Harnessing the Power of Technology to Enhance Financial Literacy Education and Financial Well-Being:
A Literature Review

Wendy L. Way, Professor and Associate Dean
Nancy Wong, Professor
Prepared for presentation at the
Financial Literacy Research Consortium Conference
November 18, 2010
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 University of Wisconsin System, including Center for Financial Security.
Background: Project Need

• Growing number of technology-based resources for financial education

• Little attention given to WHY technology-based tools/strategies might be expected to improve financial literacy education outcomes or financial well-being

• Need to develop guidelines for theory-based practice and further research
Project Purposes

• Review theories of human behavior and their relevance to personal finance education research and development

• Examine theory-based educational affordances that might be offered by technology-based resources to support personal finance teaching and learning
Project Purposes

• Create an integrative model for using educational and behavioral theory to harness the potential of technology-based tools for designing financial education interventions and nurturing financial well-being

• Derive implications for further research on utilizing technology to advance personal finance education and well-being
Behavior Theories Reviewed

• Numerous frameworks available
• Suggest points of intervention for financial education using an ecological perspective
• Represent insights on factors that influence behavior at the individual, interpersonal, community/organization, and system/policy levels
• May be complementary, suggesting use of more than one at a time
Sample Behavior Theories by Level of Intervention

• Individual
  • Theory of Reasoned Action/Theory of Planned Behavior
  • Transtheoretical Model of Change

• Interpersonal
  • Social Cognitive Theory
  • Social Networks and Social Support (e.g., Social Capital)
Sample Behavior Theories by Level of Intervention

- Community/Organization
  - Diffusion of Innovations
  - Community Organizing and Community Building
- Systems/Policy
  - Social Marketing
  - Choice Architecture (Behavioral Economics)
Affordances of Technology: New Resources to Support Learning

• **The Internet** – global system of computer networks that carry information and resources and facilitate communication (e.g., webpages, email, instant messaging, video conferencing)

• **Web 2.0** – web applications that facilitate interactive information sharing and collaboration on the World Wide Web as opposed to passive viewing of content (Web 1.0); e.g., social media (Facebook, LinkedIn, Twitter), video sharing sites (YouTube), multiplayer gaming (World of Warcraft), virtual learning environments (Blackboard, WebCT, Moodle)
Affordances of Technology: Access and Motivation

- Technology holds promise of expanding access to personal finance education by providing flexibility in how, when, and where learning occurs (mode, pace, place).
- Technology can support motivation to learn 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 financial management expertise by nurturing situated understanding, effective social practices, shared values, and powerful identities.
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 to 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/life cycle stage, language and literacy differences, cultural bg, learning styles, web accessibility guidelines – and eschew gender and pedagogical biases

– Having encouragement and support for informal (self-directed) and not just educator-directed learning

– Having access to well-prepared personal finance educators
Recommendations for Practice

• Consider theoretical bases related to human behavior, human learning, and motivation in education as key foundations for selecting and designing technology-based PF education interventions.

• Consider the potential for self-directed as well as educator directed learning in designing PF education resources and strategies.
Recommendations for Practice

• Expand preparation for personal finance education practitioners

• Beware the technological mindset!
Recommendations for Further Research

• Do not confuse application of theory to technology-based PF education with testing of theory

• Expand translational research efforts and 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
Wendy L. Way  
Professor and Assoc. Dean for Undergraduate and Graduate Academic Programs  
School of Human Ecology  
University of Wisconsin-Madison  
2412 Sterling Hall  
475 N Charter St  
Madison, WI 53706  
(608) 262-1963  
wlway@wisc.edu

Nancy Wong  
Assoc. Professor and Director, Center for Retailing Excellence  
School of Human Ecology  
University of Wisconsin-Madison  
310 Middleton Bldg.  
1305 Linden Drive  
Madison, WI 53706  
(608) 265-5954  
nywong@wisc.edu