Classroom-Based Financial Education for Youth: How Can We Do it Better?

Michael E. Staten, University of Arizona
Nicole Wanago, University of Arizona
Shawn Cole, Harvard University
Lois Vitt, Institute for Socio-Financial Studies

The broad theme of this special session was a discussion of classroom-based financial education for youth: what does research and practical experience tell us about how well it is working and how we can do it better. Classrooms offer an extended opportunity to implement an experiential learning program over time for young people. Education research shows that repeated exposure and reinforcement is critical, giving financial education in a classroom environment a comparative advantage (if done well), relative to after-school financial education programs or web-based financial education independent of instructor interaction.

The Landscape for Youth-based Financial Education: Michael Staten

The need for a financially literate population has never been greater. Even prior to the global financial crisis of 2008, American households were faced with an increasingly sophisticated and complicated array of financial products, and increasing responsibility for their own financial well-being in the present and future. A shift to defined contribution retirement programs, greater employee responsibility for health care costs (higher deductibles and co-payments), and much greater volatility in home prices (traditional anchors of household wealth) has put a greater premium on forward thinking financial plans. These and other events are severely testing the financial decision-making skills of households across the United States. Consequently, there is an acute need to identify the most effective programs for preparing consumers, especially young consumers, to make financial decisions as they move through early adulthood.

Recognizing these challenges, federal agencies and creditor-sponsored coalitions promoting financial literacy have issued repeated calls for a greater role for personal financial education in public school curriculum. Many states have responded by adopting economics and financial education curriculum standards in the public schools. In its 2007 survey of K-12 curriculum in the United States, the National Council on Economic Education (NCEE) reported that 40 states have personal financial education standards, although only 28 states had required the standards be implemented. Twenty states require some form of personal finance instruction for secondary schools, either as a stand-alone course (7 states) or incorporated into other courses.

What does the experience to-date tell us about the effectiveness of classroom-based financial education in shaping positive financial management behaviors in young consumers? Research that investigates the impact of youth financial education efforts across the country has reported mixed results. At least one widely cited test of financial literacy among high school seniors (the Jump$tart Coalition survey) has failed to find significant improvement in financial literacy scores in biennial national testing since the survey’s inception in 1997. And, the goal of documenting the effectiveness of specific financial education programs has proven elusive. A number of studies (and unpublished program reports) over the past decade have found evidence of increased knowledge of personal finance topics following financial education sessions. Some studies have also found a link between increased knowledge and changes in consumer attitudes and planned financial behaviors (e.g., heightened appreciation of the value of saving and greater commitment to save more in the future). But there is only weak evidence at this point that greater knowledge (e.g., as demonstrated on pencil/paper tests), ceteris paribus, leads to observable improvements in financial behaviors over time (Bernheim, Garrett and Maki, 2001; Hilgert, Hogarth and Beverly, 2003; Courchane and Zorn, 2005; Shim, et al 2009; Walstad et al 2009).

An increasing concern among financial education policymakers are the apparent weak links in traditional, classroom based instruction on the topic of personal finance at both the high school and collegiate levels. A longitudinal study of college students (Shim, et al, 2009) has found that the role played by parents of students at home, prior to college, is a more important influence on young adults’ financial attitudes and behavior than are either high school work experience or financial education coursework. But, many students at all grade levels arrive in the classroom without the benefit of home-based resources and background in money management. Many parents struggle to handle their family finances, and lack the knowledge or confidence to advise their children. Many educators assigned to teach non-core, elective high school courses in personal finance may also lack the confidence, experience or training to effectively engage their students (Way and Holden, 2009). Lack of motivation by students...
(especially in mandated courses) and/or relevancy of topics included in the course also contribute to poor financial outcomes.

Complicating all empirical efforts to measure classroom financial education success is the fact that cognitive ability appears strongly correlated with observable personal finance benchmarks (e.g., savings and investment behavior; net worth), making it quite difficult to isolate the influence of the financial literacy education itself (Cole and Shastry, 2007). Even more problematic from a researcher’s perspective is that consumer risk preferences (willingness to accept or avoid increasingly risky options) and time preferences (degree of impatience in decisions involving choices between immediate vs. deferred rewards) are major drivers – and have been shown to be empirically predictive – of choices in a variety of inter-temporal decision settings (Chabris, et al, 2008). But, risk and time preferences are difficult and expensive to measure, and such data have rarely been present in financial education evaluation studies.

Further complicating the program evaluation task is a growing sense that a focus on observable financial benchmarks alone (e.g., household net worth) may not be doing justice to the question of whether financial education improves consumers’ financial well-being. Kozup and Hogarth (2008) point out that a consumer’s sense of financial security may be the most important attribute to measure, a task that necessarily takes a researcher down the road of measuring satisfaction, happiness and other notorious intangibles. Frustrated by failure to find more definitive signs of improvement, policymakers are questioning the approach taken over the last decade toward youth financial education (Willis, 2009).

**Family Economics and Financial Education: Nicole Wanago**

The Family Economics and Financial Education project (FEFE) started in 2001 as a regional experiment to get financial education into classrooms, and has grown national in scope, winning a national award in 2003 from the Association for Financial Counseling and Planning Education for innovative financial education curriculum. From its inception, the FEFE project has been a collaborative and interdisciplinary effort bringing together content experts, school administrators, and teachers (and their endless capacity for generating creative new learning activities) in an ongoing cycle of program improvement. The program has been designed to anticipate and lessen the barriers to deeper penetration of personal finance instruction in the nation’s schools. The success and subsequent growth of FEFE (as of March 2010, the curriculum has 18,000 registered educators and reaches over 500,000 high school and middle school students annually) is largely attributable to a project model built on a true partnership with teachers and investment in teacher training and professional development to build confidence regarding personal finance topics. As a result, the FEFE lesson plans and materials are constantly changing and improving based on what teacher feedback about what works.

As part of the ongoing evaluation process, a year-long review project was undertaken by the Take Charge America Institute at the University of Arizona that engaged nationally recognized researchers, content experts and high school “master teachers” to help identify weaknesses in the leading financial education curricula used in the nation’s schools. The review (and resulting set of recommendations) also incorporated feedback from teachers using the FEFE program. From those discussions emerged the following conclusions: 1) the leading high school personal finance curricula in the U.S. are overly focused on information transfer and not enough on developing problem-solving and decision-making skills regarding financial choices; consequently, a shift in allocation of course time is necessary to build analyses of scenarios, cases and problems into the course experience – i.e., to put students in the position of making decisions; 2) insights from a decade of behavioral research on how individuals and families actually make financial decisions (and persistent biases in those decisions) are absent from most curricula, and 3) the leading programs offer few meaningful opportunities to link classroom education to home and community money management experiences.

Emerging from the program review process were specific recommendations for next steps to address these areas of weakness. To address the underweighting of decision-skill development, an effective personal finance curriculum should be grounded in a constructivist theory of learning. People don’t learn personal finance, per se. A successful program will help students to develop financial decision-making skills by repeatedly making choices, observing outcomes, weighing new options and making more choices. Activity-based curriculum should promote interactive learning.

This will require at least three distinct changes to the curriculum: 1) The traditional content in financial education courses needs to be distilled down to a smaller set of key concepts that would prepare an individual to gather and critically evaluate information for the majority of personal financial decisions; 2) Shift the curriculum toward more interactive learning by incorporating Web 2.0 technologies to dramatically broaden the decision-
simulation opportunities, as well as learning through financial socialization. Recent research in the education technology field has shown that both simulations and socialization opportunities are effective learning enhancements across a variety of academic subjects. When applied in an educational setting, good computer and video games have been shown to incorporate fundamentally sound learning principles. They engage students, and offer them a continuous learning process that motivates them to go further. They build problem solving skills in the context of the topic by confronting “players in the initial game with problems that are specifically designed to allow them to form good generalizations about what will work well later when they face more complex problems” (Gee, 2003). Consequently, electronic, online delivery of financial education lessons has potential as an effective supplement to traditional classroom instruction of personal finance. Game-based simulations can also illustrate complex concepts and engage students in real-world decision-making with the advantage of accelerating outcomes and consequences so that many decisions can be made and experienced in the relatively short span of a classroom-based course; 3) this new approach will require the development of a new set of evaluation tools to assess whether students have achieved the core competencies in a learning environment that features project-based, experiential learning and repeated decision-making. It is doubtful that the multiple-choice assessment tools currently used in many research studies are adequate for capturing student competency in financial decision-making.

**Behavioral Financial Education:** Shawn Cole

Insights from behavioral economics should have much greater impact on personal finance curriculum. Financial decisions are often difficult. Inter-temporal choices (e.g., savings and borrowing options, with different interest rates and terms structures) can be difficult for those without financial savvy – and even knowledgeable individuals may need to rely on calculators and spreadsheets to make truly informed decisions. Yet, many households are not knowledgeable, and often receive little assistance when making these decisions. Moreover, unlike the decision to visit a restaurant or purchase a particular model of car, financial services customers may not receive useful feedback about the value of the product they have purchased, making the typical learning process even more difficult. Add to this that research in economics and psychology has long recognized that humans are not “perfectly rational” decision makers. They make mistakes, have self-control problems, and have difficulty processing complex information. The financial services market has responded in some cases to take advantage of these biases, for example, by offering credit cards with “teaser” rates in the hope that the consumer will overestimate the probability she will promptly pay her balance in full (DellaVigna and Malmandier, 2004).

Academic research has only scratched the surface in developing and testing alternative approaches to financial literacy education. Consequently, insights from behavioral economics are almost completely absent in standard financial education curriculum. Cole suggests building in explicit “debiasing” exercises and lessons. Instead of providing standard financial education content in the classroom, an educational “intervention” could be designed to actively make individuals aware of their behavioral biases. This could be done as it is in classroom discussions of psychology and economics, by appealing to participants’ intuition and then showing that it may be incorrect, or by allowing students to play simulation games in which they make decisions and learn the consequences of their decisions.

Put a little differently, the general question for curriculum design is whether there are decision pitfalls that could be avoided (or effects mitigated) through advance warning in a financial education class. If so, which behavioral insights would be the most valuable to communicate? From a research and development standpoint, are there simple in-class experiments that illustrate how decisions can go consistently astray, and can such insights and lessons have lasting influence? Technology can almost certainly play a role here. Simulations and calculators help to illustrate – and perhaps offset - some behavioral biases in making short-run consumption decisions (for example, by illustrating costs of procrastination in savings behavior – or underestimating the high costs of revolving credit card balances, etc). This area seems particularly ripe for some experimental work with randomized control trials.

**Social and Cultural Influences on Consumer Financial Behavior:** Lois Vitt

Diverse perspectives are emerging from multiple disciplines about the failure of financial education to change “poor” consumer behaviors, but these views do not account for the macro and micro societal influences on individuals and families. Most evaluators of financial education programs focus primarily on the financial behavior
of students rather than on the lifelong influence of the social and cultural factors that shaped their behavior in the first place.

All financial behavior is learned in social contexts through social interactions, and all financial decisions involve other people in one way or another. Even when individuals make financial decisions alone, they take into account the views and potential reactions of other people—authorities, reference groups, spouses, children, friends, supervisors or colleagues at work, even strangers. Moreover, the consequences of consumer financial decisions—as retailers know well—can greatly impact the social environment, causing multiple ripple effects in the marketplace and various other organizational environments that ultimately reverberate throughout the larger society. Thus it is realistic and useful to think of financial behavior, including motivated decision-making and subsequent action, as embedded within multiple interconnected social contexts rather than as isolated events performed by solitary individuals.

Social and cultural influences surround, form, and impact consumer financial decision making. Policymakers, K-12 schools, colleges, employers, and community financial educators, must ultimately ask: How can financial education be restructured to reflect more accurately the interactions that exist between individuals and the social environment? New pedagogical approaches and strategies are needed that reflect financial decision dynamics in real world contexts. They are much more likely to help individuals develop successful financial behaviors that lead to less spending and more saving even in good economic times.

As a case in point, a survey of over 1,200 educators using the FEFE curriculum revealed the importance of incorporating family influences into discussions of the financial decision making process. For a course to be effective and relevant for students, teachers felt strongly that the content must be discussed in the context of students’ personal and family daily lives. This includes the broad concept of personal well-being as well as explicit recognition that a decision involves a trade-off. For example, an individual may choose a lower paying job because greater work flexibility provides more time for family. Such a decision reflects the individual’s values and therefore enhances his/her well being. Values-based financial education would engage students more directly in identifying tradeoffs in the context of individual values and personal goals for well being.

Survey evidence suggests that financial socialization may matter a great deal in shaping financial attitudes, self-confidence and subsequent financial behaviors (Shim et al, 2009) Technology can facilitate social networking among students and others. This raises the following question. If the influence of families, peers, communities and media interact to form a powerful (and inevitable) influence on individual’s beliefs and attitudes, how can we build a social networking feature into financial education classes that will improve learning and decision making? Perhaps there is even a role for harnessing competition (in some form) in conjunction with social networking to keep students engaged in the subject?

References


---

i Michael E. Staten, Take Charge America Endowed Professor, Norton School of Family and Consumer Sciences, The University of Arizona, Phone: 520-621-9482, E-mail: statenm@email.arizona.edu.

ii Nicole Chinadle Wanago, Director, Family Economics and Financial Education Project, Take Charge America Institute, Norton School of Family and Consumer Sciences, The University of Arizona, Phone: 406-219-3920, E-mail: chinadle@email.arizona.edu.

iii Shawn Cole, Assistant Professor, Harvard Business School, Phone: 617-495-6525, E-mail: scole@hbs.edu.

iv Lois Vitt, Founding Director, Institute for Socio-Financial Studies, Charlottesville, VA, Phone: 434-823-1320, E-mail: lvitt@isfs.org.