Improving Financial Literacy and Capability: What Works?

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Building Financial Literacy
For K-8 Pre-Service Teachers and Adult Learners

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FLC Financial Literacy Center
A joint center of the RAND Corporation, Dartmouth College.
Target population: 16-24 and/or in college

Goals for this project:

- Create rich curriculum materials for use with this age group that can be used easily in the classroom
- Identify opportunities for using them, especially with pre-service teachers
- Test them out (formatively) in various settings
- Promote their use (and therefore the teaching of financial concepts) in as many settings as possible
- Understand what research questions need to be answered for this demographic
Curriculum materials: content

Freestanding modules on the following topics:

- How much will I take home? Understanding your paystub.
- Paddle Your Canoe. Budgeting.
- Understanding Credit Card Offers
- Jetta or Jaguar? Buying your ideal car
- Buy, Rent, or Live in a Tent? Mortgages and house purchase.
- Investing in Savings and Bonds
- Investing in the Stock Market
- Investing in Mutual Funds
- Your Parents Will Move In With You! How much needed to retire.
- Saving For Retirement
- NEW! Forthcoming module on taxes.
Curriculum materials: format

Every module includes most of these:

- Slides for presentation, including embedded videos and links, delivered on the web and free to use.
- Pre and post tests on financial and numerical concepts in the module.
- Detailed instructor notes with ideas for quantitative assignments, writing assignments, and other educational activities.
- Notes especially for future teachers and those who teach them.
- Spreadsheets for doing realistic calculations and exploring the future impact of financial decisions.
- Case studies of (fictional) individuals so that students can put themselves in the position of financial advisors.
Curriculum materials: emphasis

Modules are designed to:

- Emphasize quantitative aspects of financial decisions
- Use the language of the financial world, the language of mathematics, and the language of ordinary people
- Give instructors many options for how to use them
- Appeal to college age adults
- Address the needs of those doing something for the first time, such as getting a first credit card, first job, first car
- Treat the learner as an adult, in particular by imitating the business school case study approach and introducing the use of spreadsheets.
Curriculum materials: other resources

In addition to these modules we also developed:

- A complete textbook in developmental math (for college students) focusing on financial examples, available free online.

- A series of videos of mini-case studies for use in classrooms and faculty development workshops, available free online, with several more NEW videos to be added this summer.
Opportunities for financial education, using the Dartmouth modules

These are some of the best places to use these modules:

- As part of a quantitative reasoning or other math course
- As part of a financial literacy course
- As part of faculty development in financial education at high school and college levels
- In conjunction with financial education games, such as Ne$tEgg, for informal financial education
- At moments when life changes, such as for graduating seniors
Where have materials been tried?

- Mass Bay Community College (inserted into a math course)
- Bowdoin College (part of a quantitative reasoning course)
- Teacher workshops at Champlain College (for high school teachers)
- As indirect inspiration for three “senior survival” lectures at Dartmouth College
- NEW These will be incorporated into a quantitative reasoning course at Hollins University next academic year, in conjunction with Ne$tEgg
And how did it go? Very well, in general.

- Mass Bay Community College (inserted into a math course)
  - The instructor reported that the module she used was quite good.
- Bowdoin College (part of a quantitative reasoning course)
  - High correlation between performance on homework based on modules and later quiz results.
- Teacher workshops at Champlain College (for high school teachers)
  - Good engagement with the case studies.
- As indirect inspiration for three “senior survival” lectures at Dartmouth College
  - Good voluntary attendance, good evaluation reports, will be repeated next year (decision of alumni relations).
Major remaining task: how to get them into use?

Identify potential targets and work with existing structures:

- Quantitative reasoning programs, instructors, and requirements at colleges throughout the U.S.
  - Hope to complete survey of 3 small states by the end of summer.
- Teacher workshops funded and localized through identified programs/centers
- Other alumni organizations at other institutions
  - Building good relations with alumni through financial literacy
- Through collaboration with Ne$tEgg
  - Financial literacy in the workplace, at elementary schools, etc. They do outreach.

*These activities require funding.*
Research questions that have arisen:

- What is the state of quantitative reasoning programs in the U.S., how can we reach and interact with them, what are their needs?
  - Hope to complete survey of 3 small states by the end of summer. Should maintain a database of all QR centers/programs/requirements/courses in US, as these are mostly likely to be successful targets.

- What is the “natural” learning progression for FL?
  - Do people need to learn the math first, or is it better to learn the math in context. And if so, what context works best? We propose a randomized clinical trial of a large population of students, and would like to collaborate with colleagues at the University of Wyoming to answer this.

- How can we improve the impact and appeal of the content of our curriculum by integrating them with a financial game such as Ne$tEgg?
  - We felt there was great potential here but a lot of development is needed.

*These activities require funding.*
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