



Welcome to the Center for Financial Security 2011 Webinar Series

June 28, 2011

*Harnessing the Power of Technology to Enhance
Financial Literacy & Personal Financial Well-Being*



Harnessing the Power of Technology to Enhance Financial Literacy Education and Personal Financial Well-Being

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Center for Financial Security Webinar
June 28, 2011

The research reported herein was performed pursuant to a grant from the U.S. Social Security Administration (SSA) funded as part of the Financial Literacy Research Consortium.

The opinions and conclusions expressed are solely those of the author(s) and do not represent the opinions or policy of SSA or any agency of the Federal Government or of the of the University of Wisconsin System, including Center for Financial Security.

Background: Project Need

- Expanding interest in financial education – often with presumption that it will lead to improved financial behavior
- Growing number of technology-based tools for financial education – but educators not well prepared to use them
- Little attention given to WHY technology-based tools/ strategies might be expected to improve financial literacy or financial well-being
- Need to develop guidelines for theory-based practice and further research re: the role of technology in financial education and financial behavior

Project Purposes

- Identify kinds of technology-based resources/tools available to support personal finance education
- Review theories of human behavior and their relevance to personal finance education research and development
- Examine educational theory about how technology-based resources can support personal finance teaching and learning
- Develop a theoretically grounded model to inform future research and practice in financial literacy education

Types of Online Financial Education Resources and Tools

- **Financial Information** – e.g., MyMoney.gov (collection of financial information, tools, & resources from government agencies; targeted by group and life events); FederalReserveEducation.org (personal finance resources for the general public, students, teachers)
- **Internet Forums** – e.g., MyKmart.com (smart shopping, layaway); Healthboards.com (health insurance); Wisebread.com (frugal living, personal finance)
- **Internet Blogs** – e.g., Dailyworth.com (budgeting, earning, saving, investing, spending)
- **Financial Management Tools** – e.g., Mint.com (free -tracks expenditures & makes recommendations); Mvelopes (fee-based budgeting, bill pay, forums & chat)

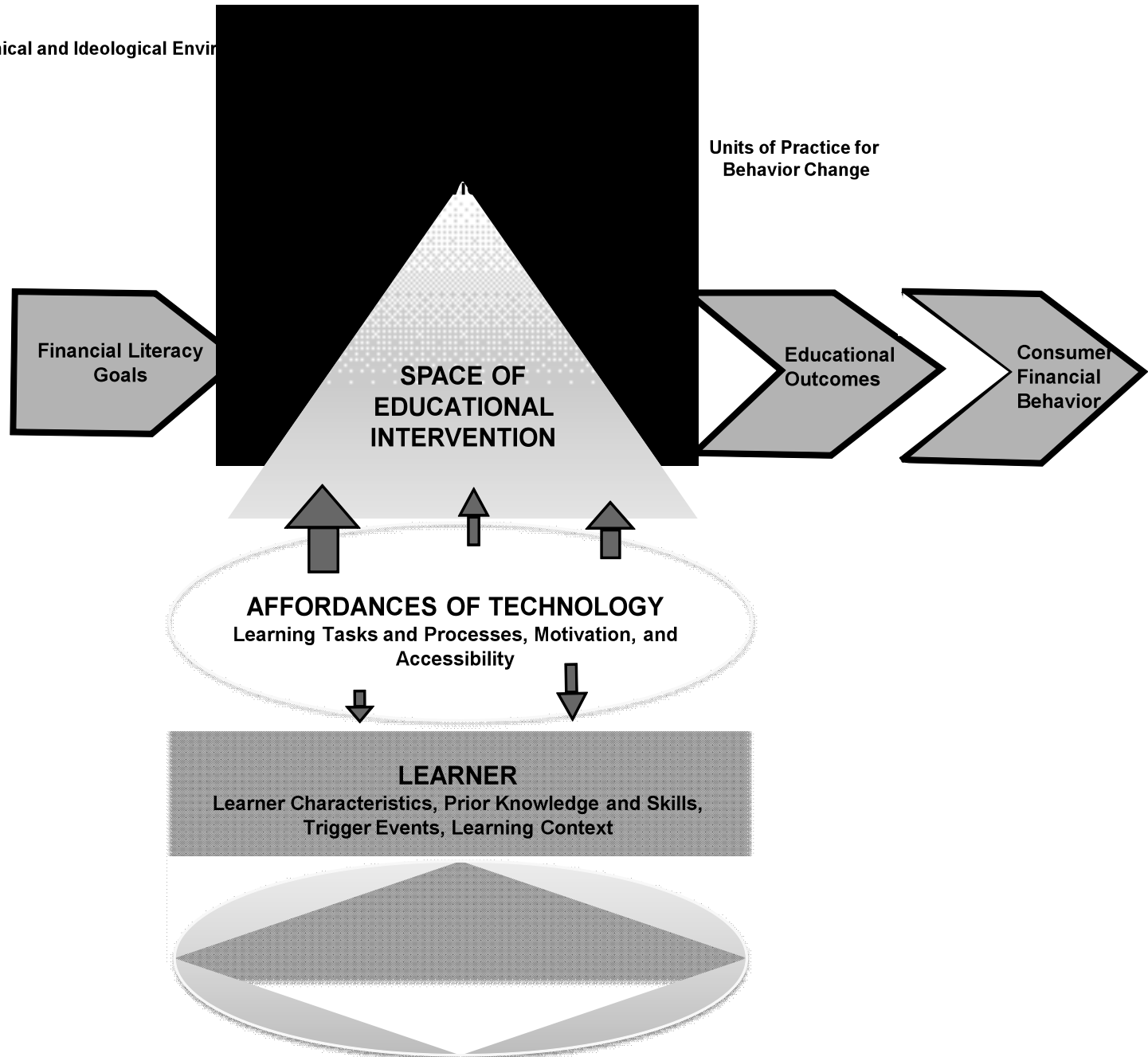
Online Games to Teach About Money – Identified as ‘Tops’

- Financial Football - VISA
- Celebrity Calamity – D2D
- Bad Credit Hotel – US Treasury
- The Great Piggy Bank Adventure – Disney & T. Rowe Price
- Planet Orange - IngDirect
- Reality Check –Jump\$tart Coalition
- (CBS MoneyWatch.com, September 21, 2010)

How to Choose?

- Numerous frameworks available from both human behavior and education literatures
- Suggest points of intervention for financial education using an ecological perspective b/c behavior is influenced by factors at individual, interpersonal, community/organization, and system/policy levels
- May be complementary, suggesting use of more than one at a time

Philosophical and Ideological Environment



Sample Behavior Theories by Level of Intervention

Individual : Theory of Reasoned Action/Theory of Planned Behavior/Integrated Behavior Model

Keys to behavior:

- Beliefs about likely outcomes of behavior and how close 'others' would feel about it
- Knowledge & skills needed to perform the behavior
- Salience of the behavior to the individual
- Confidence in ability to perform behavior despite barriers
- Experience performing the behavior (habit)

Sample Behavior Theories by Level of Intervention

Interpersonal: Social Networks and Social Support (e.g., Social Capital)

Social groups (e.g., family, peers, online networks) can provide social influence, social undermining, or social support.

Social support = emotional (caring), instrumental (tangible aid), informational (advice, new info), appraisal (info for self-appraisal)

Sample Behavior Theories by Level of Intervention

Community/Organization: Diffusion of Innovations

New behavior most likely to be adopted is:
advantageous compared to old; compatible with
needs, values; easy to adopt; testable first; visible to
others

Systems/Policy: Social Marketing

Marketing principles (highlighting benefits,
payoff, convenience, message match) can
influence adoption of socially beneficial behavior

Affordances of Technology: Access and Motivation

- May expand access to personal finance education (or not) by providing flexibility in how, when, and where learning occurs (mode, pace, place)
- May support motivation to learn (or not) by providing a sense of competence, autonomy, and belongingness (self-determination) as well as 'flow' or immersion/fun

Affordances of Technology: Learning Tasks and Processes

- An important distinction: *learning from versus learning with* technology
- ‘Learning with’ perspective more consistent with constructivist learning and human behavior theories

Affordances of Technology: Learning Tasks and Processes

- ‘Learning with’ perspective characterized by learning activities that are: more authentic, less formal, involve others, provide for reflection, and give learners control.
- Games and simulations offer special potential for developing genuine financial management expertise by requiring important knowledge/skills, but also nurturing situated understanding, experimenting with powerful identities, and developing shared values.

Access and Vulnerability

- Lack of access to technology may create/reinforce financial vulnerability
- Access = not just having appropriate hardware but also capacity to make meaningful use of it
 - Knowing how define information needs and identify and evaluate internet-based financial information

Access and Vulnerability

- Having access to learning opportunities (including materials) that support diverse needs – age/ gender/life cycle stage, language and literacy differences, cultural bg, learning styles, web accessibility guidelines
- Having encouragement and support for informal (self-directed) and not just educator-directed learning
- Having access to tech savvy personal finance educators

1. Overview

2. Purpose

3. Review

4. Recommendations

Sample Recommendations for Practice

- Select technology that nurture's positive financial behavior and not just knowledge acquisition
- Target beliefs as well as knowledge, address potential barriers to positive financial behavior; provide actual practice in the behaviors.
- Use 'learning with' approaches that foster reflection and link to action; tools that engage, nurture competence and autonomy.
- Consider the potential for self-directed as well as educator directed learning in designing PF education resources and strategies

Recommendations for Practice, con't

- Use technology to design/implement educational interventions beyond the individual: build supportive social networks, spread innovations, market powerful ideas.
- Design & evaluate technology-based tools using a theory-based (WHY) perspective focused on learning and behavior

Sample Questions – Does the Resource....

1. Support a behavior-focused intervention? Which kind(s)?
2. Enhance access to learning via flexibility – place, pace, mode of instruction?
3. Enhance motivation to learn via competence, autonomy, belongingness, immersion/fun?
4. Reflect ‘learning with’ perspective – learner control, involvement with others, practice, reflection?
5. Foster financial expertise – valuable knowledge, skills, patterns of reasoning, values, personal identities?
6. Address needs of learners (e.g., gender, age, cultural bg)?
7. Support self-directed learning?

Recommendations for Further Research

- Expand testing of growing body of PF education tools, resources, strategies with diverse audiences in a variety of contexts
- Create a ‘what works’ clearinghouse of theory- and research-based evidence about PF education tools, resources, strategies

Recommendations for Further Research

- Investigate how social media are contributing to self-directed and incidental learning about financial matters
- Examine how educators are learning to use technology-based financial education tools and strategies

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Discussant

- Nick Maynard, Director of Innovation, Doorways 2 Dreams Fund (D2D)



Library of games

- *Celebrity Calamity*: Manage credit & debt
- *Groove Nation*: Dance budget game
- *Bite Club*: Vampire retirement savings
- *FarmBlitz*: Manage resources to build savings
- *Refund Rush*: Make the most of a tax refund



For More Information

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Discussant

- Bruce Spates, Associate Director, FINRA Investor Education



Moneytopia

Immersive Simulation Game



About Us



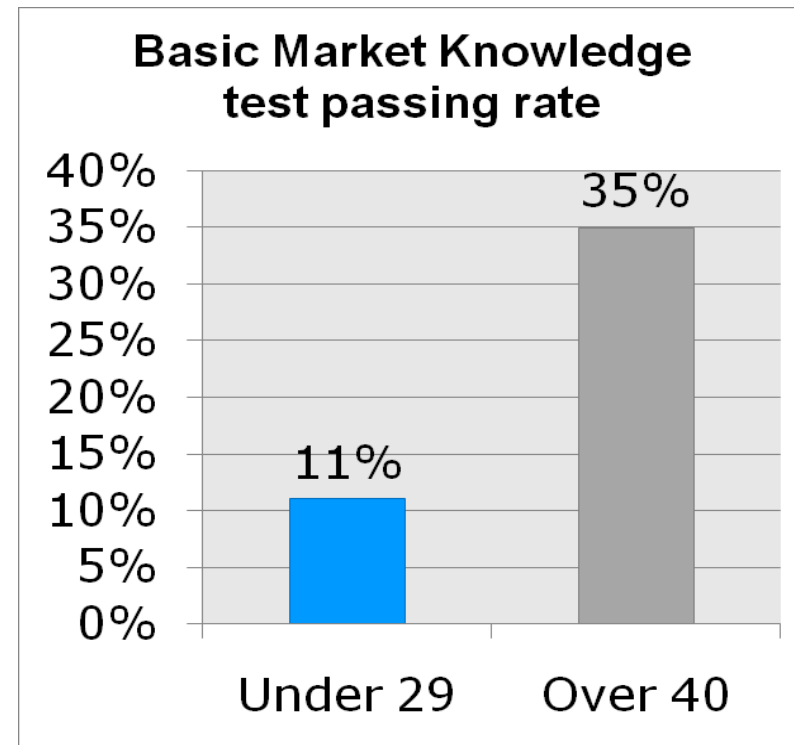
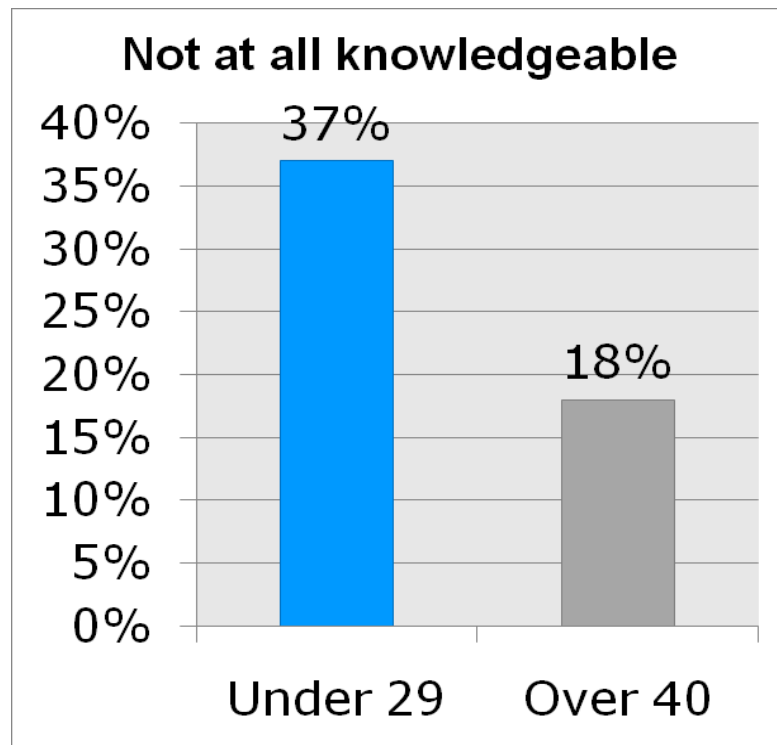
The mission of the FINRA Investor Education Foundation is to provide underserved Americans with the knowledge, skills and tools necessary for financial success throughout life.

www.finrafoundation.org

Why a Game-Based Immersive Simulation?

2005 Investor Literacy Research Study

Military Personnel and Spouses



FINRA Foundation Military Personnel and Spouses Investor Literacy Report of Research Findings, July 19 2005

Why a Game-Based Immersive Simulation

- 90 million “gamers” in the U.S. from 15 to 35.
- 80% of all people under 35 have played PC or online games
- Appeals to the target demographic—engaging & fun!
- “Learning by doing” instructional model
- Real-world experiences with real-world consequences
- Ability for player to practice managing finances in a “safe” environment

When to Choose an Immersive Simulation

1. **For developing an understanding of big ideas and concepts**
2. **For dealing with time and scale**—to speed up results of an action that might actually take one or more lifetimes to play out
3. **For situations where people need practice in decision-making** before they face the situation in real life
4. For taking people to a **time or place that they are unable or unlikely** to experience directly
5. For situations in which people **need practice performing a process in a safe environment** before performing it in the real environment

Moneytopia: An Immersive Simulation Case Study



Instructional Features: Learner-Centric

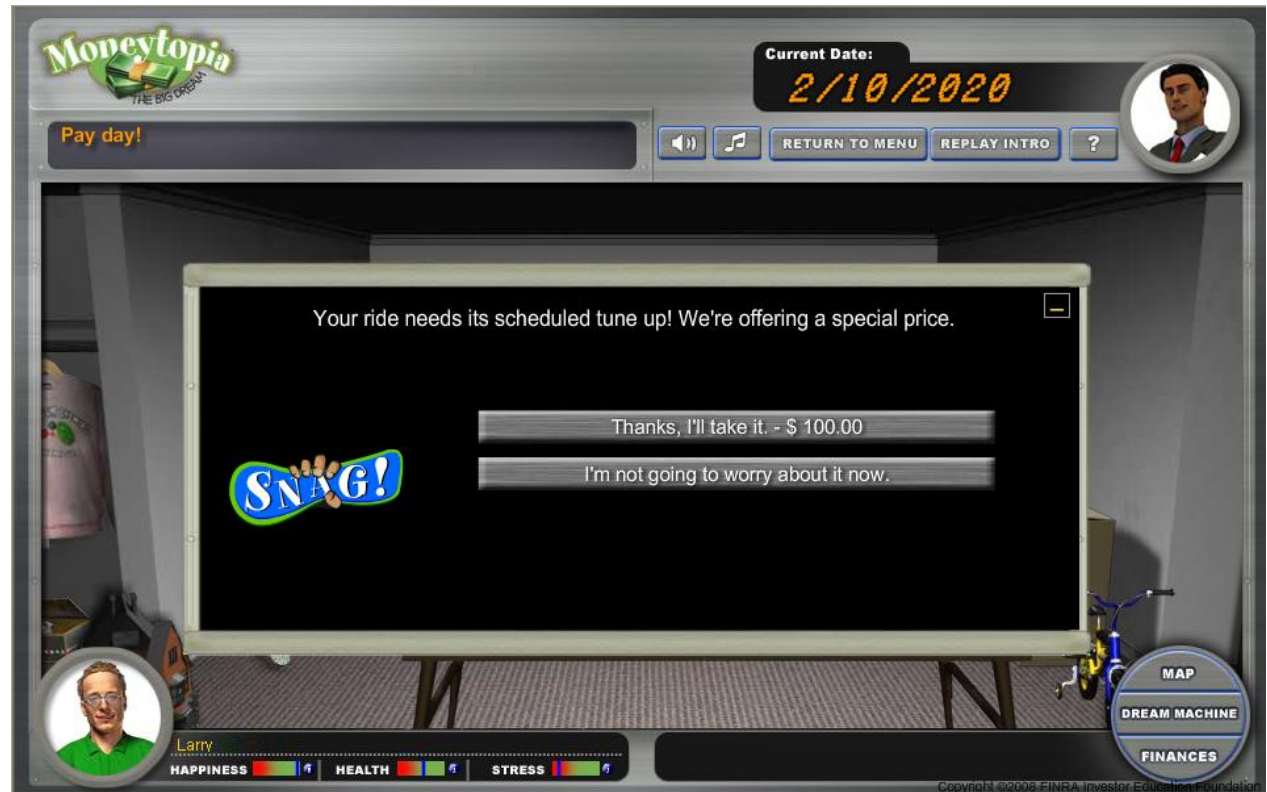
Customizable and learner-centric



Instructional Features: Decision-Oriented

Problem-based
design

Multi-path
decision making



Instructional Features: Prescriptive

Mentor-based

Self-directed
learning

Rewards



Instructional Features: Intrinsic Feedback

Decisions lead to consequences



Game Play Features



- Micro-Games
- Financial Dashboard
- Dream Machine
- Competition
- Consequences
- Win & Replay

Moneytopia Survey Feedback

- 73% Rated Moneytopia Good to Excellent
- 68% Would Play Moneytopia Again
- 60% Will take steps to improve how they manage their finances based on their experience with Moneytopia
- 82% Would recommend Moneytopia to others

Moneytopia Survey Feedback

“LOVED the realistic examples and I think it is helpful for the younger generation to see it in a form they use a lot - games! It brings reality closer without the actual experience. May prevent some stupid decisions for some players in real life!”

“It is very informative in a fun way, shows you how your choices have an effect on your finances, I lost \$40K at one time!”

“I found it engaging and fun. . . and a little addictive!”

“For someone who is not even a gamer, this was a wonderful experience. It is a fun test of your financial knowledge and you actually end up paying attention to what you are doing with your money during the game. It is very interesting and I will play again!”

Financial Capability Study



Dimensions:

- Spending vs. Saving
- No “Rainy Day” Fund
- Non-Bank Borrowing
- Financial Literacy
- Comparison Shopping

www.usfinancialcapability.org

Play Moneytopia Today!

www.SaveAndInvest.org/Moneytopia





Question and Answer?

Thank You for your participation in
the Center for Financial Security
2011 Webinar Series.

For more information: [http://
cfs.wisc.edu](http://cfs.wisc.edu)





Upcoming Webinar

Tuesday, August, 16th
1pm - 2pm CDT / 2pm - 3pm EDT

Integrating Financial Education into Traditional Family Support Services

Kristi Slack, Professor and Associate Director,
School of Social Work,
University of Wisconsin-Madison

For more information on the 2011
CFS Webinar Series: [http://
cfs.wisc.edu](http://cfs.wisc.edu)

