

From Financial Literacy to Financial Capability Among Youth

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Youth in the United States are facing an increasingly complex and perilous financial world. Economically disadvantaged youth, in particular, lack financial knowledge and access to mainstream financial institutions. Despite growing interest in youth financial literacy, we have not seen comparable efforts to improve access to financial policies and services, especially among disadvantaged youth. Instead of aiming for financial literacy, an approach widely promoted in the United States, we suggest aiming for financial capability, a concept grounded in the writing of Amartya Sen and Martha Nussbaum. Building on research in the United Kingdom, the paper proposes that financial capability results when individuals develop financial knowledge and skills, but also gain access to financial policies, instruments, and services. The paper addresses theoretical and pedagogical approaches to increasing financial capability, followed by examples of programs in the United States. In the conclusion, we discuss implications for policy, practice, and research.

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Although seldom a mainstream topic in either sociology or social welfare, the financial functioning of individuals and
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families plays a central role in well-being. Financial functioning is deeply intertwined with sociological issues, and social welfare policies and programs should pay greater attention to the financial life of the poor. It may be particularly beneficial to adopt this perspective among young people in preparation for financial challenges ahead.

Youth in the United States face an increasingly complex financial world. With spending power of \$172 billion a year, youth attract the interest of retailers and credit card companies, but have little knowledge about how to make wise consumption decisions. Many accumulate significant debt that may lead to poor credit scores and possible bankruptcy (Norvilitis et al., 2003; Todd, 2002; Consumer Federation of America, 1999). College seniors have average credit card balances of \$2,864; many pay high rates of interest (Nellie Mae, 2005; Lyons, 2004). Minority and low-income youth are particularly vulnerable (Jacob et al., 2000). One study indicates that college students most financially at-risk for credit card debt tend to be female and African American or Hispanic (Lyons, 2004).

At the same time, many youth lack savings accounts and savings. In a recent survey conducted by the Jump\$tart Coalition, 68.5 percent of high school students report owning a savings account (Mandell, 2005). A 1999 study reported that fewer than half of 16 to 22 year old students say that they always save some money, and only half of the students believe that saving is "very important" (American Savings Education Council, 1999, p.1).

Concern about the financial well being of young people and their preparation for making financial decisions in adulthood has led to a groundswell of interest in youth financial education. Private sector organizations such as the National Council on Economic Education (NCEE), the Jump\$tart Coalition, and the National Endowment for Financial Education (NEFE) have been leaders in calling for financial education, developing voluntary national standards and curricula for financial education, as well as instruments that assess young people's financial literacy (NCEE, 2006; Jump\$tart Coalition, 2006a).

The federal government has also begun to recognize the importance of financial education. The Office of Financial Education in the US Treasury Department and the National

Financial Literacy and Education Commission were created in 2002 and 2003 respectively, to develop “a national strategy to promote financial literacy and education” through Title V of the Fair and Accurate Credit Transaction Act of 2003 (U.S. Department of the Treasury, 2006; U.S. Department of the Treasury, 2002). Most recently, the Commission released a national strategy for financial education, establishing a toll-free hotline and clearinghouse of financial education and literacy materials (MyMoney.gov), as well as conducting regional conferences and meetings to create public awareness and build public-private partnerships (U.S. Department of the Treasury, 2006).

At the state level, a small but growing number of states are encouraging or requiring teachers to integrate personal finance concepts into core subjects, such as math, social studies, and economics (Pennsylvania Office of Financial Education, NEFE, 2005). Nonetheless, coverage is far from universal. According to NCEE’s recent “Survey of the States,” 38 states have adopted personal finance standards, but they are not enforced in 15 of those states. Fifteen states require students to take an economics course and only seven states require students to take a personal finance course (NCEE, 2005a). Since the NCEE report, three additional states (Texas, South Carolina, and Virginia) have mandated financial education courses at the middle or high school level (Glod, 2006). While this growth is encouraging, VanFossen (2005) suggests these concepts are more likely to be taught if they are included in compulsory standardized testing.

In this paper, we examine the thinking behind these efforts and suggest an expanded definition of financial literacy towards financial capability. Our use of the term financial capability includes both financial knowledge and access to financial institutions and services.

Toward Financial Capability

Typically, financial education includes background on economics or “. . . the choices we make in a world where we can’t have everything we want and the consequences of those choices” (Roberts, 2005), and personal finance, including

topics such as income, money management, spending, credit, and saving and investing (NCEE, 2002; Jump\$tart Coalition, 2006a). The goal of financial education is to increase financial literacy (Partnership for Financial Literacy Policy, 2006; U.S. Department of Treasury, 2006; Jump\$tart Coalition, 2004; NCEE, 2005b; FDIC, 2004; NEFE, 2004a). Lois Vitt and colleagues (2000) define financial literacy as:

the ability to read, analyze, manage, and communicate about the personal financial conditions that affect material well-being. It includes the ability to discern financial choices, discuss money and financial issues without (or despite) discomfort, plan for the future, and respond competently to life events that affect everyday financial decisions, including events in the general economy (p. xii).

According to this and other definitions, financial literacy includes increases in financial knowledge and changes in financial behavior (U.S. General Accountability Office, 2004; Lyons et al., 2006; Hogarth, Beverly & Hilgert, 2003; Mandell, 2005; Bernheim, Garrett, & Maki, 1997).

In our view, financial literacy is a helpful but not sufficient idea. Participation in economic life should maximize life chances and enable people to lead fulfilling lives. This requires knowledge and competencies, ability to act on that knowledge, and opportunity to act. This involves linking individual functioning to institutions. It also involves use of pedagogical methods that enable people to practice and gain competency in this functioning. We refer to this as "financial capability." Our use of the term financial capability builds on work introduced in the UK and Canada. Financial capability, according to Atkinson et al. (2006), incorporates skills, behavior, and knowledge in five areas: making ends meet, keeping track, planning ahead, choosing products, and staying informed (also see UK Financial Service Authority, 2005; SEDI, 2004). A recent report by Mike Dixon (2006) advances this work by pointing to ways that support and to structures that help people "take steps to become more financially capable" (3). We focus explicitly on the role of institutions, a key feature that may have significant impact on learning and behavior.

Access to financial institutions and financial capability

We turn first to Amartya Sen's and Martha Nussbaum's seminal work on capability theory. Capabilities, or "the freedom that a person has to lead one kind of life or another" (Sen, 1993, 3), may be a productive way to think about well-being. This approach asks if people have adequate opportunities to engage in desired activities permitting them to become who they want to be (Robeyns, 2005). As Sen writes, "Capabilities . . . are notions of freedom in the positive sense: what real opportunities you have regarding the life you may lead" (Sen 1987, 36).

Unlike human capital theory, the capability approach is not purely individualistic in the sense that it takes into account the external environment and array of opportunities open to a person, as well as that person's internal capabilities. For example, according to Ingrid Robeyns, in her analysis of capability theory, "Given the same amount and quality of education, not every child or adult will to the same degree be able to use this education for income-generating activities" (2005, 6). This could be true for internal reasons, e.g., physical or intellectual ability, or external reasons, e.g., cultural barriers, racial or gender discrimination (Robeyns, 2005). Nussbaum writes that a person's *internal capabilities* and the existing *external conditions* make up a person's *combined capabilities* (2000, 85). The goal, Nussbaum suggests, is that we structure the environment—e.g., policies, laws, regulations, practices—in ways that individuals can choose to develop the full range of capabilities that lead to well-being.

What are the implications for education and for financial education in particular? Overall, education, as viewed through the capabilities lens, is important not only because it permits a person to flourish and thrive, but also because it allows a person to develop other capabilities (Nussbaum, 2002; Robeyns, 2005). As a result, education plays a key role in the capabilities approach, showing up on Nussbaum's list of ten basic capabilities (2002, 129-130), and on measures of well-being, such as the Human Development Index, that are used to assess national welfare (UNDP, 1990; Saito, 2003).

Turning back to financial education, it is crucial in modern society that people have the ability to understand, assess, and act in their best financial interests. Unfortunately, current

approaches that emphasize financial literacy may fail in this regard because they do not address external conditions that may inhibit financial capability. What are these external conditions and how do they affect a person's capabilities?

In the United Kingdom, researchers have called attention to the importance of external resources. For instance, Mason and Wilson suggest that financial functioning is dependent on availability of resources (2000, 25). Nonetheless, resources remain in the background largely undefined. The UK Financial Service Authority (2005) treats financial services and institutions as fixed, suggesting that it is up to the individual to know how to use them: "...the information and advice environment can be considered to be an external factor, in the sense that it is fixed - it does not vary from individual to individual, although of course each individual will choose which parts of the information environment they use" (p. 16).

In the United States, evidence suggests that the environment differs a great deal across groups in society. Minority and low-income youth are less likely to have access to mainstream financial systems. Many low-income children and their parents lack checking or savings accounts, investments, insurance, and access to employment-based retirement savings (Carr & Schuetz, 2001; Greenwald & Associates, 2001; Hogarth, Beverly, & Hilgert, 2003; Zhan, Anderson, & Scott, 2006; Jump\$tart Coalition, 2006b). Low-income youth are more likely to come from families who are "unbanked" (Aizcorbe, Kennickell, & Moore, 2003) and therefore lack early information and access. The Parents, Youth and Money Survey reveals that significantly fewer children in lower income families have savings and investment accounts than children in higher income families (Greenwald & Associates, 2001, 11). Moreover, families with low credit scores are often eligible only for high interest sub-prime loans and credit cards. Further, they do not benefit from policies, such as tax benefits for savings and home ownership, which help build wealth in middle-to-upper income households (Sherraden, 1991; Howard, 1997). Differential access to services is also reflected in financial knowledge. In one study, white students scored significantly higher (55%) on a test of financial knowledge than Hispanics (46.8%) or African Americans (44.7%), and students from the highest income

families (over \$80,000 per year) scored significantly higher than lower income students (Jump\$tart Coalition, 2006b).

There is some limited evidence that linking people to financial instruments along with financial education makes a difference. For example, Kotlikoff with Bernheim (2001) found that people who had an allowance, bank account, or investment when they were children saved more of their income as adults. In a pre-test of financial knowledge, Zhan et al., (2006) found that low income participants of a financial management training program offered by Financial Links for Low Income People (FLLIP) scored higher if they had a bank account or filed a tax return (p. 64). A study by NEFE suggests that "the use of mainstream banking services contribute[s] to positive financial behavior" (NEFE, 2004b).

We suggest that differences in young people's access to resources and institutions may affect their ability to absorb and act on knowledge and skills learned in financial education classes. Even when low-income young people (and their parents) receive financial education, this may have little impact on financial well being until and unless they gain access to mainstream financial institutions and services. Although teaching financial concepts to these children may increase their financial knowledge and build financial decision-making skills—i.e., increase financial literacy—these gains in human capital may do little to increase financial capabilities in the absence of access to mainstream financial institutions. Practically, if policymakers and practitioners aim to increase financial capabilities, it is vital not only to develop standards and learning opportunities, but also to increased access to financial institutions.

Without changes in institutional access, financial education could even have negative effects. To illustrate, suppose a middle school student learns that it is important to have a savings account. She goes to a nearby bank with her \$50 earnings from babysitting to open an account only to find that she must have \$300 to open an account, and to make matters worse, the teller is impatient with her. This experience could result in an enduring negative association with banks and diminished capability to act in her best financial interests in the future. From a theoretical perspective, it may produce non-functioning or, in Sen's words, an "unfreedom" (Sen, 1999,

86). Ultimately this outcome represents a loss in the child's ability to accrue and safeguard assets. In practical terms, she might decide to save money at home, and in the future, resort to accessible but higher cost financial transactions through places like check-cashing outlets and payday lenders. This example points to the importance of early experiences that can open doors to new and beneficial opportunities for learning and participation.

A final theoretical question is whether the capability approach can apply to children, who may be too young to exercise freedom and make decisions in their best interests (Saito, 2003). Saito (2003) suggests that the capabilities approach applies to children's education if we take their life span into perspective. She quotes Sen: "When you are considering a child, you have to consider not only the child's freedoms now, but also the child's freedom in the future" (Saito, 2003, 25). With this perspective, beginning to develop financial capabilities in childhood makes sense.

Building Financial Capability: Experiential Learning Through Access to Financial Institutions

How can access to financial institutions be built into financial education curricula for children and youth? Early educators, such as John Dewey, emphasized the importance of learning by doing, arguing that teaching should not be isolated from real life experience (Harris, Denise & Thomas, 1989; Dewey, 1938). Experiential learning allows students to test their understanding and explore their developing ideas through interaction with the environment (Gregory, 2002; Galligan, 1995; Harris, Denise & Thomas, 1989; Kolb, 1984). Experiential learning uses a cycle of action, reflection, conceptualization, and new experience. This process permits the learner to adopt new theoretical constructions and knowledge, and leads to further experiences and new learning (Gregory, 2002; Kolb, Boyatzis, & Mainemelis, 1999). What may be especially powerful about experiential education is that it educates the whole person by promoting development in all three learning domains: cognitive, affective, and behavioral (Galligan, 1995).

Jarvis (2002) and Tosey (2002) discuss a variety of

experiential teaching methods including practice-based learning, role-play, simulation, imagination and inner exploration, encounter, and group work. While each of these methods offers value, we focus here on practice-based learning such as apprenticeships or internships, because they occur "in the real world, under slightly sheltered conditions" (Jarvis, 2002; p. 123). It is important to add that it is not the practice only, but also the preparation prior to and reflection after the experience that are part of the learning process (Jarvis, 2002). As Kolb and colleagues point out: "These reflections are assimilated and distilled into abstract concepts from which new implications for action can be drawn. These implications can be actively tested and serve as guides in creating new experiences" (1999, p. 3).

According to Galligan (1995), the crux of John Dewey's "... model of pragmatic education (1916) linked knowing and doing in a way that created a bridge between experience, critical thinking and participatory democracy" (p.191-192). Researchers have suggested for years that appropriate direct experience complements classroom teaching in a way that develops understanding in young children (Fox, 1978; Sutton, 1962; Furnham, 1996). For example, research suggests that children understand consumer relationships before they understand production because they have more personal experience with the former (Danziger, 1958). Further, children who are given an allowance learn how to handle money more responsibly, and are more sophisticated money managers (Pliner et al., 1996). Similarly, managing a savings account may contribute to children's ability to understand concepts related to saving and investment. Thus, in our application to financial education, linking the experiential process with access to financial institutions might be used to promote learning.

However, most financial education programs that employ experiential learning do not provide access to financial institutions. Well-known programs, such as the Junior Achievement (JA) program and the NEFE High School program, are typically taught over the course of several weeks (Junior Achievement of Dallas, Inc., 2006; NEFE, 2004a) and employ role-play and simulation. JA's yearly evaluations indicate that students have a better understanding of economic concepts

than non-JA students (Junior Achievement Worldwide, 2006). An evaluation of the NEFE High School program, which has been used with over two million youth, similarly indicated statistically significant increases in financial knowledge, and self-reported behavior such as tracking expenses and saving money, and confidence in making financial decisions (Danes, 2006). Nearly half of students (46.5%) reported that the most important thing they had done with their money was to open a savings or checking account. Yet, over 70% of the sample was Caucasian.

The JA and NEFE programs do not build in access to financial institutions and services in their curricula. In the following section, we present two approaches that integrate financial education and access to the financial services sector. Each is illustrated with examples of programs. Outcomes are explored and questions are raised for further study.

Financial education plus savings accounts

One type of experiential financial education program is bank-at-school. These partnerships between schools and financial institutions are not new. Established in the late 1800s, school banking in the public schools emphasized thrift and savings (Cruce, 2001). School banking programs grew until the 1960s and 1970s when they began to cost more than banks were willing to pay (Cruce, 2002; Samuel, 1996).

This type of program has regained popularity as concern about financial literacy has grown (Cruce, 2002). Credit unions, in particular, have been successful establishing in-school programs. Currently, there are 198 high schools, 41 middle schools, 207 elementary schools, two K-12 schools, and 13 youth centers in 30 states that have youth-run credit union branches in schools (Credit Union National Association, 2007).

School banking programs vary by target population, type of financial education, and account design. Programs continue to be developed and refined but, typically, a financial institution collaborates with one or more schools to allow youth to open and make deposits into a savings account. Financial institution representatives, adult volunteers, or youth trained as tellers collect and deposit savings in the financial institution (Community Investment Unit, Sargent Shriver National

Center on Poverty Law, 2005).

Save for America. Begun in 1980, Save for America is a federally sponsored school banking program, co-sponsored by the US Departments of Treasury and Education, and operated in partnership with local financial institutions and schools or youth organizations. Save for America uses the Department of Education-approved school savings curricula, and also provides a no-fee savings account to participating youth. The financial education curriculum is designed for use by teachers and parents, and is available for grades kindergarten through sixth grade (see Table 1). Deposits are made at school, typically on a weekly basis, and transferred by parents and other volunteers to the financial institution. As of 2005, the program reports that over two million youth have graduated from the program (Save for America, 2005).

Illinois Bank-at-School. In 1992, the State of Illinois Treasurer's Office initiated a statewide voluntary bank-at-school financial education program for fourth through eighth graders. Banks and credit unions partner with participating schools, and banking representatives collect deposits at the school at least once a month. Teachers use a financial education curriculum provided by the Treasurer's Office (Illinois State Treasurer's Office, 2005). As of 2004, Illinois reports over 200,000 students participating in the state's bank-at-school program (Topinka, 2004).

Financial education and matched savings accounts

Some programs also use institutional access and savings incentives as a way to build savings (Sherraden, 1991; Sherraden et al., 2003). One of three programs described in this section, Credit Where Credit is Due, Inc., is a school banking program that incorporates year-end high saver bonus contributions while the other two programs use matched savings as a core element. The latter two are part of the Saving for Education, Entrepreneurship and Downpayment (SEED) initiative, a nationwide four-year demonstration of children's savings in 12 programs across the United States targeted to low and moderate income families (CFED, 2003).

Credit Where Credit is Due, Inc. (CWCID). In 1998, a New York City non-profit, CWCID initiated collaboration with

Neighborhood Trust Federal Credit Union to provide monthly financial education and savings accounts to fourth and fifth grade students at five elementary schools. The program targets two very low-income immigrant neighborhoods. Unlike other school banking programs, CWCID awards a year-end distribution of funds from the school's matching gifts program into the accounts of the highest savers. CWCID requires that account withdrawals be made at the credit union with adult supervision, hoping to increase parental participation in financial services. At the end of the 2004/2005 school year, 400 children had received financial education and 1,200 children had opened accounts with a savings total of \$51,000 (CWCID, 2005).

Juma Ventures. Juma Ventures is a not-for-profit youth development organization that teaches job skills, offers employment opportunities, and provides career counseling to approximately 400 youth (ages 15 to 19). In 1999, the organization initiated a matched savings program that included financial education, a savings account, and a savings match rate ranging from 2:1 to 3:1, depending on type of asset purchased. Since then, 600 youth have opened matched savings accounts and saved more than \$400,000 of their own money (G. Mello, personal communication, November 3, 2006; Juma Ventures, 2006). In 2004, as part of SEED, Juma Ventures modified its program to a match rate of 1:1 with financial incentives of \$300 for completing high school and \$200 for completing a course in financial education. Family members are also encouraged to contribute to the savings account. Allowable asset purchases include education, homeownership, microenterprise, and computer purchase (Juma Ventures, 2004; San Francisco Federal Reserve Bank, 2005). Savings sources include employment income, birthday and holiday gifts, parental deposits, and asset transfers from other accounts, with direct deposit being "extremely helpful" for the youth to facilitate their saving (Scanlon & Adams, 2005; p. 14). After an average of 27 months participation, the 76 youth in the SEED program had saved over \$46,000 and accumulated \$86,692 (including match) in total savings (Mason, Loke, & Clancy, 2006).

I Can Save (ICS). ICS provides financial education and matched savings for college to two cohorts of public elementary school children (Gonzalez-Rubio, 2005; Sherraden et al., 2007).

The school serves families representing a broad mix of income, although a majority is low-income (57 percent participate in the free school lunch program). Children receive financial education instruction in an after-school ICS Club operated by Beyond Housing/Neighborhood Housing Services. The club meets once a week during the school year engaging students in games, projects, and monthly visits to the bank to deposit savings. Classroom teachers initially included some financial education into classroom activities but Beyond Housing now provides weekly classroom instruction. Parents receive periodic financial education on topics including money management, spending, credit, debt management, and saving and investing.

Children own savings accounts that are opened with an initial deposit of \$250 at the bank across the street from the school. A one-to-one match incentive is provided for all deposits into the savings accounts made by children, their parents, and other contributors until program end when the total amount in the accounts (\$3,000 if families deposit the full amount that can be matched) is estimated to cover approximately two years tuition at a community college (Sherraden et al., 2007). The program offers opportunities for children to earn small amounts of money by attending ICS Club, and for parents by attending ICS financial education classes. (Children receive one dollar every week that they attend an ICS Club session. This is deposited during a monthly visit to the bank, where their "earnings" are matched by another dollar. Each time a parent attends a financial education workshop, \$25 is deposited in the child's ICS account and equally matched.) These "earnings" are automatically deposited into their accounts. At the end of the four year program, savings are rolled over into Missouri's 529-college savings program (Clancy, Orszag, & Sherraden, 2004). After two years of program operation, 74 children (of 75 total children in the two grades) enrolled in the program and opened a savings account. After an average 30 months of participation, youth had accumulated total savings of \$73,618, including incentives (Mason et al, 2006).

Summary and Areas for Further Study

These examples illustrate a range of programs that aim to build financial capability (Table 1). Beginning as early as kindergarten, the programs offer children the opportunity to build financial knowledge and skills through financial education. Each program also provides a savings account in a bank or credit union. These accounts provide a way for children to apply financial concepts through owning a savings account, and to increase familiarity with financial institutions. For many children—and some of their parents—these accounts are the first bank instruments they have owned. In some programs, there are also mechanisms that encourage family participation through workshops.

In all of the programs except Juma Ventures, programs partner with one or more local schools. School systems offer many advantages to financial capability programs. First, universal access through the schools means that almost all children gain exposure to financial instruction and a savings account. One can imagine a policy where all children entering school would open a savings account and begin to receive age-appropriate financial education. Other options might be made available along the way for depositing money in their accounts. In the sample of programs, Save for America at the federal level, and Illinois Bank-at-school at the state level, come the closest to being universal. However, unlike the pilot programs, they do not offer savings matches. Future research should compare the capacity of the latter programs to reach all children.

A related question is how to reach groups of financially underserved children. In the programs highlighted in Table 1, community-based programs explicitly target minority and low-income families. Research can explore ways in which universal programs, such as Save for America and Illinois Bank-at-School, might reach underserved and economically disadvantaged youth. One possibility would be to employ community-based agencies to provide options for local groups to reach out to and provide more intensive programming to target populations (Sherraden, Laux, & Kaufman, in press). These might include culturally specific curricula, education and training for parents, ways for children to earn money to

deposit in their accounts, and incentives for saving. Research should assess the impacts of these interventions on long-term financial capability.

The educational focus of schools is also an advantage. However, in all cases highlighted except Illinois bank-at-school, community-based organization staff, not teachers, teach

Table 1. Sample Financial Capability Programs

Grade Range	Duration of Financial Education	Staffing	Experiential Learning Approach	Family Involvement
Financial Education with Savings Accounts				
<i>Save for America Program</i>				
Grades K – 8	Two months (K – 6)*	-Adult volunteers assist with weekly deposits -Teachers and parents provide financial education	Open savings account	Assist with program implementation
<i>Illinois Bank-at-school Program</i>				
Grades 4 – 8	Unit of 12 lessons	School and financial institution provide financial education	Open savings account	Contribute to saving in child's account
<i>Credit Where Credit is Due Program</i>				
Grades 4 – 5	School year - monthly	Community organization provides financial education	-Open savings account -Bonus match for high savers	Contribute to saving in child's account
Financial Education with Matched Savings Accounts				
<i>Juma Ventures Program</i>				
Ages 15-19	Periodic workshops	Community organization provides financial education and job training	-Job placement -Open savings account -Incentives and savings match	Contribute to saving in child's account
<i>I Can Save Program</i>				
Grades K – 4	School year -weekly after school club - weekly in class	Community organization provides financial education	-Open savings account -Initial "SEED" grant -Savings match for deposits	-Attend financial education workshops -Contribute to saving in child's account

*A financial education curriculum is not specified for grades 7 and 8 (Save for America, 2005).

financial education. This raises the question whether teachers should play a larger role in financial instruction. Although community-based partners may be experts in the field, this approach may also be more costly. However, teachers already feel stretched by the requirements of the No Child Left Behind Act and may be reluctant to assume responsibility for financial instruction. Further research should sort out the most efficient and effective methods for delivering financial instruction.

These sample programs also target different age groups (see Table 1). Relatively little is known about which interventions are the most appropriate at various ages. Children might benefit the most if they received a savings account at school entry (or before, as will be discussed in the next section), but financial concepts should be introduced based on children's cognitive and emotional development (Sonuga-Barke & Webley, 1993). Additional research is essential to determine the developmentally appropriate and effective ages for introducing education and accounts.

Regarding family participation, Save for America encourages parents to volunteer in program implementation, to teach financial education and to assist in collecting weekly savings deposits. In programs such as ICS and CWCID, the focus is on motivating parents to save in their children's accounts. Other key issues, then, are to understand more fully the optimal roles for parents and the effectiveness of including parents in children's financial education programs.

Notably, in ICS and Juma Ventures, there are opportunities for matched deposits in the children's savings accounts. These aim to generate enthusiasm for financial education, to provide incentives to save, and to build savings (Sherraden, 1991; Scanlon & Adams, 2005). Focus groups with Illinois caseworkers, trainers, and low-income families, designed to identify components to include in financial literacy programs for low income workers and welfare-to-work recipients, also suggest that matched savings are an attractive option (William M. Mercer, Inc., 2001). Research on ICS suggests that children, families, and teachers are enthusiastic about the savings match, but many families are not on track to draw the entire possible savings match (Sherraden et al., 2007). Additional research is needed to determine the impacts of matches on saving and on developing financial capability.

Other research on matched savings programs such as IDAs indicates that adult students who are saving for post-secondary education benefit more from financial education and save more than adult non-students who are saving for post-secondary education (Zhan & Schreiner, 2005). Financial education and participation in a matched savings program *while in school* may be an important combination, especially for setting intermediate goals to bolster saving and develop financial capability.

Without features like matched savings, school-based financial capability programs may simply reproduce wealth inequality at the elementary school level because low-income families have less to deposit in a children's account than higher income families. Children themselves have only limited means to come up with "the wherewithal," from such sources as allowances, holiday money, birthday money, chores, and jobs in and out of the home (Webley, Burgoyne, Lea & Young, 2001, 32-33), and even the contributions from these sources will vary by social class. Savings programs that provide bonuses to individuals for reaching a savings threshold may exacerbate inequality. Therefore, programs should create opportunities for additional sources of savings for low-income children. Possibilities include savings matches, bonuses for classrooms or schools that reach participation or savings threshold goals (these could vary by school), academic achievements (e.g., attendance, reaching personal goals, homework completed), or school community service projects.

A related question is the benefits and costs of financial capability programs. Programs, such as ICS and Juma Ventures, are surely the most expensive. At this time, however, we cannot determine the relative benefits or costs. What aspects of the savings accounts, incentives, and financial education are most effective? For example, do saving incentives increase learning or would it be as effective to provide no match, or a higher match? What amount of financial education contributes to financial capability?

Finally, we need experimental research designs that accurately measure impacts that distinguish effectiveness of interventions. In order to parse out the benefits of particular curricula, approaches to teaching, and impact of accounts, research should examine the relative contributions of each to

successful financial capability, especially among economically disadvantaged youth and their families. This paper makes a case for experiential learning that includes ownership of a savings account and incentives for saving; however, it is possible that outcomes might be equal or better if children were simply issued a savings account (independently of the school) and offered basic financial instruction in school.

In order to gain a true understanding of a person's financial capability, measures should include assessments, not only of financial knowledge, but also financial decision making, participation in financial institutions, and level of individual savings and debt. It is particularly important to assess these measures for minority and lower income households who historically have had limited access to mainstream financial services (Hogarth et al., 2003).

Conclusion and Policy Implications

There is growing interest in financial education for youth. Public, non-profit, and for-profit organizations have created curricula, many of which incorporate imaginative experiential learning methods. While encouraging, these programs do not adequately take into account the fact that many disadvantaged youth lack access to mainstream financial institutions and asset building policies (Sherraden, 1991). In this paper, we suggest that a limited focus on financial literacy may work quite well for children whose families already have access to these institutions, but may not work as well for children whose families lack access. Although these children may learn enough to pass a test of financial knowledge and they may even be able to recite desired financial behaviors, they will not have developed what we call financial capability.

In order to develop financial capability, we suggest that financial education should include access to financial institutions, possibly with savings incentives. This is not to suggest that financial education by itself is not useful, or that access to financial accounts by themselves may not also be effective. Instead, we believe that a combination of financial education, institutional access, and opportunities for savings accumulation may be more effective. Without increasing institutional

access, we run the risk of repeating approaches employed in the early 20th century that focused on the financial incompetence of the poor rather than directly addressing inequality. As Viviana Zelizer (1997) suggests, at that time social workers were all too ready to supervise families' economic behavior. "The managerial incompetence of the poor provided a perfect loophole to justify the active intervention of social workers in the domestic economy of their clients. For despite new environmental theories of poverty, it was still simpler to redo private economies than tamper with the public market" (Zelizer, 1997, 152). We suggest that this time we should address these institutional inequalities.

Most programs discussed in this paper are relatively small, although Save for America and Illinois Bank-at-School offer a glimpse of the potential magnitude of participation with government support. Another approach would be to provide a savings account for every child at birth and to encourage families and children to participate by providing a savings account with a small grant to launch every child's savings account (Sherraden, 1991; Lindsey, 1994; Goldberg, 2005). This idea is embodied in the current legislative proposal for "Kids Accounts" proposed in the Aspire Act (Corzine et al., 2005; New America Foundation, 2005). Inspired by United Kingdom's Child Trust Fund and experiments with IDAs in the United States (Sherraden, 1991, 2002; Schreiner et al, 2005; Child Trust Fund, 2006), Aspire offers an opportunity for financial education to meet the real world. It proposes that every child born in the United States receive an account with an initial \$500 deposit. Eligible low-income families could receive matched savings incentives and supplemental deposits. If all children had savings accounts at birth, would financial education become more compelling? All children—not just wealthy children with savings accounts or trust funds—might be able to apply what they are learning in financial education. Lessons on money management, saving, and investment might take on greater meaning, and as a result, might have greater impact. Moreover, if each child owned an account, parents might be drawn into financial education and the financial system as well.

If all children came into school with a savings account,

they could be met with universal financial education, using their accounts in lessons on economic decision-making and money management. Implementation of a national policy for kids' accounts with universal financial education would send a clear message of commitment to the financial success and well being of future generations. In this way, we might have a nation of "financially capable" young people.

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