

Research Background Paper

**Financial Education
in a Children and Youth Savings Account
Policy Demonstration: Issues and Options**

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George Warren Brown School of Social Work

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Children and Youth Savings Account Policy Demonstration

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INTRODUCTION

Individuals may acquire financial knowledge, attitudes, and behaviors from informal and formal sources. Informal sources include parents, other relatives, and friends. Formal sources include financial education courses are offered by public organizations (e.g., schools and the Cooperative Extension System) and private organizations (e.g., consumer credit counseling agencies, financial institutions, and private employers). Financial education is often a mandatory component of home-ownership and Individual Development Account (IDA) programs, and it is assumed that financial education leads to increased home ownership and saving (Caskey, 1998). One question of interest to the Children and Youth Savings Account Policy Demonstration (CYSAPD) is whether formal financial education makes children and youth savings accounts (CYSAs) more effective. In other words, are positive outcomes from CYSAs more likely when account-holders (or their parents) also receive formal financial education?

In this paper, we summarize evidence regarding financial education, state our assumptions regarding financial education in CYSAPD, discuss key questions related to financial education in CYSAPD, and, where possible, make recommendations.

WHAT DO WE KNOW ABOUT EXISTING FINANCIAL EDUCATION?

INFORMAL FINANCIAL EDUCATION

As one might expect, parental involvement in teaching or modeling saving behavior appears to influence children's attitudes regarding finances (Matthew Greenwald & Associates, Inc., 1999; 2001; Schorr, 2001). In fact, 94 percent of students say that they are likely to use their parents as a source of financial information (Matthew Greenwald & Associates, Inc., 1999), and 60 percent of parents say that their child has asked about financial matters (Matthew Greenwald & Associates, Inc., 2001). In one study of 1,619 employed high school seniors and their parents, students who saved were more likely to have parents who saved in general, who saved specifically for college, and who planned how they would use their money (Pritchard et al., 1989).

But how well are parents doing? Thirty-one percent of students say their parents rarely or never discuss with them setting financial goals (Matthew Greenwald & Associates, Inc., 1999), and less than half of parents can think of more than one thing they have done to teach their children about financial matters (Matthew Greenwald & Associates, Inc., 2001). Parents with incomes of less than \$35,000 may be less equipped than parents with higher household incomes to be sources of financial information for their children (Matthew Greenwald & Associates, Inc., 2001). These findings suggest that informal sources of financial education are inadequate.

FORMAL FINANCIAL EDUCATION

Evidence for Adults. For many American adults, financial information is delivered in the workplace and is related to retirement savings, especially 401(k) plans. Retirement-saving material focuses on increasing knowledge of financial topics and, because 401(k) plan participation is typically voluntary, the link between current choices and retirement income. Limited research on 401(k) plans indicates that both plan participation rates and saving rates increase with employees' exposure to financial education (Bayer, Bernheim, and Scholz, 1996; Clark & Schreiber, 1998). Bernheim and Garrett (1996) found that in firms that offered financial education, participation rates were 20 percentage points higher for employees who chose to attend than for those who did not, and that employer-based education significantly increased household and retirement savings. Garman et al. (1999) also found that financial planning workshops produced positive changes in employees' personal financial behaviors.

Low earners are less likely than more highly compensated individuals to work for employers who offer 401(k) plans and are therefore less likely to receive workplace financial education. However, some low-income adults receive financial education through IDA programs. Two studies of IDA participants suggest that completing up to 12 hours of financial education has large, positive effects on saving deposits (Schreiner et al., 2001) and on saving frequency (Clancy et al., 2001).

Evidence for Youth. Personal finance classes for youth may also positively impact financial knowledge and saving behavior. In a study of 418 teens participating in a high school financial planning program (Boyce et al., 1998), financial knowledge, behavior, and self-efficacy improved immediately after program participation. Additional progress was reported three months after program participation: fifty-eight percent of participants reported changes in spending habits (e.g., thinking more carefully about spending, saving money for purchases, or buying only necessary items), and 56 percent reported changes in savings habits (e.g., starting to save, or saving more than previously).

In another study of 418 students who completed a personal finance course, 41 percent of participants said the course altered the way they handled money. Behavior changes included initiating saving, increasing saving, investing savings differently, and developing a budget (Matthew Greenwald & Associates, Inc., 1999). Ultimately, evidence suggests that participation in a financial education curriculum during high school may raise saving rates when youth reach adulthood (Bernheim, Garrett & Maki, 2001).

Other statistics are less encouraging, however. Most students aged 16-22 have never taken a personal finance class (Matthew Greenwald & Associates, Inc., 1999). In 2000, the average score for 723 public high school seniors on a personal finance test was 52 percent (Mandell, n.d.). The average score for 1,532 high school seniors on the same test in 1997 was 57 percent (Mandell, 1998), perhaps indicating that financial literacy among youth is declining.

Limitations and Caveats. Existing evidence regarding the effectiveness of financial education is limited for several reasons. First, financial education differs. The content of sessions, the types of materials used, the quality of teaching, and the student/teacher ratio vary among settings, so one can argue that each study evaluates a particular financial education course, not financial education in general. Second, self-reported survey responses from financial education participants may not accurately reflect program effects, either because individuals give responses they believe will please evaluators or because they overestimate the efficacy of their own behavior.¹ Finally, many financial education participants volunteer to complete financial education programs and are therefore likely to be more motivated to improve their financial knowledge and behavior than those who have not volunteered to attend financial education courses. Thus, changes in financial knowledge and behavior observed in participants may have occurred even without the financial education program. Random assignment experiments—with one group receiving financial education and another group not receiving financial education—are needed to sort out the effects of selection from the effects of financial education.

ASSUMPTIONS REGARDING FINANCIAL EDUCATION IN CYSAPD

Limited research suggests that financial education may be an important component of CYSAs; yet more information is necessary to determine whether financial education will make CYSAs more effective. In this section, assumptions regarding financial education in CYSAPD are noted (1) because they are related to key questions and recommendations in the next section; and (2) to promote discussion between the CYSAPD designers at the Corporation for Enterprise Development (CFED), and CYSAPD evaluators at the Center for Social Development (CSD) and the University of Kansas (KU).

- Assumption 1.** Financial education is included as a component of the demonstration in order to determine whether financial education makes CYSAs more effective.
- Assumption 2.** Random assignment is the most appropriate research design. The effects of financial education will be evaluated by randomly assigning individuals to a control group and to multiple treatment groups (with and without financial education).
- Assumption 3.** At the preschool site, financial education will be provided to parents.
- Assumption 4.** At the teen site, financial education will be provided to teens and delivered in a school setting.
- Assumption 5.** Several characteristics of a financial education course might matter for CYSAs. These include:

¹ In fact, participants in one recent study reported positive changes in financial knowledge and money management, but their actual behavior differed very little from the behavior of those who had not completed the financial education course (Matthew Greenwald & Associates, Inc., 1999).

1. content related to financial literacy topics (presumably leading to increased knowledge)
2. content related to saving benefits, saving goals, and the link between current choices and future opportunities (presumably leading to increased motivation)
3. content related to saving strategies (presumably leading to more effective behavior)
4. timing of the course (i.e., does it matter if an individual completes a financial education course before, rather than after, receiving a CYSA?)
5. peer interaction and support
6. staff interaction and support
7. CYSA-specific content (e.g., discussing the benefits of saving in CYSAs, discussing saving goals with reference to CYSAs)

However, it is not feasible for CYSAPD to provide a comprehensive evaluation of financial education. For example, the demonstration will not assess the effects of the different components of financial education, and it will not reveal what type of financial education is most effective. Also, it may be difficult to take programs that emphasis peer and staff interaction to scale, so these components of financial education should be de-emphasized.

Assumption 6. The ultimate goal of the demonstration is a universal CYSA policy. The desire to go to scale should inform all program and evaluation decisions.

KEY QUESTIONS AND RECOMMENDATIONS FOR CYSAPD

In this section, three key questions related to evaluating financial education in CYSAPD are reviewed. To reduce costs, it is recommended that financial education be evaluated only at experimental design (random assignment) sites. CSD and KU have recommended two experiments, one with accounts for pre-school children and one with accounts for teen-agers.

Question 1. How many treatment groups should there be?

Options: There are three possible treatment groups (plus one control group): CYSA and financial education; CYSA-only; and financial education only. Thus, there are four options for the random assignment groups:

Option	Control	CYSA and Financial Education	CYSA Only	Financial Education Only
1a	✓	✓	✓	✓
1b	✓	✓	✓	
1c	✓	✓		✓
1d	✓		✓	✓

Discussion: If financial education makes CYSAs more effective *and* CYSAs make financial education more effective, then it is possible to assess the independent effects of financial education and CYSAs only by having all three treatment groups (Option 1a). Of course, more groups mean more complexity and higher costs. Also, if the total number of accounts at the experimental site is constrained, then more groups means smaller samples.

If the decision is made to limit the design to two treatment groups (Option 1b, 1c, or 1d), it makes sense to omit the financial education only group (i.e., to choose Option 1b) because assessing the independent effects of CYSAs is a higher priority (in CYSAPD) than assessing the independent effects of financial education.

However, as noted previously, there is a great need for experimental-design evaluations of financial education programs, so the demonstration can make an addition contribution to knowledge by also estimating the independent effects of financial education.

If there are two experimental sites, it is possible to have three treatment groups at one site (Option 1a) and two treatment groups (Option 1b, 1c, or 1d) at the other site.

Recommendations: At the preschool site, financial education will be offered to parents and will presumably be voluntary. (It is difficult to imagine enforcing mandatory financial education for parents in a CYSA program, especially when the program is taken to scale.) However, parents in a voluntary financial education-only group are unlikely to attend financial education classes. Therefore, in this site, we recommend only two treatment groups: a CYSA-only group and a CYSA and financial education group (Option 1b).

At the teen site, financial education will be offered to the teens and delivered through schools. If resources and logistics allow, we recommend having all three treatment groups (Option 1a). In this case we can ask whether financial education makes CYSAs more effective and whether financial education alone changes financial knowledge, attitudes, and behaviors among teens.

The next-preferred option for the teen site is a CYSA-only group and a CYSA and financial education group (Option 1b). In this case, we ask only our primary question—whether financial education makes CYSAs more effective.

Question 2. At the teen site, should financial education be offered to parents? If so, how intensely should it be evaluated?

Options:

2a. Do not offer financial education to parents of teens

2b. Offer financial education to parents of teens but do not evaluate it

2c. Offer financial education to parents of teens and evaluate very simply (Ex: Did parents attend any sessions?)

2d. Offer financial education to parents and conduct a fairly intense evaluation of the outcomes and effects of parental financial education

Discussion: There are several advantages to offering financial education to parents: First, research summarized above suggests that parents influence children’s financial knowledge, attitudes, and behavior. If financial education for parents is effective then there may be indirect positive effects on children. Second, parents’ attendance is presumably an important indicator of parental support for teens’ saving. Third, for various reasons, funders and/or staff at demonstration sites may strongly favor offering financial education.

On the other hand, financial education would add substantial complexity and cost to program implementation. A fairly thorough evaluation of financial education for parents of teens would also add complexity and cost to program evaluation. For example, it may be desirable to assess the effects of financial education on parents’ knowledge, attitudes, and behaviors, and this would presumably require a survey of parents.

Recommendations: Option 2d is the most desirable, but the benefits of this option must be weighed against the costs.

The possibility that financial education for parents may have indirect effects on children implies that Option 2b is undesirable (at the experimental design sites). If financial education is offered to parents of teens but is not evaluated, the ability to generalize findings from the teen site will be limited. The outcomes observed for teens will be outcomes from a CYSA and financial education *package* and will say little about the outcomes from a CYSA program without financial education.

If we simply note whether parents attend financial education courses (Option 2c) and use this information as an indication of parental support for teens’ saving, then this will be an very expensive single variable. However, Option 2c may be appropriate if there is a strong desire to assess parental support for teens’ saving but funds are fairly limited.

Option 2a makes sense (at the experimental design sites) if the costs of offering and evaluating financial education for parents of teen are prohibitive.

Question 3. How should the evaluation account for other financial education that Participants might receive during the intervention?

Options:

3a. Control for other financial education through the site-selection process

3b. Control for other financial education by including self-reported data on other financial education collected through the surveys

3c. Use methods 3a and 3b

Discussion: The amount and quality of financial education content already available to participants is important. For example, if all participants were receiving financial education, there would be no true control group, and it would be impossible to determine the effects of CYSAs without financial education.

This issue may be quite relevant to the teen site, because students may already receive financial education in school. It may also be relevant to the preschool site if the site (e.g., Head Start) offers financial education to parents or strongly encourages parents to complete a financial education course. Also, parents at the pre-school site may be receiving financial education at work.

Financial education experiences can be controlled, to some degree, through the site selection process. For example, for the teen site, CFED can choose not to consider schools that provide financial education content to 8th grade students. For the preschool site, CFED can choose not to consider sites that require or strongly encourage financial education for parents.

Other financial education experiences can also be controlled statistically, to some extent, if questions about other financial education are included in the survey instruments. For example, the survey could ask participants whether they have recently received any of a variety of types of financial education (e.g., a financial literacy course from a church or social service agency; assistance from a Consumer Credit Counseling agency; or a work-place retirement seminar). Although imperfect, this approach would help control for individual variation in other financial education experiences.

Recommendations: We recommend using multiple methods to control for other financial education (Option 3c). With regard to site selection, for the teen site, we recommend that schools that already offer “above-average” financial education content be avoided. For the preschool site, we also recommend that sites that offer their own financial education courses and sites that strongly encourage adults to attend financial education courses be avoided. (Issues related to other financial education should be addressed in the Request for Proposals.)

Even with careful site selection, it is likely that some participants will receive other financial education during the course of the demonstration. Including questions about financial education courses will help control for individual variation in other financial education courses.

In any event, we suggest that financial education associated with CYSAPD be viewed and discussed as financial education over and beyond financial education already received by participants.

CONCLUSION

This paper is an attempt to identify issues and make recommendations related to financial education in CYSAPD. We believe that a fairly extensive evaluation of financial education at one or two experimental sites would provide important insight. In particular, a design that includes three randomly-assigned groups—a control group, a CYSA only group, and a CYSA with financial education group—would shed light on the need to supplement a universal CYSA policy with universal financial education. A design that includes these three groups plus a financial-education only group, while costly, would also help to assess whether financial education alone changes financial knowledge, attitudes, and behaviors. Making a decision about the goals and scope of the demonstration is an important immediate task.

REFERENCES

- Bayer, P. J., Bernheim, B. D., & Scholz, J. K. (1996). The effects of financial education in the workplace: Evidence from a survey of employers (Working Paper No. 5655). Cambridge, MA: National Bureau of Economic Research. <http://www.nber.org/papers/w5655>.
- Bernheim, B. D., & Garrett, D. (1996). The determinants and consequences of financial education in the workplace: Evidence from a survey of households (Working Paper No. 5667). Cambridge, MA: National Bureau of Economic Research. <http://www.nber.org/papers/w5667>.
- Bernheim, B. D., Garrett, D. M., & Maki, D. M. (2001). Education and saving: The long-term effects of high school financial curriculum mandates. *Journal of Public Economics*, 80(3), 435-465.
- Boyce, L., Danes, S. M., Huddleston-Casas, C., Nakamoto, M., & Fisher, A. B. (1998). *Evaluation of the NEFE high school financial planning program*. Englewood, CO: National Endowment for Financial Education. <http://www.nefe.org/pages/educational.html>.
- Caskey, J. P. (1998). *Can financial-literacy education promote asset accumulation for the poor?* (Manuscript). Swarthmore, PA: Swarthmore College
- Clancy, M., Grinstein-Weis, M., & Schreiner, M. (2001). *Financial education and savings outcomes in Individual Development Accounts* (Working Paper No. 01-2). St. Louis, MO: Center for Social Development, Washington University.
- Clark, R., & Schreiber, S. J. (1998). Factors affecting participation rates and contribution levels in 401(k) plans. In O. S. Mitchell, & S. J. Schieber (Eds.), *Living with defined contribution plans* (pp.69-97). Philadelphia: University of Pennsylvania Press.
- Garman, E. T., Kim, J., Kratzer, C. Y., Brunson, B. H. & Joo, S. (1999). Workplace financial education improves personal finance wellness. *Financial Counseling and Planning Journal*, 10 (1), 79-88.
- Mandell, L. (n.d.). *2000 Personal financial survey of high school seniors: Executive summary*. Washington, DC: Jump\$tart Coalition for Personal Financial Literacy.
- Mandell, L. (1998). *Our vulnerable youth: The financial literacy of American 12th graders*. Washington, DC: Jump\$tart Coalition for Personal Financial Literacy.
- Matthew Greenwald & Associates, Inc. (1999). *Youth and money*. Washington, D.C.: American Savings Education Council. <http://www.asec.org>.
- Matthew Greenwald & Associates, Inc. (2001). *Parents, youth & money 2001*. Washington , DC: American Savings Education Council. <http://www.asec.org>.
- Pritchard, M. E., Myers, B. K., & Cassidy, D. (1989). Factors associated with adolescent saving and spending patterns. *Adolescence*, 24(95), 711-723.
- Schorr, A. (2001). *Understanding money in everyday family life: A qualitative study of parents with kids age 7 to 13*. Chicago: Kid Capital. <http://www.kidcapital.com>.
- Schreiner, M., Sherraden, M., Clancy, M., Johnson, L., Curley, J., Grinstein-Weiss, M., Zhan, M., & Beverly, S. (2001). *Savings and asset accumulation in Individual Development Accounts: Downpayments on the American Dream Policy Demonstration; A national demonstration of Individual Development Accounts*. St. Louis, MO: Center for Social Development.