

# What We Know About Successful Financial Education Programs

Andrew T. Hill, Ph.D.  
Economic Education Advisor  
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FEDERAL RESERVE BANK OF PHILADELPHIA

## Disclaimer

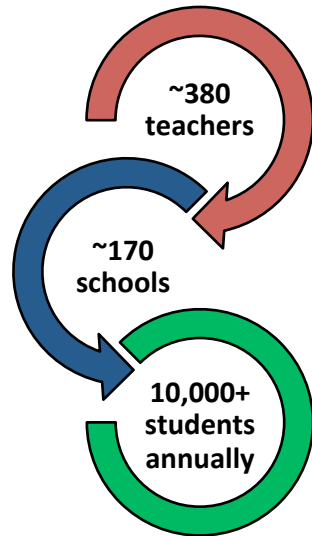
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## Keys to Financial Success Program



- Program began in 2001.
- Together these teachers have earned over 10,000 professional development hours in this program.

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## The Features of the Keys Program

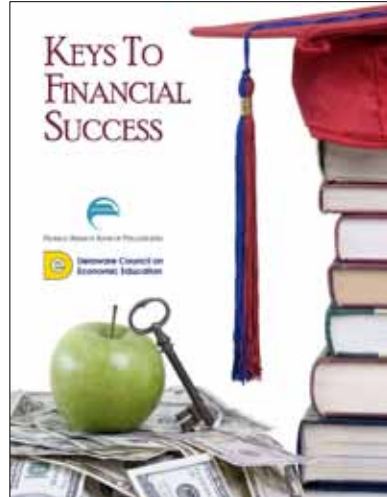
- The *Keys to Financial Success* Program
  - Partnership with University of Delaware Center since 2001
  - Partnership's goals
    - Provide training and materials for teachers to support the teaching of a semester course in personal finance.
    - Use accurate materials grounded in the "economic way of thinking."
    - Provide flexibility for the teacher to use the materials in a variety of classes.
  - Assess program effectiveness with pre- and posttesting.

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## The Features of the Keys Program

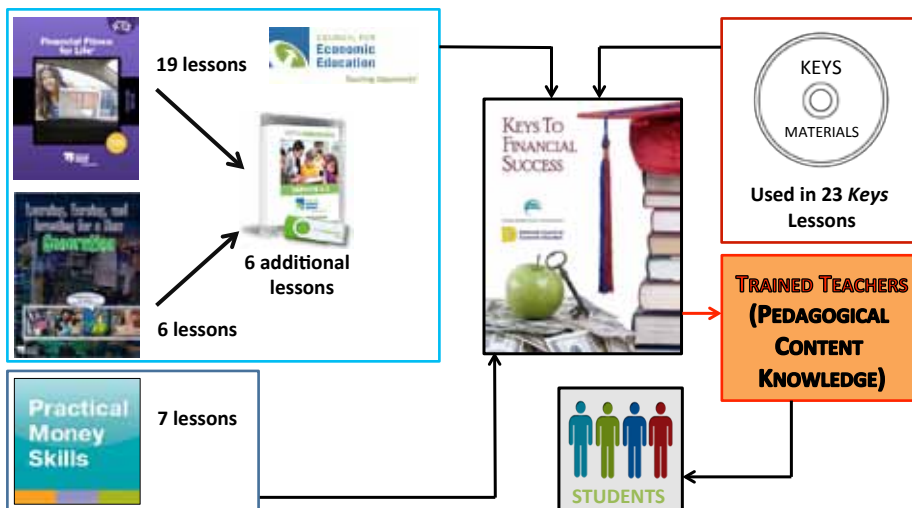
- The *Keys* Curriculum
  - 52 lessons
  - Organizes mostly existing materials and activities into a semester personal finance course for high school students
- Teachers receive 30 hours of professional development at FRB Philadelphia



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## How the *Keys* Curriculum Works

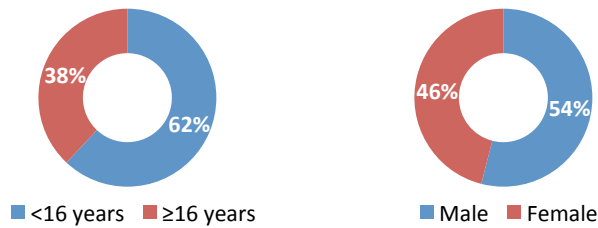


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## Study Design

- Asarta, Hill, and Meszaros (2014), *International Review of Economics Education*
- Study Design
  - Pre- and posttest students using a nationally-normed personal finance instrument (*FFFL-HS Test*)
  - Compare our results to *FFFL-HS Test* norming test results
- The 2011-2012 and 2012-2013 Cohort (Semesters)

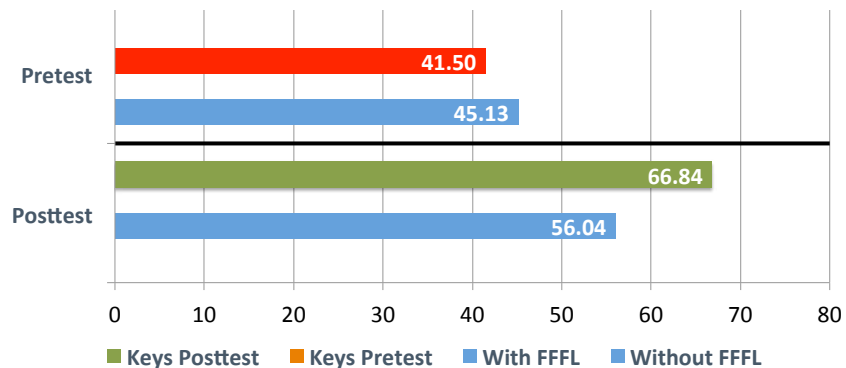


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## Results

- Keys students exhibit large and highly statistically significant gains in all topic areas on the *FFFL-HS Test*.



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## Income and Money Management

**Table 3**  
Differences in student performance by standard and concept (N=967).

	FFFL items	Pretest	Posttest	Difference	% Change
A. Income		48.80	75.09	26.29 <sup>a</sup>	53.87%
1. Sources of income	1, 11	57.14	85.94	28.80 <sup>a</sup>	50.41%
2. Determinants of income	9, 14, 15, 17	48.91	76.09	27.17 <sup>a</sup>	55.55%
3. Taxes and transfer payments	18, 19, 20	43.09	66.53	23.44 <sup>a</sup>	54.40%
B. Money management		42.87	66.89	24.02 <sup>a</sup>	56.03%
1. Limited resources and choice	5, 8	44.52	62.56	18.05 <sup>a</sup>	40.53%
2. Opportunity cost	7	23.78	56.98	33.20 <sup>a</sup>	139.57%
3. Personal financial responsibility	6	80.25	89.66	9.41 <sup>a</sup>	11.73%
4. Financial decision making	10	36.19	75.90	39.71 <sup>a</sup>	109.71%
5. Inflation and investing	28	22.23	43.64	21.41 <sup>a</sup>	96.28%
6. Insurance, risk management	46, 47, 48, 50	50.08	67.45	17.37 <sup>a</sup>	34.69%
7. Budgeting	41, 42, 43	37.16	64.46	27.30 <sup>a</sup>	73.47%
8. Use of money management tools	44, 45	39.87	74.41	34.54 <sup>a</sup>	86.64%

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## Spending, Credit, Saving, and Investing

**Table 3**  
Differences in student performance by standard and concept (N=967).

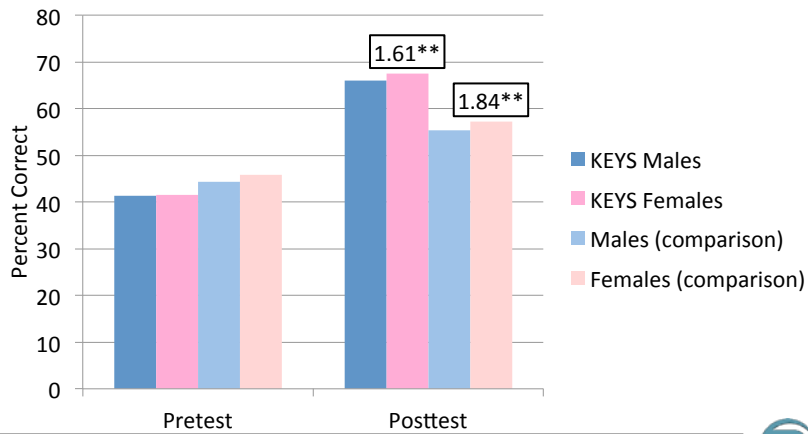
	FFFL items	Pretest	Posttest	Difference	% Change
C. Spending and credit		33.72	61.71	27.99 <sup>a</sup>	82.99%
1. Benefits and costs of spending	3, 4	40.64	60.70	20.06 <sup>a</sup>	49.36%
2. Information on products					
3. Costs and benefits of payment methods	31, 32	46.23	73.01	26.78 <sup>a</sup>	57.94%
4. Risk and credit	35, 36	47.00	67.37	20.37 <sup>a</sup>	43.34%
5. Sources of credit	37, 40	22.54	49.74	27.20 <sup>a</sup>	120.64%
6. Credit history and records	33, 34	20.53	60.86	40.33 <sup>a</sup>	196.47%
7. Managing financial difficulties					
8. Rights and responsibilities of buyers, sellers, and creditors	38	17.06	55.43	38.37 <sup>a</sup>	224.85%
D. Saving and investing		41.55	65.16	23.71 <sup>a</sup>	57.20%
1. Saving and investing	21, 23	23.80	49.69	25.80 <sup>a</sup>	108.01%
2. Reasons for saving and investing	2	87.18	96.28	9.10 <sup>a</sup>	10.44%
3. Risk, return, and liquidity investment	25, 26, 27	44.01	66.49	21.89 <sup>a</sup>	49.07%
4. Buy and sell investments	29, 30	44.93	78.54	33.61 <sup>a</sup>	74.80%
5. Rate of return on investments	22, 24	26.47	47.10	20.63 <sup>a</sup>	77.93%
6. Sources of investment information	39	44.30	70.32	25.96 <sup>a</sup>	58.51%
7. Government and saving and investment					
Total		41.50	66.84	25.34 <sup>a</sup>	61.05%

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## Hill and Asarta (2016) *forthcoming*

**Overall**, in both the KEYS sample and the FFFL-HS comparison group, males and females did not differ in their personal finance knowledge before treatment, but females slightly exceeded males after being taught personal finance.

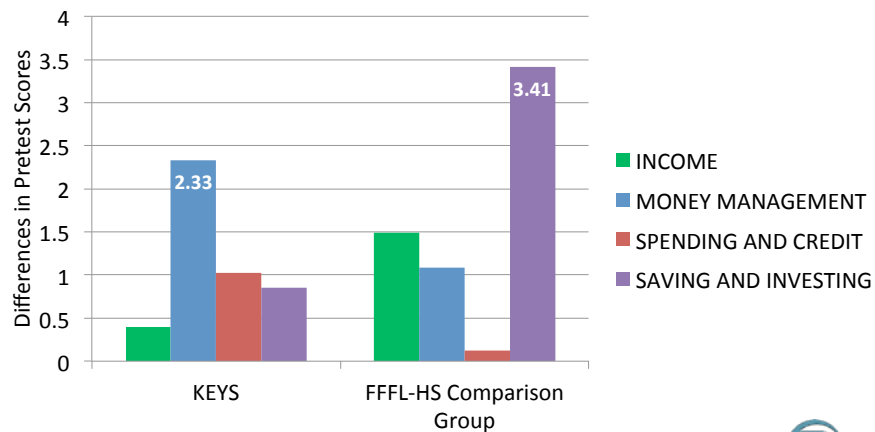


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## Hill and Asarta (2016) *forthcoming*

On the **pretest**, the females exceeded the males on the Money Management standard in the KEYS group and on the Saving and Investing standard in the FFFL-HS comparison group.

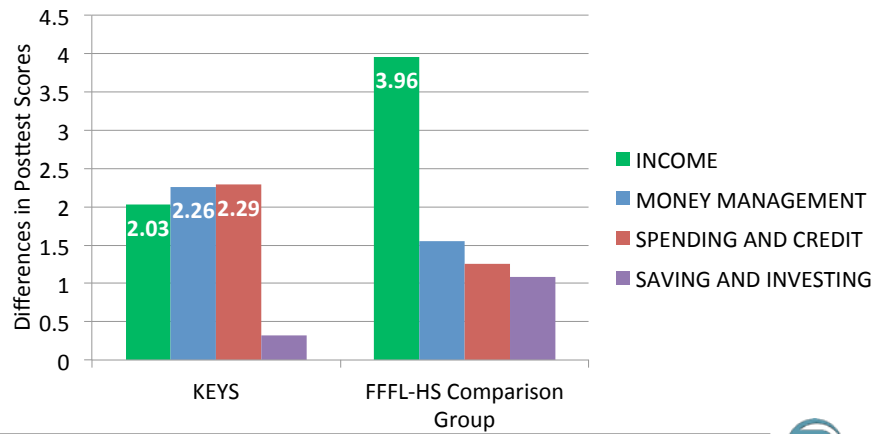


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## Hill and Asarta (2016) *forthcoming*

On the **posttest**, the females exceeded the males on the Income, Money Management, and Spending and Credit standards in the KEYS group and on the Income standard in the FFFL-HS comparison group.

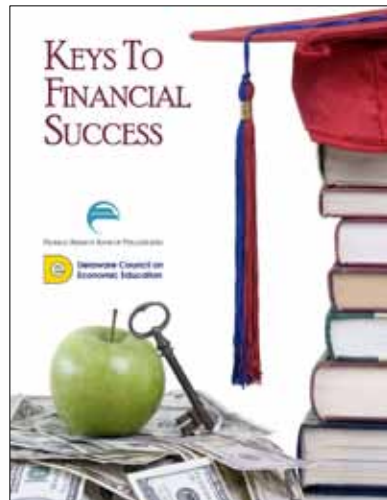


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## What Did We Learn?

- *Keys to Financial Success* significantly increase students' personal finance knowledge.
- Training and materials matter.
- Females *slightly* outperform males.



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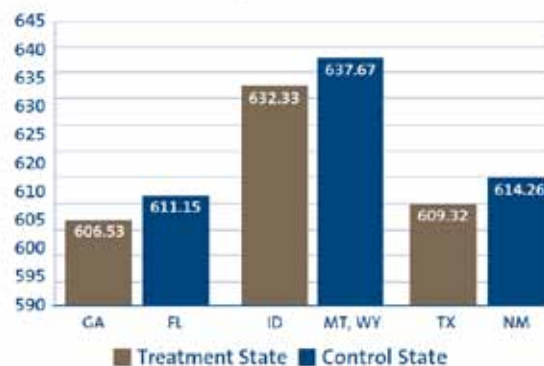
## What Did We Learn?

- Limitations
  - Our results only show knowledge gained over the semester. To what extent does the average student’s personal finance knowledge decay after the course?
  - How does taking a *Keys* course affect future personal finance behaviors?
- Current and Future Research
  - *Keys* teachers’ human capital → Chambers and Hill (2015), *PEER*
  - Semester vs. year-long *Keys* courses: Semester courses result in higher student achievement
  - Student age and the *Keys* course: *Keys* closes gaps in personal finance knowledge between younger and older high school students.

## Urban, Schmeiser, Collins, and Brown (2015)

“State Financial Education Mandates: It’s All in the Implementation”

Figure 3: Average Credit Scores in the Treatment and Control States Prior to Mandate Implementation



Source: Urban, Schmeiser, Collins, and Brown (2015)

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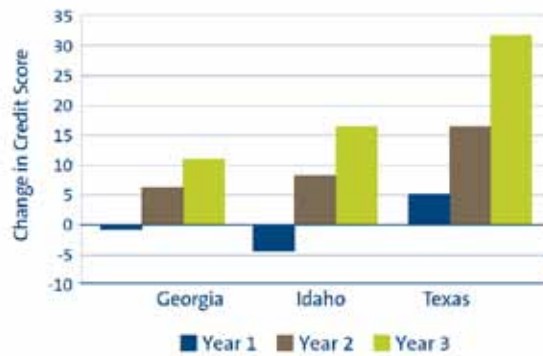




## Urban, Schmeiser, Collins, and Brown (2015)

### “State Financial Education Mandates: It’s All in the Implementation”

Figure 4: The Effect of Personal Finance Education on Credit Scores, by State and Implementation Year Cohort



Source: Urban, Schmeiser, Collins, and Brown (2015)

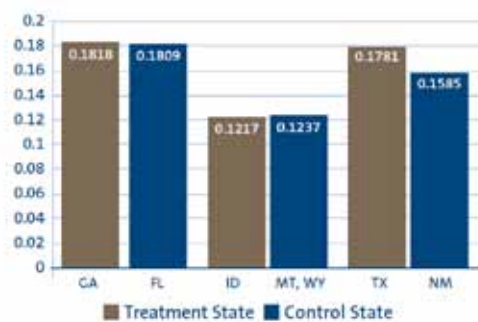
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## Urban, Schmeiser, Collins, and Brown (2015)

### “State Financial Education Mandates: It’s All in the Implementation”

Figure 5: Share of People with Any Account 90+ Days Delinquent in the Treatment and Control States Prior to Mandate Implementation



Source: Urban, Schmeiser, Collins, and Brown (2015)

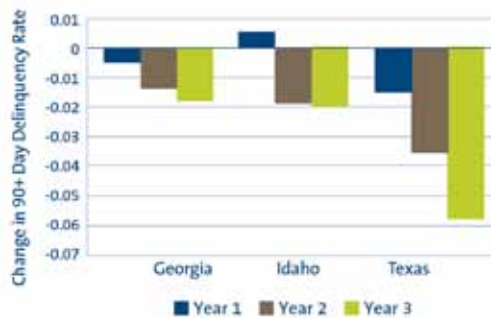
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## Urban, Schmeiser, Collins, and Brown (2015)

### “State Financial Education Mandates: It’s All in the Implementation”

Figure 6: The Effect of Personal Finance Education on Rates of 90+ Day Delinquency, by State and Implementation Year Cohort



Source: Urban, Schmeiser, Collins, and Brown (2015)

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## Upcoming Teacher-Training Programs at the Philly Fed

- ***Kids and Money III*** (elementary)  
April 6, 13, & 20, 2016; 5:00 p.m. – 8:00 p.m.; FRB Philadelphia
- ***Keys to Financial Success Training*** (high school)  
June 27 – July 1, 2016; 8:00 a.m. – 3:30 p.m.; FRB Philadelphia
- ***Making Sense of Money and Banking*** (K-12)  
July 18 – 22, 2016, 2015; 8:00 a.m. – 3:30 p.m.; FRB Philadelphia

For more information about these programs and to register, visit

[www.philadelphiafed.org/education](http://www.philadelphiafed.org/education)

- ***Economics Across Curriculum*** (high school)  
August 2, 3, & 4, 2016; 8:00 a.m. – 3:30 p.m.; FRB Philadelphia  
Offered in partnership with the American Institute for Economic Research  
Register online at [www.aier.org/teach-teachers](http://www.aier.org/teach-teachers)

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