

REVALIDATION SUBMISSION OF ECONOMIC LITERACY
(SAVE FOR AMERICA School Savings Component only)

ABSTRACT

Note: The name of the program has been changed from Economic Literacy to SAVE FOR AMERICA.

Goals

1. To increase student knowledge of basic principles of personal economics
2. To provide opportunities for students to apply personal economic skills in real-life situations.

Purpose

The primary purpose of SAVE FOR AMERICA is to teach students in grades 4-6 basic principles of personal economics during social studies and then help them practice the skills they have learned by participating in a school-based saving program. SAVE FOR AMERICA is also charged with the task of creating a new generation of savers. In 1991, School Savings was selected by The White House to be the centerpiece of the national SAVE FOR AMERICA campaign. SAVE FOR AMERICA'S mission is to implement a school savings program in every elementary school in America and thereby reestablish the saving habit in America's youth. "Because there is a direct relationship between growth of a country's productivity and its savings, we must increase our national saving in order to increase productivity. Low productivity growth causes inflation, low wage gains, and a stagnating economy." (President George Bush)

Method of Operation

SAVE FOR AMERICA is a school-based savings program sponsored by a bank but managed by parent volunteers. Bank day is before school once a week. To make a deposit, students bring their money and savings register on Bank Day. Using SAVE FOR AMERICA software, and with parent supervision, students key in their deposit on the school's computer. With a computer-generated receipt, a sticker, and the deposit recorded in their savings register, it's off to class for the new generation of savers! But just making a deposit is not enough to firmly establish the saving habit in the minds of American children. A personal economics curriculum is taught to the students by teachers during social studies.

NDN History

SAVE FOR AMERICA (Economic Literacy) was funded by the NDN from 1987-1991.

Claims

Students in grades 4-6 participating in the School Savings Program for eight weeks will significantly ($p < .05$) outperform a comparable control group participating in the regular school curriculum, on the School Savings Test (SST). The gains of 1989-90 Treatment group for students in grades 4-6 on the SST compared to those of the original Treatment group students on the SST in 1984-85 will be stable.

SAVE FOR AMERICA

**REVALIDATION SUBMISSION ECONOMIC LITERACY
(Save For America School Savings Component)**

BASIC INFORMATION

Project Title: SAVE FOR AMERICA (Economic Literacy)
Applicant Agency: Model Classrooms Association (non-profit)
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 Ms. Rae Nelson, Director of Education Policy at The
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 Dr. Sidney Jones, Assistant Secretary of the U. S.
 Department of the Treasury for Economic Policy, Wash. D.C.
 Ms. Kellee Elkins, Office of the Special Advisor to the
 President for Consumer Affairs, Wash. D.C.

* Dr. Aven was the project evaluator for both the original and the resubmission. Drs. Evans and Wintz were the evaluator and statistician respectively, for the original submission. Mr. Deedes was the statistician for the revalidation submission.

YEARS OF PROJECT	
Dates Developed	1982-1985
Dates Operated	1982-1991
Dates Evaluated (Treatment vs Comparison)	1984-85; 1990
Dates Disseminated	1985-1991

DESCRIPTION OF PROGRAM

Specific Goals of SAVE FOR AMERICA

1. To increase student knowledge of basic principles of personal economics in grades 4-6.
2. To provide opportunities for these students to apply personal economic skills in real-life situations.

Purpose and Addressed Needs

The purpose of SAVE FOR AMERICA is to teach students in grades 4-6 basic principles of personal economics during social studies and then help them practice the skills they have learned by participating in a school-based saving program. Students not only learn what a savings account is, but why it's important to save, how to make a deposit/withdrawal, how savings transactions are processed, how to keep a record of savings, how to calculate interest, and how to balance a bank statement. In addition, their participation in the school savings program provides weekly practice and reinforcement of the concepts they learned during their social studies and math lessons.

SAVE FOR AMERICA addresses the following needs:

- The need for young people to develop the habit of thrift.
- The need for young people to learn the value of money.
- The need for young people to learn financial responsibility
- The need for real-world reinforcement of personal economics concepts taught in school.
- The need for teachers to have supplemental social studies and math materials that provide current and practical problems for students.

The importance of the needs addressed by this project cannot be overstated. Lack of basic financial skills and the resulting inability of Americans to be financially responsible account for many social ills. Parents say they want their children to participate in SAVE FOR AMERICA because they (the parents) never learned to save and wished they had.

Intended Audience

SAVE FOR AMERICA is intended for all public and private school grades 4-6 audiences regardless of ability or achievement. No student is restricted from participating in the program. To ensure economic fairness, the bank deposits the first dollar in each student's account. The curriculum is intended for use during social studies and math.

Background, Foundation, and Theoretical Framework

When SAVE FOR AMERICA began in 1982, there were no similar programs. Those youth saving programs of "yesteryear" whose savers had licked stamps or put coins in a little envelope had fallen victim to banking deregulation in the late 1960's. It was too expensive after deregulation to send a banker to the schools to collect the money and then have tellers hand post hundreds of

deposits of \$.25 a week! Yet, everyone acknowledged that teaching America's younger citizens personal economics and how to acquire the saving habit was a worthwhile task. The beginning of the computer age in the early 1980's. presented the opportunity to once again have a school saving program—**SAVE FOR AMERICA** was created. Instead of using bankers, it trained Parent Teacher Association/Parent Teacher Organization (PTA) volunteers to collect the student deposits and drop the money off at the bank. Instead of hand posting, **SAVE FOR AMERICA** had students make their deposits on a computer so the deposit record could be electronically uploaded to the bank's mainframe computer. Instead of hoping parents would teach their children personal financial skills, **SAVE FOR AMERICA** created a curriculum to supplement or replace the out-dated savings curriculum—one that would motivate students to open savings accounts and save for the future.

SAVE FOR AMERICA was also developed to help increase the country's future productivity growth rate which is closely correlated to its net saving rate as can be seen from Figure 1 below. Figure 2 portrays American's low personal savings rate. To increase its productivity growth rate, America must convince its nation of spenders to become a nation of savers! Productivity determines a nation's quality of life—its opportunities for an ever higher standard of living, meaningful education, and stimulating, well-paying jobs. Lowered productivity growth can cause inflation, low wage gains, and a stagnating economy. This present generation of youth must develop the saving habit or be prepared to accept a lower standard of living than that of their parents.

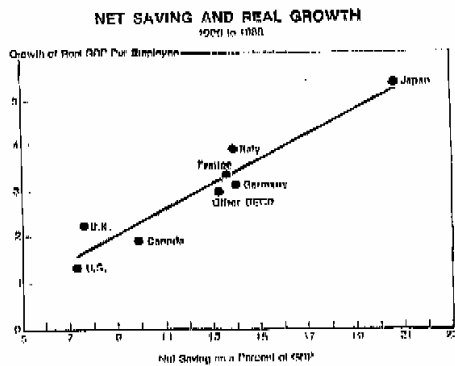


Figure 1

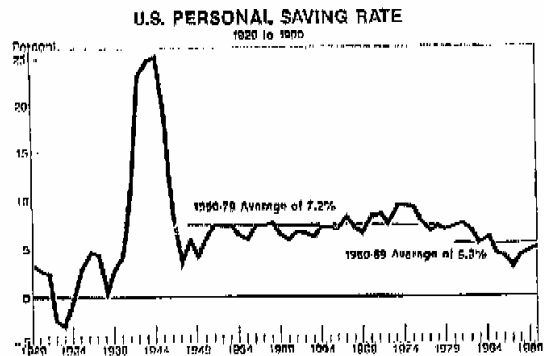


Figure 2

Features: How the Program Operates

SAVE FOR AMERICA is a school/business/parent partnership with three components: (1) the deposit process, (2) the education curriculum, and (3) the incentive program. A local bank enrolls students in the voluntary savings program. The PTA manages the deposit component of the program at the school and awards stickers to all students who make a deposit, regardless of amount. Banking usually takes place before school after which the PTA takes the money, a printout of the deposits, and the computer disk to the bank. The bank uploads the record of the deposits to its mainframe and returns the disk to the school for the next bank day which is once a week. Students receive monthly statements and are not charged any fees. The deposit and incentive components last all school year. During the summer months, students bank at their local bank branch.

SAVE FOR AMERICA supplements or replaces social studies materials and instruction in the area of economics regarding savings accounts. It is a real-life foundation for such social studies

units including 1) borrowing, 2) credit, 3) international monetary systems, 4) the family's role in the economy, 5) investing, 6) planning for a responsible future and 7) good citizenship. The curriculum includes 1) a teacher's manual, 2) a 30-item pre-posttest, 3) a 24-page student booklet 4) and worksheets that provide homework assignments or quizzes for the student booklet. The specific objectives or central points of the program — the ones on which students are tested — are as follows:

- ▶ What is a savings account and who can have one?
- ▶ Why is it important to save?
- ▶ What is interest and why does a savings account earn interest?
- ▶ How does one make a deposit and a withdrawal?
- ▶ How are savings transactions processed?
- ▶ How does one keep a record of a savings account?
- ▶ How does one figure interest?
- ▶ How does one read and balance a statement?

All of the above points are also covered in the *student worksheets* which are keyed to pages in the student booklet. The *student savings register* also provides students with a hands-on opportunity to practice "keeping a record of deposits and withdrawals." A sample savings register page is found on page 13 of the student booklet in Appendix A. Another way the central points of the program are covered in other parts of the curriculum is through the *parent brochure* also found in Appendix A which is mailed directly to the student's home. As can be seen from the parent brochure, parents are advised to make sure "the student adds interest earned to the balance in the savings register. Students compare their savings registers and deposit receipts with the statement's listing of transactions." The parent brochure which is also available in Spanish helps parents reinforce the primary program concepts presented in the student booklet. The project is currently considering requests to publish the student booklet in Spanish.

Teachers receive instruction in the use of the curriculum during a half-day training workshop. The materials can be used by individual teachers or those working in teams or units. The education curriculum usually takes approximately two months to implement with lessons of approximately one hour's duration provided four times each week. Reinforcement on balancing statements and saving registers is provided weekly and quarterly as statements are received.

The number of volunteers participating depends on many factors: size of school, willingness to participate and the number of available computers. A minimum of 3 volunteers is usually required if the whole school is banking. Some schools have as many as 25 volunteers because an effort is made to accommodate the volunteer's time schedule, some schools also bank during lunch and after school and some schools are set up so volunteers are responsible for only certain grade levels. Parents of afternoon kindergarten students may perform their banking duties when they drop their children off for school. Most volunteers are parents of children attending the school where they perform their volunteer duties. Every school that has wanted the program has been successful in recruiting volunteers, and no school savings program has been terminated as a result of lack of volunteers.

The training of volunteers primarily consists of teaching them to use the banking computer software. Together with school administrators attending the workshops, the volunteers design the logistical plan for banking and awarding stickers. The when, where, and how of the banking process is determined at this training workshop.

SAVE FOR AMERICA management activities consist primarily of marketing the program to banks, updating and maintaining the software, providing technical implementation and evaluation assistance to schools, and tasks associated with preparing banks to modify their computer systems to upload the student deposits. Banks sign a license agreement for the schools in their target market. The banks, educators, and initial PTA volunteers are trained by Model Classrooms Association (MCA). As the program expands, no further training is required from MCA; certified trainers at each bank continue to train new PTA volunteers and educators at other elementary schools in the district. Parents of participating schools market the program to other parents in the district so MCA's marketing role diminishes greatly. To perform these management tasks, MCA retains the services of a computer programmer, an adoption coordinator, a full-time marketing specialist and the services of the original Developer/Demonstrator. Program monitoring of the adoptions is done frequently since banks must receive an encoded disk from MCA for each school that uses the program. This disk request gives MCA an opportunity to discuss implementation progress with the banks and remind them to pretest students with the SST test and submit the results to the MCA office. All the school disks are also updated annually so MCA has a chance to make any required software changes during the summer and also collect any information needed to refine the program.

There have been no major alterations to the program or materials since the program was developed in 1983. Banking Americans still make withdrawals, deposits, and, hopefully, balance their statements. There have, however, been improvements and refinements to the program. The software is improved every year according to requests from bank data processing personnel and the PTA. Appendix B contains the list of improvements scheduled for School Savings software version 4.0. Version 4.0 will be tested in the Spring of 1992 by one bank in three schools. Revisions will be made during the summer so that all banks will be using the new version in Fall of 1992.

Two years ago the student booklet was submitted to all the banks and schools for suggested revisions. The result was the deletion of four pages in the booklet. One page for notes was deleted; one page that listed the bank branches was deleted and the information was transferred to the back cover of the booklet. The remaining two pages were deleted by reducing the size of some graphics and putting more information on a page. The SST test was also reviewed at this time and was not changed. Another revision to the program was the addition of sticker incentives for students making a deposit. In the original program, banks provided students with random incentive awards. That policy has been changed to require banks to provide SAVE FOR AMERICA stickers to students EACH time they make a deposit. This procedure was implemented because it increased the frequency of deposits thereby increasing the probability of developing the saving habit.

EVIDENCE OF DISSEMINATION ACTIVITIES

Settings and Participants

SAVE FOR AMERICA has been implemented in Alabama, Texas, New Hampshire, New Jersey, New York, West Virginia, and Maryland since its development in Washington state in 1982-85. Banks in Connecticut and Pennsylvania and a credit union in Michigan recently signed a contract and will begin implementation of 135 schools in February of 1992. Figure 3 displays the program's dissemination progress graphically:

Figure 3

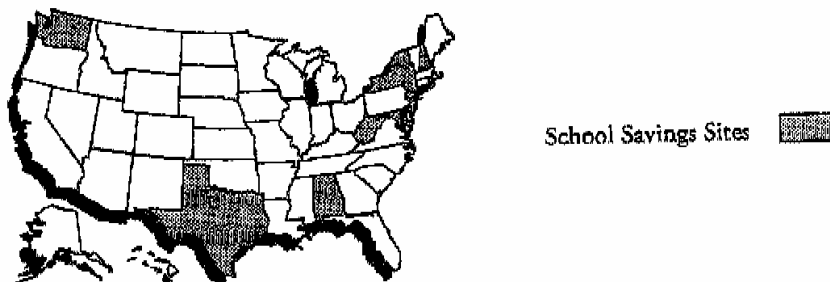


Table 1 provides a breakdown of the School Savings Sites displayed in Figure 3.

TABLE 1
IMPLEMENTATION HISTORY

Year	# SS Schools	Trained	# Banks	States
1983-1986	58	1740	1	WA
1986-1987	32	1085	1	WA
1987-1988	24	839	3	TX, WA, NY
1988-1989	36	1101	4	NY, WA, WV, TX
1989-1990	48	1440	6	NJ, AL, WV, WA, TX, NY
1990-1991	72	2160	22	AL, MD, TX, NY, NJ, WV, WA, NY
1992 Under Contract	154	—	25	All of the above plus CT, PA & MI

SAVE FOR AMERICA requires the participation of teachers and administrators, and the approval and commitment of the school's PTA to perform the required work. Appendix C contains a description of School/PTA/Bank responsibilities. The above procedures are expensive and time consuming. Banks usually require 2-3 months to make the implementation decision and another 3-4 months to actually conduct the first banking day. A typical adoption is 1-3 schools in one district the first year with expansion to other schools as quickly as possible. Because parent demand from schools in the bank's market area is great, implementation is planned on a "date of request" basis. Banks sign a contract with MCA to continue the program for at least five (5) years.

MCA's ability to respond to requests for awareness information, consultation and training is excellent. All Requests are responded to immediately. To implement the program, banks provide schools with several types of printed materials: receipt paper, software documentation manuals, student booklets, teacher guides, and tests, savings registers, and stickers. MCA provides each bank

with camera-ready copy of all the printed materials; banks use local printers to print all the required materials. MCA also supplies the banks with the encoded software for each school. A copy of the SAVE FOR AMERICA brochure used by the project to inform banks, schools, and parents about the project is in Appendix D. A list of items received by the adopting bank and the User's Guide Table of Contents are enclosed in the presentation folder.

Each bank that implements SAVE FOR AMERICA is required to have a MCA trained and certified staff member conduct program expansion training activates once the pilot program has been completed. Banks also agree to send their SAVE FOR AMERICA trainer to a national seminar once a year as part of the contract they signed to participate in the program. MCA uses these same trainers to provide training to new banks. There are enough SAVE FOR AMERICA banks now that new banks can be provided with training by SAVE FOR AMERICA trainers who work, on a daily basis, in banks similar in size and charter to the adopting bank. Every SAVE FOR AMERICA bank is a demonstration site.

The biggest change in the program was its selection by The White House on November 15, 1990 as the centerpiece of the SAVE FOR AMERICA campaign. The U.S. Office of Consumer Affairs asked community organizations to Invest in the Future and start a SAVE FOR AMERICA school saving program in their community. The letter from the Office of the Special Adviser to the President and National Consumer Week brochure is in Appendix E. This change in program stature has required a logo and name revision for all the materials, but no significant change to the program's key elements or curriculum content.

MCA ensures quality and consistency among its SAVE FOR AMERICA adopters by controlling its key elements—the deposit software, the education materials, and the stickers (Appendix G). Banks sign a contract that requires them to use these key program elements. Banks must be in compliance in order to receive the next year's software. Since a new calendar year is loaded onto the disk in the summer, banks cannot resume the program in the fall without the new disk that must come from MCA. Banks are also required to provide copies of the student booklet for all students in school even if they do not have a savings account. One of the ways MCA ensures consistency at the school is to publish a newsletter for the PTA volunteers every year. MCA uses this newsletter, a sample of which is in Appendix F, to resolve software problems and maintain enthusiasm among PTA volunteers. In addition, a PTA volunteer sees a banker at least once a week and any concerns can be quickly referred to MCA by the bank. The network of certified trainers at each bank also helps ensure quality and consistency. There are 40 certified SAVE FOR AMERICA trainers nationwide.

Maintaining the effectiveness of materials, training, dissemination and implementation is accomplished by individual feedback from banks and PTA volunteers throughout the year. Participants have consistently returned a positive evaluation of program materials, training, and implementation assistance during 1990-91. At its annual meeting MCA also gets suggestions and ideas for new stickers, software revisions, and training techniques. MCA uses these suggestions to make improvements in the SAVE FOR AMERICA program.

SAVE FOR AMERICA has received national recognition for its quality and relevance. Dr. Roger Porter, Assistant to the President for Economic Policy, The White House, stated that "the program will help stimulate a new generation of savers...and promote responsible citizenship and volunteerism." Mr. Lawrence Connell, CEO of Society For Savings in Connecticut stated that "No other economics program for youth will have more impact on America's future for so few dollars." Appendix H contains a complimentary letter from U.S. Senator Lloyd Bentzen as well as other articles testifying to the program's quality and relevance.

EVIDENCE OF IMPLEMENTATION AND PROGRAM RETENTION

The table below delineates the fidelity of key program elements and commitment to expansion of the program of three SAVE FOR AMERICA banks over a 3 year period:

TABLE 2

	TEXAS First City, TX	NEW YORK Dollar Dry Dock	WEST VIRGINIA WesBanco
Number of Schools			
Year 1	5	3	1
Year 2	32	16	8
Year 3	75	47	12
Use of Deposit Software			
Year 1	3	3	3
Year 2	3	3	3
Year 3	3	3	3
Use of Education Curriculum			
Year 1	3	3	3
Year 2	3	3	3
Year 3	3	3	3
Use of Stickers			
Year 1	N/A	3	3
Year 2	3	3	3
Year 3	3	3	3

Appendix I provides samples of the newsletters, newspaper articles and other correspondence that confirm the commitment of these and other SAVE FOR AMERICA banks to the program.

Below are the names, addresses and phone numbers of three people in charge of implementing the SAVE FOR AMERICA program at their banks.

PLEASE CALL SAVE FOR AMERICA FOR CURRENT REFERENCES. (206) 746-0331

Description of SAVE FOR AMERICA's most important accomplishments

SAVE FOR AMERICA's most important accomplishment was the creation of a hi-tech process that is allowing America to create a New Generation of Savers! Families wanted their children to save but they do not have enough time to take them to the bank often enough to establish the savings habit. Banks wanted a youth savings program but couldn't have one because they were too expensive until SAVE FOR AMERICA utilized the school's computers to record the deposits and transfer them electronically to the bank's computer.

EVIDENCE OF THE PROGRAM EFFECTIVENESS

Original Evaluation Claims

Students in grades 4-6 being taught with the **SAVE FOR AMERICA** Program will achieve significant ($p < .05$) gains on The School Savings Test (SST) above the Comparison Students.

Original Design

The original design consisted of a treatment versus comparison, pre/post test design. A 2 (Treatment versus comparison) by 2 (pre-post) repeated measures analysis of variance (ANOVA) was completed on the data. All comparisons were accomplished using PAIRED t-TESTS.

Original Results Approved by JDRP in 1985

Statistical Results. Individual comparisons using PAIRED t-TESTS yielded the following:

1. A non-significant ($p > .05$) difference FOR THE 4-6 Treatment versus Comparison groups on the PRETEST SST.
2. A significant ($p < .001$) difference between the 4-6 Treatment and Comparison group on the POST-TEST SST.
3. A significant ($p < .001$) GAIN by the 4-6 Treatment group.
4. A non-significant loss by the 4-6 Comparison group.

Effect Size Results. An Analysis of the SST data, grades 4-6 using Cohen's ES¹ formula yields the following for all individual comparisons which show statistical significance:

1. For grades 4-6, a LARGE ($d = 1.08$, ES Estimate) difference between Treatment and Comparison students on the POST TEST favoring the Treatment students.
2. A LARGE ($d = 1.16$, ES Estimate) gain by the grades 4-6 Treatment students.

Results by District and Grade Levels. Paired t-tests performed for each GRADE LEVEL (4-6) and each DISTRICT on the SST revealed significant ($p < .001$) gains in each case.

SUMMARY OF SST RESULTS FOR GRADES 4-6. The Objective was attained at or above stated levels. On the SST, the treatment group attained significant ($p < .001$) and large ($d \geq 1.16$) gains whereas the Comparison groups did not. There were large ($d \geq 1.08$) and significant ($p < .001$) differences on the post tests favoring the Treatment group.

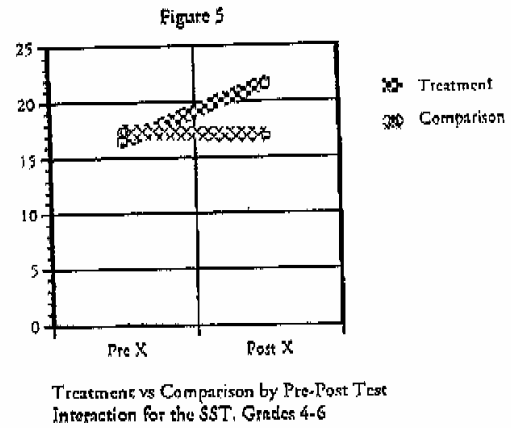
¹Cohen, Jacob. Statistical Power Analysis for the Behavioral Sciences. New York: Academic Press, 1969.

Table 3 and figure 5 display evidence from SAVE FOR AMERICA sites involved in the original 1984-85 evaluation.

Table 3
1984-85
Means, Standard Deviations, and Ns. for the SST, Grades 4-6

	Pre		Post		*
	N	\bar{X}	S	\bar{X}	
Treatment	341	16.62	4.63	21.66	4.69
Comparison	270	17.53	4.26	16.98	4.57

*Significant at (.001) between treatment and comparison groups



The mean difference in the pre-test for 1984-85 between the experimental and control group was .91 which was not significant, but in the posttest the experimental group outperformed the control group by 4.68. The Standard deviations for both years remained stable.

CURRENT EVIDENCE OF THE PROGRAM EFFECTIVENESS

Claims

Students in grades 4-6 being taught with the SAVE FOR AMERICA program will (1) achieve significant ($p < .05$) gains on the School Savings Test (SST) over a comparable Control group and (2) 75 percent of students will open savings accounts within two months after the SAVE FOR AMERICA program is introduced and (3) 70 percent or more of the students opening savings accounts will continue their savings accounts after two years.

Methodology

SAVE FOR AMERICA has made only minor changes to the School Savings education materials since the program passed JDRP in 1985. The project is still using the same pre-posttest, the same student booklet, the same teacher's manual, and the same worksheets. (These minor revisions were described in paragraphs 2 and 3 of page 5.) SAVE FOR AMERICA replaces comparable activities in Social Studies and Math without requiring additional time. The program is directed towards the application and current use of basic math and economics concepts. SAVE FOR AMERICA requires two months to implement with lessons of one hour duration provided four times a week.

While the Treatment students were using the SAVE FOR AMERICA program the Control groups were receiving the conventional social studies and math lessons for their grade levels which incorporated all the skills being taught in SAVE FOR AMERICA. They were learning about the free enterprise system, trade, government, scarcity, and exchange systems in social studies. In math, they

were studying addition, subtraction, numeration, multiplication and division, and beginning geometry.

Design

The design for the re-validation of **SAVE FOR AMERICA** is the same as for the original submission — a treatment versus comparison, pre-posttest design. In addition, each grade level, male/female, ethnic, and socio-economic factors were considered with a follow-up in two years to determine the staying power of those starting accounts.

Sample

The data for the re-validation report were collected from three **SAVE FOR AMERICA** sites: New York, West Virginia, and Texas. The New York data were from urban sites, the West Virginia data from rural sites, and the Texas data from suburban and urban sites. All students were from grades 4-6 regular classrooms. Approximately 2000 treatment and comparison group students were tested. The treatment group consisted of schools selected by banks to implement the program. The comparison group consisted of schools in the same school district similar in ethnic and general achievement composition to the treatment schools. In New York two thirds of the participating students were Black or Puerto Rican. In Texas two thirds of the students were Hispanic and in West Virginia more than 95 percent of the students were Anglos. All teachers participating in the testing did so on a voluntary basis; students were automatically selected for the program if their teacher volunteered.

Of the 2000 treatment and comparison group students tested 248 comparison group students and 257 treatment group students were selected using a stratified random sample. The sample is representative of program participants because it includes all grade levels, all ethnic groups, geographic areas, and includes urban, suburban, and rural populations. See Table 4.

TABLE 4
Demographic Data on Target Districts

Pop. Type	District	% Minority	% Low Income	Schools	Classrooms	Grade Levels	Reading	Math
Urban	Austin	56	4	3	3	4-6	68 ¹	60 ¹
Suburb	Springbranch	50	48	3	36	4-6	76 ¹	71 ¹
Urban	Queens 26	45	19	2	20	4-6	94 ²	97 ³
Rural	Brooke	1	26	3	19	4-6	62 ⁴	60 ⁴

¹ TEAM: Texas Education Assessment of Minimum Skills: % with reading & math skills above state reference point.

² NY Degrees of Reading Progress Test: % reading above state reference point (min. competency).

³ Pupil Evaluation of Progress Test: % with math skills above state reference point (min. comp.).

⁴ SAT median percentile.

Instruments and Procedures

This re-validation used the same instrument (School Savings Test-SST) that was used to validate the original School Savings unit of the Economic Literacy Program. The SST instrument was again reconsidered and evaluated by SAVE FOR AMERICA bankers two years ago and determined to be a valid test of savings concepts. The SST has a Reliability Coefficient (Coefficient Alpha) of .81.

The pre- and the post-test are the same. The 30-item test is administered as a pre-test and then re-administered as a post-test. The following excerpt regarding the SST Test is from the original SAVE FOR AMERICA submission:

Instrument: School Savings Test (SST). The SST is a 30-item, multiple choice instrument designed to measure knowledge of: (1) How to set up a savings account, (2) how to maintain a savings account register, (3) practical math concepts and applications for figuring simple and compound interest and for balancing a quarterly statement for a savings account, (4) the rationale for having and maintaining a savings account, (5) how a bank processes transactions and uses the depositors' money, (6) how to use a cash machine and maintain records of these transactions, and (7) vocabulary related to banking terminology.

The School Savings Test was developed by a banker, Mr. Dan Goestart and the project staff with assistance from one of the project's evaluators, Dr. Keith Evans. The test was revised by Dr. Evans and the project staff and field-tested with 600 grades 4-6 students. During this process the test underwent item analysis and was revised at each stage of the process.

Reliability and Validity. The Reliability Coefficient (Coefficient Alpha) for the SST is .81.

Validity. The correlation between the Treatment versus Comparison condition and the SST post-test scores is .32 ($p < .001$).

The final version of the test was reviewed by the project director, two staff members, three stock brokers and three bankers. It was their unanimous judgment that:

1. The items were actually measuring the booklet's objectives.
2. There was only one clearly correct answer for each item.
3. If an item were answered correctly, this was an indication of understanding of areas of knowledge in the instructional materials. (SS booklet).

The testing period was determined by whether the Treatment schools started in the Fall or the Spring. Three districts started in the Fall. They were pre-tested the middle of September and post-tested the middle of November. One district started the program in early March. The students were pre-tested in early March and post-tested in early May. All testing was done before banking started.

Data Collection

Each bank involved in the evaluation was responsible for administering the 30-item SST to the Comparison and Treatment groups. The personnel administering the SST had been trained in its use and had administered the test frequently. Some of the tests were scored by adult volunteers while others were scored at a data processing center. Pre-posttest data record forms were then forwarded to the evaluator for analysis.

Data Analysis

The statistical techniques and levels of significance used in the original program were also used for re-validation. A 2 (Treatment vs Comparison) by 2 (Pre - Post) repeated measures analysis of variance (ANOVA) was completed. All individual comparisons were accomplished using paired t-tests. The level of significance was set at $p < .05$ for all F and t-tests.

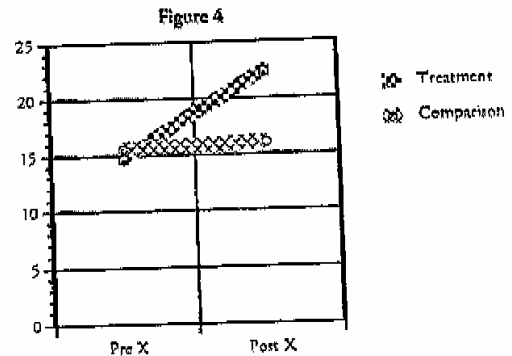
Results

Table 4 shows Treatment and Comparison means, standard deviations and Ns for 1989-90 grade levels 4-6. Figure 4 depicts the significant ($p < .001$) interaction from the Repeated Measures ANOVA.

Table 4
1989-90
Means, Standard Deviations, and Ns for the SST, Grades 4-6

	Pre			Post	
	N	\bar{X}	S	\bar{X}	S
Treatment	257	14.77	4.60	22.39	5.19
Comparison	248	15.66	4.54	16.08	4.88

*Significant at (.001) between treatment and comparison groups



Treatment vs Comparison by Pre-Post Test Interaction for the SST, Grades 4-6

On the pre-test for 1989-90 the comparison group outperformed the experimental group by .89 which is not significant. On the post-test, however, the experimental group outperformed the control group by 6.31 which is significant at the .001 level.

Individual comparisons using paired t-tests yielded the following results:

1. A significant ($p < .001$) difference between the 4-6 treatment and comparison groups on the post-test SST.
2. A non-significant gain ($p > .05$) by the comparison group.
3. A significant gain ($p < .001$) gain by the grades 4-6 Treatment group.

Summary of SST Results of 1984-85 Original Submission to Resubmission Results in 1989-90.

The data show consistent and positive results between the original and revalidation evaluations with a 1.63 gain for the current evaluation above the gain for 1984-85 in posttest scores between the treatment and comparison groups.

There are regional differences in average weekly deposits and balances, but there are no significant differences within regions between male/female, ethnic, or socio-economic groups.

Savings Account Registration and Retention

Table 5 contains data from 8,800 students in New York, Texas, and West Virginia who have been in the program for two years.

TABLE 5
Savings Account Registration
and Retention Data
1989-1991

Results after 2 years of implementation	NY (suburban)	TX (urban)	WV (rural)
% of students opening savings account within 2 months of program inception	80% (1280)	80% (5120)	55% (640)
% of Students still banking	90% (1152)	83% (4250)	65% (416)

The above results indicate that 80 percent or 7040 of the 8800 students opened a savings account within two months of the program's inception. These results exceed the stated goal which was 75 percent.

Of the students who opened accounts, 5818 or 83 percent are still banking after two years. These results also exceed the stated goal of 70 percent.

Supplementary Evidence

An indication of the success of the program is evidence that students are banking frequently and not withdrawing their money almost as quickly as it is deposited. Table 6 presents data that substantiates the claim that students are still banking and developing the savings habit. The students are from the same population as those represented in table 5.

TABLE 6
Data on Savings Retention & Consistency

Results after 2 years of implementation	NY (suburban)	TX (urban)	WV (rural)
Banking frequency per month	70%	50%	75%
Average weekly deposit	\$6.50	\$5.38	\$1.50
Average account balance	\$201	\$68	\$40
Average number of withdrawals p/year p/student	Less than 1	Less than 1	Less than 1
% of students who regularly record deposit in savings register	90%	70%	45%
Average % of students who make 2 or more deposits at bank branch during summer recess.	45%	2%	10%

Of the above students, 5% in New York, 30% in Texas, and 35% in West Virginia already had savings accounts. Of these students 90% in New York, 85% in Texas and 50% in West Virginia also opened School Savings accounts.

Further evidence of the program's worth to families in the New York, Texas and West Virginia sites is the expansion of the program within the above districts in the three states. SAVE FOR AMERICA is now in 4 of 5 elementary schools in the New York district, 21 of 67 in the Texas district and 12 of 14 in the West Virginia district.

Educational significance and conclusions:

SAVE FOR AMERICA is a vital part of the education of each student because it provides a procedure and reason for saving. This program is often the first step in establishing a financial plan for students. Participants perform basic math functions as well, and demonstrate a higher level of economic literacy than those who do not participate in the program. Data also show that once students begin the program, they continue to save at a high frequency rate.

Because SAVE FOR AMERICA is also fun, students are motivated to plan for a responsible financial future. There are no losers in the program. Every student can participate and every student can succeed at saving for something special in their future—a future that can be as bright as a rainbow!

