	S.D.	n
FFFL	25.82 (52%)	8.66	698
Control	17.19 (34%)	4.97	362
Mean difference	8.63		
Alpha test reliability	.87		
Number of test items	50		

Source: *Middle School Financial Fitness for Life: Examiner's Manual* (New York: National Council on Economic Education, 2005).

Table 3

Financial Fitness for Life: High School (Grades 11-12) Results

	Mean	S.D.	n
FFFL	27.84 (56%)	8.72	524
Control	22.34 (45%)	6.52	335
Mean difference	5.5		
Alpha test reliability	.86		
Number of test items	50		

Source: *High School Financial Fitness for Life: Examiner's Manual* (New York: National Council on Economic Education, 2005).

A Case Study on Personal Finance Education Informed by Economics

Financial Fitness for Life (FFFL)[9] provides an example of a comprehensive program for personal finance education informed by concepts and principles of economics. It is a K-12 financial education program organized by reference to the *Voluntary National Content Standards in Economics*, published by NCEE.[10] The FFFL curriculum, which is also correlated with the *National Standards in Personal Finance Education*, incorporates about half of the national economics standards, including the following:[11]

- Scarcity, choice, and productive resources
- Decision making and marginal analysis
- Voluntary exchange and trade
- Supply and demand
- Economic institutions
- Interest rates
- Labor markets and income
- Entrepreneurship
- Physical and human capital

The complete FFFL program is made up of separate books of instructional activities for each of four categories of grade level (K-2, 3-5, 6-8, 9-12). In each book the instructional activities are organized into these content themes:

- Earning income
- Saving
- Spending and using credit
- Money management

NCEE developed measures of learning to find out whether the students of teachers who were trained in the use of the FFFL materials, and who used the materials in their instruction, performed better or worse than students who did not receive FFFL instruction from trained teachers. Separate tests were developed and administered to upper elementary (Grade 5), middle school (Grade 8), and high school (Grades 11 and 12) students.[12] The three tests were administered to a total of 2,734 students.

Tables 1-3 show that students at all three grade levels who were taught by trained teachers using the FFFL instructional materials achieved at higher cognitive levels than students in the control groups that did not use the FFFL activities; the differences are statistically significant in the expected direction. The probability that this difference is due to chance is about zero (probability less than 0.001; the standard error of measurement ranged from 2.76 to 3.14).

The tests are also shown to be reliable. Alpha coefficients are a measure of the internal consistency among test items with a common focus, which in this case is personal finance. One way to conceptualize internal consistency is to think of splitting the test in half and correlating student scores in both halves. The alpha coefficient provides an estimate of the average of all possible split-half correlations. The alpha coefficient statistic ranges from zero to 1, with the higher coefficient being better. Alpha scores range from .86 to .89 on these tests.

Although no claim can be made that the group tested is exactly representative of the student population enrolled in schools throughout the nation, it is probably indicative of the results that would be obtained if a teacher trained in the use of FFFL provided financial instruction to students and compared those results to students who have not received FFFL instruction. The good news is that a personal finance curriculum that incorporates basic economic principles shows improved results over a control group. The bad news is that overall performance, even for students who have been taught personal finance, leaves much room for improvement.

Conclusion

Economic education provides a conceptual framework for personal finance education and much more. High school graduates will make economic choices all of their lives as consumers, savers, investors, members of the workforce, and citizen-voters. They will be bombarded with information and misinformation. They will need to use basic principles of economic reasoning to make critical judgments. Their choices will have consequences for their future and our nation's future. The push for economic education and personal finance education must go beyond lip service and become truly an integral part of the K-12 curriculum.

Notes

1. Alan Greenspan, "The Importance of Financial Education Today," *Social Education* 69, no. 2 (March 2005): 65.
2. Jump$tart Coalition for Personal Financial Literacy, www.jumpstartcoalition.org.
3. Lewis Mandell, *2004 Personal Financial Survey of High School Seniors,* Jump$tart Coalition for Personal Financial Literacy, www.jumpstartcoalition.org.
4. *Ibid.*
5. *Survey of the States: Economic and Personal Finance Education in Our Nation's Schools in 2004* (New York: National Council on Economic Education, 2005).
6. *Ibid.*
7. William Walstad, "Economic Education in U.S. High Schools," *Journal of Economic Perspectives* 15, no. 3 (summer 2001): 198.
8. Jump$tart Coalition for Personal Financial Literacy.
9. *Financial Fitness for Life* (New York: National Council on Economic Education, 2001).
10. *Voluntary National Content Standards in Economics* (New York: National Council on Economic Education, 1997).
11. *National Standards in Personal Finance Education,* Jump$tart Coalition for Personal Financial Literacy.
12. *Upper Elementary, Middle School and High School Financial Fitness for Life: Examiner's Manuals* (New York: National Council on Economic Education, 2005).

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Certificate of Higher Education in Economics and Personal Finance. By studying this certificate, you'll appreciate how economic theory helps understand real world important issues in areas such as government policy, international trade, business decisions, work and innovation. . Youâ€™ll discover how economics and the economies have evolved over time. This will give you a building block towards acquiring a critical perspective on economics and economic choices for our daily lives. As youâ€™re learning about income, expenditure, savings and investments, you'll gain practical tools and ide has defined personal finance content "as an application or extension of economic understanding and analysis as applied to individual or household decision-making."4 Taken together, these factors combined to create a call to action for the development of the National Standards for Financial Literacy.Â 2John S. Morton, "The Interdependence of Economic and Personal Finance Education," Social Education 69, no. 2 (2005): 66-69. 3Council for Economic Education, Voluntary National Content Standards in Economics, www.councilforeconed.org/resource/voluntary-national-content-standards-in-economics/ . 4William Bosshardt and William B. Walstad, "National Standards for Financial Literacy: Rationale and Content," The Journal of Economic Education 45, no. 1 (2014): 64-65.