

Working Papers

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Working Paper 06-11

2006

Revised version published as:

Johnson, E., & Sherraden, M.S. (2007). From financial literacy to financial capability among youth. *Journal of Sociology and Social Welfare* 34(3), 119-145.



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CSD Working Paper 06-11

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Abstract

From Financial Literacy to Financial Capability Among Youth

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 institutional access to financial institutions and services. Instead of aiming for *financial literacy*, we suggest aiming for *financial capability*, a concept that builds on the writing of Amartya Sen and Martha Nussbaum. The paper proposes that financial capability results when individuals develop financial knowledge and skills, but also gain access to financial instruments and institutions. The paper addresses theoretical and pedagogical approaches to increasing financial capability, followed by examples of programs. Questions for further study are suggested. In the conclusion, we discuss implications for policy and practice.

Keywords: financial education; financial capability; financial literacy; children; youth; savings

From Financial Literacy to Financial Capability Among Youth

Although seldom a mainstream topic in either sociology or social welfare, the financial functioning of individuals and 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 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 black or Hispanic (Lyons, 2004).

At the same time, many students 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 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, 2006; Reilly, 2005; Georgia Dept of Education, 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, 2005). 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 capabilities includes access to financial institutions and services. We address the theoretical foundation for this recommendation and pedagogical approaches to increasing financial capability among young people. This is followed by examples of programs and questions for further study. In the conclusion, we discuss implications for policy and practice.

Toward Financial Capability

Typically, financial education includes background on economics or on “. . .the choices we make in a world where we can't have everything we want and the consequences of those choices” (Roberts, 2005:1), or personal finance topics such as income, money management, spending, credit, and saving and investing (NCEE, 2002; Jump\$start Coalition, 2006a). The goal of financial education is to increase financial literacy (Partnership for a Financial Literacy Policy, 2006; U.S. Department of Treasury, 2006; Jump\$start Coalition, 2004; NCEE, 2005; FDIC, 2004; NEFE, 2004a), which Lois Vitt and colleagues (2000) define 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).

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 is more likely when people are able to convert knowledge into action. This, in our view, includes linking individual functioning to social institutions, and pedagogical methods that enable them to practice and gain competency in this functioning. We refer to this as financial capability.¹ We discuss these in greater detail below.

Access to financial institutions and financial capability

We turn first to Amartya Sen's and Martha Nussbaum's seminal work on capabilities. 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

¹ The term "financial capability" is also used in the UK and Canada, but while it represents an expanded version of financial literacy to include economic citizenship, it does not include linking people to financial institutions. For example, according to the Financial Services Authority: "Financially capability people are able to make informed financial decisions. They are numerate and can budget and manage money effectively. They understand how to manage credit and debt. They are able to assess needs for insurance and protection. They can assess the different risks and returns involved indifferent saving and investment options. They have an understanding of the wider ethical, social, political and environmental dimensions of finances" (2005, 13). The Canadian government defines

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, p. 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, p. 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?

financial capability as: “including financial knowledge and understanding, financial skills and competence, and financial responsibility” (Canada, Financial Consumer Agency, 2005, 4).

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 largely undefined and in the background. 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 it: "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).

Unfortunately, in the United States, evidence suggests that the environment differs a great deal across groups in society. Minority and low-income youth are likely to have less knowledge about and 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\$Start 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; p. 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, 2006).

There is some limited evidence that linking people to financial instruments along with financial education makes a difference. For example, Kotlikoff and 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 people's access to resources and institutions affect young people's 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 on top of that the teller treats her unkindly. 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, p.86). Ultimately this outcome represents a loss in the child's ability to safeguard and accrue 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 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 applies to children, who may be too young to make decisions and exercise freedom 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, p. 25).

Building Financial Capability: Experiential Learning Through Access to Financial Institutions

How can access to institutions be built into financial education curricula? 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; Mezirow, 1992; 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., 1997). 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, 2004) 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, that has been used with over two million youth, similarly indicated statistically significant increases in financial knowledge, in behavior such as tracking expenses and saving money, and confidence in making financial decisions (Danes, 2004).

Less common are growing numbers of financial education programs that include actual access to financial institutions and services. In the following section, we present two approaches illustrated with examples. The programs are described, outcomes explored and questions raised for further study.

Financial education plus savings accounts

One type of experiential education-based financial education program is bank-at-school. These partnerships between schools and financial institutions are not a new concept. In the late 1800s, New York City School Commissioner J. H. Thiry established school banking in the public schools (Cruce, 2001). With an emphasis on thrift and savings, 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 banking at 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, 2006).

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 partners 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 deposits that are deposited at 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 third through sixth graders. Banks or credit unions are matched 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 the programs described in this section is a school banking program with the possibility of a year-end high saver bonus contribution while the other two use matched savings as a core element. The latter two are part of the Saving for Education, Entrepreneurship and Downpayment (SEED) initiative, a nationwide demonstration of 12 children's savings programs across the United States that began in Fall 2003 (CFED, 2003).

Credit Where Credit is Due (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 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, 2006).

Juma Ventures. Juma Ventures is a not-for-profit youth development organization that teaches life skills and job skills and provides career counseling to approximately 300 youth (ages 15 to 19) annually. In 1999, the organization initiated a matched savings program that included financial education, a savings account, and a one-to-one savings match. Since then, 800 youth have opened savings accounts and saved more than \$300,000 of their own money (Juma Ventures, 2006). As part of SEED, Juma Ventures modified its program to include financial incentives of \$300 for completing high school and an additional \$200 for completing a course in financial education. Family members are encouraged to contribute to the savings account, and the program offers parents an option for direct deposit into the account (San Francisco Federal Reserve Bank, 2005). After 24 months, the 76 youth participating in the program had accumulated over \$75,755 (including incentives) 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., forthcoming). Children receive financial education instruction in an after-school I Can Save Club once a week during the school year, including games and monthly visits to the bank to deposit savings. Teachers also include some financial education into classroom activities. 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 made for all deposits into the

savings accounts made by children, their parents, and other contributors until 2007 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., 2006). The program offers opportunities for children to earn small amounts of money by attending I Can Save Club, and for parents by attending ICS financial education classes. These “earnings” are automatically deposited into their accounts. At the end of the program, savings are rolled over into Missouri’s 529-college savings program (Clancy, 2001). After two years of program operation, 73 children (of 75 total children in the two grades) enrolled in the program and opened a savings account. After 24 months, youth had accumulated total savings of \$64,884 (including incentives) (Mason, Loke, & Clancy, 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 may be the first bank instruments they have owned. In some programs, there are also mechanisms that encourage family participation through workshops. In some there are opportunities for matched deposits in the children’s savings accounts.

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 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 to closest to being universal. Future research should compare the capacity of programs like these to reach the most 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. 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 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 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 burdened 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.

Table 1. Sample Financial Capability Programs

	Financial education program	Grade range	Duration of financial education	Staffing	Experiential learning approach	Family involvement
Financial education with savings accounts						
	<i>Save for America</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</i>	Grades 3 – 6	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</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</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</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).

These programs also target different age groups (see Table 1). Relatively little is known about which interventions would be the most appropriate at different 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. 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, helping to teach financial education and assisting with the process of collecting the weekly savings deposits. In programs such as ICS and CWCID, the focus is on motivating parents to save. Other key questions, then, are to understand more fully the optimal roles for parents and the effectiveness of including parents in children's financial education programs.

CWCID, ICS, and Juma Ventures also provide a savings match or other bonus incentive along with a savings account. These aim to generate enthusiasm for financial education, to motivate greater saving among youth, and to build a savings account (Scanlon & Adams, 2005). A focus group with Illinois caseworkers, trainers, and low-income families, designed to identify components to include in a financial literacy program, suggested that matched savings are an attractive option (William M. Mercer, Inc., 2001), and research on adult students saving for post-secondary education suggests financial education and matched savings accounts have a positive impact on savings behavior (Zhan & Schreiner, 2005). 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., forthcoming; Schreiner forthcoming). Additional research is needed to determine the impacts of matched savings on developing financial capability.

A related question is the benefits and costs of these programs. Intensive 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 accounts and the education are most

effective? For example, do saving incentives increase deposits or would it be more 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 would help to 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 decision making. This paper makes a case for experiential learning that includes ownership of a savings account (and possibly 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 received 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. In this paper, we suggest that an approach to financial education that focuses solely on financial literacy may work well for children whose families already have access to mainstream financial

institutions, but will not benefit as much those children whose families do not use banks and other mainstream financial institutions. Although these children may learn enough to pass a test of financial knowledge and they may even be able to recite desired financial behaviors, but 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 cannot also be effective. Instead, we think that the combination of financial education and financial institution access may be an effective combination.

Most programs discussed in this paper are relatively small, although Save for America and Illinois Bank-at-School offer an idea 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 & Cohen, 2000; 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 (Sherraden, 2002; 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 savings accounts, they could be met with universal financial education, which could use their accounts in lessons on making economic choices and developing money management skills. 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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