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TEACHING FINANCIAL LITERACY IN K-12 SCHOOLS: A SURVEY OF TEACHER BELIEFS AND KNOWLEDGE

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DISSERTATION

Submitted in Partial Fulfillment of the
Requirements for the Degree of

Doctor of Philosophy
Language, Literacy, & Sociocultural Studies

The University of New Mexico
Albuquerque, New Mexico

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ABSTRACT

The purpose of this study was to learn teacher attitudes and beliefs about teaching personal finance, as well as teacher understanding of a few core personal finance concepts. The population consisted of 1,120 classroom teachers from two public school districts in two states. The research questions were: (a) What are teacher attitudes and beliefs about personal finance instruction? (b) What are teacher understandings of a few core personal finance concepts?

Data were gathered using a survey instrument. Questions were divided into four categories: (1) policy; (2) instruction; (3) professional development; and (4) concept knowledge. Descriptive statistical methods were used to analyze survey responses.

The response rate was 16 percent, or 181 classroom teachers. Participants in this survey strongly support the teaching of personal finance topics in K-12 schools. Close to 83 percent agree or strongly agree with the statement, “It is important for schools to teach financial literacy.” Teachers at all grade levels in this study — elementary, middle, and

high school — favor starting personal finance instruction in elementary school. Lack of suitable curriculum, lack of classroom materials, lack of instruction time, and lack of subject matter knowledge were identified as barriers to successful personal finance instruction. Respondents preferred format for professional development is a workshop that increases teacher financial literacy. The mean score for the 12 personal finance questions was 37.5 percent.

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CHAPTER ONE

INTRODUCTION

This dissertation is a report of a quantitative study that sought to learn teacher attitudes and beliefs about teaching personal finance, as well as teacher understanding of a few core personal finance concepts. The study was conducted using a survey instrument. The participants consisted of classroom teachers currently working in two districts in two different states. The first chapter of the dissertation presents the background of the study, specifies the problem of the study, describes its significance, and presents an overview of the methodology used. The chapter concludes by noting the delimitations of the study and describing the organization of the dissertation.

Background of Study

The current financial crisis, which has been dubbed “The Great Recession,” has cast a sudden spotlight on the acute need for personal finance knowledge in the United States (Gibbs, 2009; Isidore, 2009). It could be argued, however, that for the individual the crisis has been more than forty years in the making. During this time there has been a profound shift in retirement funding responsibility from the employer to the individual, and an almost exponential rise in the complexity of financial products (Organisation for Economic Co-operation and Development., 2005). In 1960 roughly half of all private-sector employees in the United States were covered by a traditional pension plan. In 2005, only 21 percent of employees were covered by such a plan. Instead, about half of all private sector employees are now covered by a self-directed 401(k)-type plan which requires a fundamental understanding of personal finance. This trend has been described

as a “fading social contract ("The employment-based pension system: Evolution or revolution?," 2007, p. 1). It is not just retirement savings that Americans are being asked to fund; increasingly it is also healthcare costs, which are growing at twice the rate of inflation. According to Department of Labor statistics, health care costs rose by 8 percent from June 2005 to June 2006 (Kingsbury, 2006). In 2006, Americans who had employer-sponsored health care paid on average $2,904 in out-of-pocket medical expenses, while employers spent close to $9,000 per employee on health care costs. Rising medical costs combined with massive job losses (6.5 million jobs lost through June 2009) have not surprisingly led to rising debt burdens (Louis, 2009). The website myFico estimates that Americans have on average 13 credit obligations, and $16,635 in non-mortgage debt. While 45 percent of Americans pay off credit card balances each month, 37 percent carry a balance of more than $10,000 ("Average credit statistics," 2008). For individuals, home value has long served as a backstop against economic woes. In fact, it has been said that “home is where the nest egg is” (Powell, 2008). Fueled by loose lending standards and exotic mortgages, the nation saw an unprecedented rise in home value and home ownership from 2000 to 2006. However, the bubble burst in 2007, as thousands of Americans discovered they could not afford the mortgages that they often did not understand. Since reaching peak value in July 2006, home values have plummeted nationally by 21 percent (Louis, 2009). Through June 2009, more than 1.5 million homes have received a default or auction notice or have been foreclosed.

It could be argued that financial literacy is an essential life skill. Unfortunately, measures of adult financial literacy are not encouraging (Hines, 2006; Hoffman, 2008; Lusardi & Mitchell, 2006; Lusardi & Tufano, 2008; Markow & Bagnaschi, 2005).

Financial literacy is particularly poor among high school students (Hines, 2006; Hoffman, 2008; Mandell, 2006). The federal government and the states have not been blind to these trends. In 2003, Congress established the Financial Literacy and Education Commission to improve financial education in the United States. Established under the Financial Literacy and Education Improvement Act — part of the Fair and Accurate Credit Transaction (FACT) Act of 2003 — the legislation called for the Secretary of Treasury to coordinate the federal effort to improve financial literacy. Currently, 40 states have developed personal finance standards; 28 require these standards to be implemented; and seven states require students to take a specific personal finance course ("Survey of the states: Economic, personal finance & entrepreneurship education in our nation’s schools in 2007," 2007, p. 10). The state of New Mexico recently made it a requirement to offer a high school personal finance course as an elective (Dominguez-Lund, 2008).

Statement of Problem

Despite the growing push to improve financial literacy in the United States, there is very little evidence that teachers are being included in this process. While education policy is crafted, pushed and cajoled by numerous stakeholders, ultimately its success is largely dependent on the classroom teacher. To put it more bluntly, as *The Wall Street Journal* did in a story on the impact of teachers on student achievement, “It’s the Teachers, Stupid” (Wessel, 2006). The link between teacher and student achievement is strong and growing (Brophy & Good, 1986; Nye, Konstantopoulos, & Hedges, 2004; Palardy & Rumberger, 2008; Sanders & Rivers, 1996; Tschannen-Moran, Hoy, & Hoy,

1998). The Bill and Melinda Gates Foundation — which has invested billions of dollars in smaller schools and reducing class size in an effort to improve student achievement — recently announced that it had reached the same conclusion: teachers matter most ("Gates Foundation Says Good Teachers are Key," 2009). Palardy and Rumberger (2008), who examined teacher background qualifications, teacher attitude, and teacher instructional practices, described the overall teacher effect on student learning as “substantial” (p. 127). They found teacher attitude and instructional practices to be more of a factor in student achievement than teacher background qualifications. The Rand Change Agent Study of four, diverse, 1970s-era federally mandated educational programs found ineffective policy implementation when teachers were excluded from project development. Intentionally or not, this exclusion signaled a “mechanistic role” for instructors resulting in ineffective implementation (McLaughlin, 1991, p. 146). Policy success, according to McLaughlin, depends on two broad factors: local capacity and will. Local capacity is the infrastructure required to execute policy — financial resources, training capacity, etc. While often a budgetary challenge, this factor can be addressed monetarily. Will, on the other hand, is the “attitudes, motivation, and beliefs” that underlie a teacher’s response to the policy and is much harder to influence (McLaughlin, 1987, p. 172). As Handal and Herrington wrote in 2003: “Teachers are those who ultimately decide the fate of any educational enterprise. Consequently, teachers’ attitudes, feelings, and perceptions must be recognized well before the launching of any innovation” (p. 65). Martin was even more direct: “Curriculum implementation approaches that do not consider teacher beliefs have a temporary life” (as cited in Handal & Herrington, 2003, p. 62).

Significance of Problem

This study will add teacher voice, perspective and knowledge to the personal finance policy implementation discussion. There is limited research on this subject. Two recent studies surveyed teachers on financial literacy, but were largely focused on the state of financial literacy instruction (Godsted, 2007; Loibl, 2008). Only one of these investigations tested teacher financial knowledge. The participants involved in this study were current elementary, middle, and high school classroom teachers. This study queried teachers on: (1) personal finance policy; (2) personal finance instruction; (3) personal finance professional development; and (4) personal finance knowledge. Understanding teacher perspective and knowledge on these topics could lead to better personal finance policy implementation, instruction, and professional development training.

Overview of Methodology

The intent of this study was to gauge teacher attitudes and beliefs about personal finance instruction policy, as well as measure teacher understanding of a few core personal finance concepts. Survey methodology was chosen for its ability to measure attitudes, beliefs, and knowledge (Fraenkel & Wallen, 2006). It is also the primary methodology for describing a population (Glatthorn & Joyner, 2005).

This was a descriptive study. Frequencies and percentages for each survey question were computed. Means, and standard deviations were computed for selected questions. Results have been compared to the results of similar relevant studies (Godsted, 2007; Loibl, 2008; Lusardi & Mitchell, 2006; Lusardi & Tufano, 2008) and a pilot study.

Delimitations of the Study

The instrument used in this study was a survey instrument that included questions used by national researchers. By necessity, about a third of the questions were developed for this investigation. Most of these questions have been piloted tested, but have not been used by other researchers in other investigations.

The instrument relied upon self-reporting from the participants. The design of the survey and the protocol followed for contacts helped reduce this limitation. The phenomena reported are unique to the survey population.

Definition of Terms

Financial Literacy

Financial literacy, according to the Jump$tart Coalition for Personal Financial Literacy, a Washington, D.C. based financial literacy and advocacy organization, is the "Ability to use knowledge and skills to manage one's financial resources effectively for lifetime financial security" ("National standards in k-12 personal finance education (3rd ed.)," 2007). Note: "financial literacy" is used interchangeably with the term "personal finance."

Organization of Dissertation

Chapter Two of the dissertation provides a review of relevant literature. A discussion of the methodology including the procedures and methods used in designing and conducting the study is provided in Chapter Three. Chapter Four presents the data.

Chapter Five presents a discussion of the findings along with suggestions for future research.

CHAPTER TWO

REVIEW OF LITERATURE

The current body of literature on the history of personal finance instruction in the United States provides a basis for the present study. This chapter will explain the search process in reviewing this literature. An historical look at the history of personal finance instruction will then be presented, organized by its presence in the following movements: home economic, thrift, consumer and modern. Research on the effectiveness of personal finance mandates, and teacher understanding of economic, consumer and personal finance concepts will then be presented. The chapter concludes with a presentation of the theoretical framework from which this study was conducted.

Search Process

The following review was developed through a systematic review of the extant literature on personal finance instruction in the United States. Although the body of literature on teacher attitudes and beliefs about personal finance instruction and teacher understanding of core personal finance concepts is limited, some trends are evident.

Historical literature provides information about the history of personal finance instruction in the United States. Quantitative survey data provides information about the state of financial literacy in the United States (Peng, 2008a). Data from the Jump$tart Coalition for Personal Financial Literacy biennial survey of high school seniors provide large scale information about student understanding of personal finance concepts (Hoffman, 2008; Mandell, 2006). Data from the National Council for Economic

Education provides large scale information about the state of personal finance instruction in American schools ("Survey of the states: Economic, personal finance & entrepreneurship education in our nation's schools in 2007," 2007). Quantitative survey data provide information on the effectiveness of financial literacy mandates (Bernheim, Garret, & Maki, 1997; Peng, 2008a; Tennyson & Nguyen, 2001). Although the research on teacher attitudes and beliefs about personal finance instruction and teacher understanding of core personal finance concepts is limited, several studies broach these topics (Garman, 1979; Godsted, 2007; Lofgren & Suzuki, 1979; Loibl, 2008; Schug, 1983).

Historical

It could be argued that before the United States was even a nation, financial education began with the publication of Ben Franklin's *Poor Richard's Almanack* [*sic*] in 1732. The founding father's musings on life, labor and love included such timeless money mantras as: "Necessity never made a good bargain"; "Ask and have, is sometimes dear buying"; and "Who is rich? He that rejoices in his Portion [*sic*]" (p. 116). Published annually through 1758, it is estimated that the *Almanack* was read by as many as 10,000 colonists each year, and reportedly was rivaled in popularity only by the Bible ("Poor Richard's Almanac,"). Unlike many of the founding fathers, Franklin died a wealthy man. Post-Franklin, financial education in the United States has waxed and waned in reaction to economic, social and political conditions, and has not been without controversy. Often influenced by Victorian, patriotic, religious, and business principles, financial education has walked tightropes between thrift promotion and consumption preparation, and

traditional economic principles and “pocketbook” issues (Brobeck, Mayer, & Herrmann, 1997; Jacobson, 2004). Financial education played bit roles in the various consumer and home economic movements that began in the nineteenth century (Beecher, 1977; Brobeck, et al., 1997). It played a larger role in the thrift movement of the early twentieth century, which emphasized waste reduction (Gray, 1931; Strauss, 1920). While never central to the curriculum, its presence, embedded in home economic and consumer education courses, was diminished in public schools following the 1957 launch of the Soviet satellite Sputnik I (2008; Kliebard, 2002). This perceived security threat led the nation to rapidly adopt a curriculum focused on math and science, often at the expense of so-called “Life Skills” courses. In a climate of changing retirement funding responsibility, growing complexity of financial instruments, increasing debt loads, and mortgage default, financial education, or “financial literacy” as it has been re-christened, began enjoying a rebirth in the early 1990s. Led by the formation in 1995 of the Jump$tart Coalition for Personal Financial Literacy — a consortium of stake holders largely from the financial services industry and driven by the goal that every child in the United States should receive financial education — the movement gained federal momentum in 2003 when Congress established the Financial Literacy and Education Commission. Housed in the Office of the Treasury, the group released *Taking Ownership of the Future: The National Strategy for Financial Literacy 2006,* which included 26 specific calls to action (Commission, 2006). Currently, 40 states have developed personal finance standards, 28 require these standards to be implemented, and seven states require students to take a specific personal finance course; several states will be adding this latter

requirement over the next few years ("Survey of the states: Economic, personal finance & entrepreneurship education in our nation's schools in 2007," 2007, p. 10).

An historical look at the history of personal finance instruction will now be presented, organized by its presence in the following movements: home economic, thrift, consumer and modern.

Home Economic Movement

The term "home economics" first became popular in the early part of the 20th Century, but the movement began much earlier. Cornell University houses one of the foremost libraries on the topic. Known as The HEARTH Project and accessible at http://hearth.library.cornell.edu/, the organization points to Catharine Beecher's 1841 book *Treatise on Domestic Economy for the Use of Young Ladies at Home* as one the earliest and most influential texts on the movement. Beecher, a half-sister of the abolitionist Harriet Beecher Stowe, was an educator and "social reformer" who promoted the "importance of domestic life and sought to apply scientific principles to childbearing, cooking, and house keeping" ("About: home economics,"). Writing in the introduction of a 1977 re-publishing of Beecher's seminal work, Kathryn Kish Sklar, a professor and historian, said *Treatise* was "the first to depict the full behavioral details and to present the full ideological argument for the spiritualization, specialized and politicized view of motherhood we associate with the Victorian era and have come to call 'the feminine mystique'" (Beecher, 1977, p. vi). Dedicated in part to "American mothers whose intelligence and virtues have inspired admiration and respect," the book was adopted by Massachusetts' public schools where Sklar believed it was used to teach the "gap that

developed between female experience before marriage and the conditions women encountered in marital life" (p. xi).

Other movement leaders included Maria Parloa and Fannie Farmer, who taught at the renowned Boston Cooking School in the 1870s, and Ellen Richards who attended Vassar College and eventually earned a doctorate at the Massachusetts Institute of Technology (MIT). The first, and for some time, the only woman to earn a degree from the esteemed institution, Richards taught sanitary education at the school. Writing in *New England Kitchen Magazine* in 1890, Richards promoted a science-based approach to domestic tasks as a way to liberate women from domestic drudgery: "The woman who boils potatoes year after year, with no thought of the how or why, is a drudge, but the cook who can compute the calories of heat which a potato of given weight will yield, is no drudge" (Spring, 2002, p. 33). Together with Melvil Dewey and other movement leaders, Richards hosted annual meetings on domestic issues beginning in 1899. Known as the Lake Placid Conferences, the term "home economics" grew out of these gatherings, as did an aggressive effort to promote its teaching in schools and universities ("About: home economics,"). Caroline Hunt was considered the "so-called philosopher" of the movement. A graduate of Northwestern University and head of the School of Domestic Science at the University of Wisconsin, she "delineated the new role of women as consumers" (Spring, 2005, p. 212). She argued at the Lake Placid gatherings that because of industrialization and the resulting specialization, the home had ceded the role of education to the school, and the production of home goods to the factory. In such a changing environment she believed it imperative that home economics — which she saw as "training for wise consumption" (p. 213) and whose mission also included influencing

producers in the areas of worker treatment and sanitation — be part of the college curriculum.

By 1917, roughly 20 percent of high schools offered home economics classes, and more than 17,000 students were taking such courses at the college level (p. 214). The movement got a boost from the federal government that year with the passage of The Smith-Hughes Act of 1917, which provided federal funding for the teaching of vocational and home economic courses at public schools and universities. However, some believed the vocational emphasis of the bill compromised the scientific role of home economics. Historian Rima Apple wrote:

> In the early twentieth century, women who wanted to pursue careers in scientific research were frequently counseled to study home economics… As home economic units became increasingly involved with teacher training for public school instruction … [this] lessened the perceived significance of the scientific aspect of home economics (p. 212).

While financial education generally played only a bit role in the movement (typically found in the category of home management), several home economics writers, including Beecher, touched on this subject. In a chapter titled "On Economy of Time and Expenses" Beecher made a pitch for financial education: "It is impossible for a women to practise [*sic*] a wise economy in expenditures, unless she is taught to do it, either by a course of experiments, or by the instruction of those who have had experience" (Beecher, 1977, p. 176). Beecher described several money management principles relevant today: importance of budgeting so "expenditures never exceed means"; paying most important

bills first; cost-saving benefits of self-reliance; buying wholesale; and care for possessions. She also noted the “uneasiness and discomfort” money issues can cause a marriage (Beecher, 1977, p. 178).

Dora Morrell Hughes’ 1918 *Thrift in the Household* began by citing the financial wisdom of *David Copperfield’s* Mr. Micawber: “Annual income twenty pounds, annual expenditure, nineteen six, result, happiness. Annual income twenty pounds, annual expenditure twenty pounds ought and six, result misery” (p. 5). Despite this precursor, the book is solely focused on wise buying of household items. Hughes urged readers to recall the advice of Ben Franklin’s Poor Richard: “Take care of the pennies, and the dollars will take care of themselves” (p. 23). Reviewed by the University of Chicago Department of Home Economics for a March 1919 edition of *School Review,* Hughes’ book is described as suitable for the “home economics teacher… on the alert for concrete suggestions for practicing thrift.” The reviewers also note the effect of The Smith-Hughes legislation at that time: “An unusual amount of governmental activity has influenced home economics literature since our review of a year ago… the act has of course stimulated the writing of articles and pamphlets” ("Recent books for home economics in high schools ", 1919, p. 219).

Designed as a textbook for home economic instruction, Agnes K. Hanna’s 1922 *Home Economics in the Elementary and Secondary Schools* lays out a curriculum for public school students. While largely focused on clothing and cooking issues, it does call on instructors to present income and budgeting instruction in a concrete manner. “Unfortunately,” wrote Hanna, “many teachers present this material in so theoretical a way that their classes are left with a little general information and rather vague ideas how

[*sic*] to make this information of practical use" (p. 178). She recommended that students create an actual household monthly budget, a task she described as "so complex a problem" that students should first work on smaller budgets in the areas of food and clothing (Hanna, 1922, p. 180). As part of this activity, Hanna suggested that educators investigate "desires versus future needs" (a core personal finance principle today commonly referred to as wants versus needs), and the benefits of planning, by examining the actual personal budget of a "Wage-Earning Girl," which included an exploration of the "Advantages and abuses of 'living at home' " (p. 183).

Clarence W. Taber and Ruth A. Wardall's 1923 *Economics of the Family* boasted that it was written as closely "as possible from the high school student's point of view" (Taber & Wardall, 1923, p. v). The book focused on money and budgeting, albeit with a stern tone:

> You boys and girls are going to study how to handle your own money and meet business situations successfully, and how your families can successfully handle their money and the business matters that come up with running a home.
>
> If people were only trained to handle money more skillfully, we would all become a Mr. Thrifty — and a Mrs. Thrifty or a Miss Thrifty — and our town would become a Thrift Town and incidentally, a Happy Town. But how can we learn to be thrifty? (Taber & Wardall, 1923, p. vii).

The no-nonsense tone carried over to a discussion of allowance, which was deemed a "very excellent" idea if used for "necessary expenses," but "foolish" if spent on "fancies" (p. 4). The authors warn that when even a small sum is given to children with

no purpose, it is likely to instill poor money management habits. The book also emotes a patriotic and "family values" fervor. The authors argue that the economics of the family is critical to the nation's well being. "If one is destroyed the other's existence ceases" (p. 164). While much attention is focused on budgeting, *Economics of the Family* included a unit on investing in which concepts such as interest and principal are described. As part of the lesson students are asked to query their fathers on how they invest ("What do they consider safe investments, and which do they consider chance and uncertain investments or speculation?"). Differences between a savings and checking account are also discussed. As a culminating activity, students are asked to write about how they would "safely" invest their teacher's money (p. 219). No pressure there! Interestingly, several investing and saving mantras popular today are described. The authors discuss how a mother they know instructs her child to divide allowance three ways: "to give, to spend, and save" (p. 4). Today, savers are often counseled to put aside money in such a manner. In fact, a piggy bank is available today with three slots — one for charity, one for spending and one for long-term saving. The importance of investing in oneself (through self-improvement) is also illustrated in *Economics of the Family*. The authors noted that this is a "form of investment not sufficiently appreciated" (p. 205). Finally, the use of the term "personal economics" is a first in my investigation, and an apt forbearer to the term popular today: "personal finance."

Out of the hundreds of texts Cornell's HEARTH Project makes available in electronic format (http://hearth.library.cornell.edu/h/hearth/browse.html), only a few are focused on what could be described as personal finance issues. More typical are books such as Ellen Richards 1900 *Air, Water and Food from a Sanitary Standpoint*; Caroline

Hunt's 1913 *Home Problems from a New Standpoint*; and the 1923 *Principles of Clothing Selection* by Helen G. Buttrick. Still taught in schools today — though more likely to be known as Family and Consumer Science — Sara Stage and Virginia B. Vincenti, editors of *Rethinking Home Economics: Women and the Profession,* write that home economics was much more than "glorified housekeeping" and was "never intended to keep women in the home." Instead, they say that leaders such as Ellen Richards used the "traditional ideology of woman's place to urge women to do untraditional things" (p. 15). The editors note in a chronology of home economics the negative effect the 1957 launch of Sputnik I had on the field as Congress passed The National Defense Education Act, which stressed science, math, and foreign languages over secondary school electives such as home economics (p. 326).

The Thrift Movement

The Thrift Creed from the 1931 *Thrift in Education* sourcebook by Avery J. Gray.

> I believe in the **United States of America**.
>
> I believe that her progress depends upon the **Industry** and **Thrift** of her people.
>
> Therefore, I will devote my time to worthwhile activities and **Save Time** by being punctual.
>
> I will **Preserve** my **Health**, because without it I have less earning power.
>
> I will **Conserve Materials**, because materials **Cost Money**.
>
> I will **Save** my **Money**, because saving leads to security, helpfulness, and happiness.
>
> **I Will Do All of These Things for the Welfare of America** (p. iii).

Beginning in the late nineteenth century, a myriad of organizations and interests including the banking industry, Christian groups, consumer advocates, educators, the federal government, home economists, moralists, parental groups, patriots, the National Education Association, and social control advocates pushed the concept of thrift. Author Lisa Jacobson described a “burgeoning culture of consumption” brought on by the industrial revolution. Writing in a 1900 edition of *Harper’s Bazaar*, Carolyn Benedict summed up the influence of this new paradigm of products and consumption on the young: “the mind of the child veers between the love of acquiring and the love of spending. It delights to hoard, to shake its bank and feel its increasing weight, and to spend recklessly until it is bankrupt.” Other commentators were more blunt. One described the American child as fast becoming a “mercenary little wretch” (as cited in Jacobson, 2004, p. 56).

Dispute on how to address this issue raged among women’s publications, educators and parent groups. Editorialists wondered if it was possible for children to learn money management skills without becoming overly fixated on money. Jacobson (2004) believed the tension was part of a larger, eternal parental fear: “How best to prepare children for their encounters with the outside world while still protecting their cherished innocence” (p. 57). One idea that gained hold during this time was the school savings bank. Popular in Europe for decades, the concept was introduced in the United States in 1885 by Long Island City School Commissioner John Thiry. Under his system, students deposited coins in a school account each Monday, which became known as Bank Day. Often operated in conjunction with local banks, deposits ranged from a penny to 25 cents.

Sums of more than $2 drew interest of about 3 percent. Students were permitted to withdraw by signing a check endorsed by both a parent and the teacher. Writing on the twelfth anniversary of its inception, the *New York Times* reported that Thiry's program had grown from 3,000 area students to more than 7,000, and that $73,028.62 had been saved. The article noted that the savings system was designed "not only to stimulate the accumulation of capital… but to build up habits of frugality and self-denial… to divert their (the child's) spending from foolish or injurious to practical channels" ("The school savings bank," 1887). In 1910, California, Minnesota, New Jersey, and New York made "provision for the correlation of the school savings banks with local savings banks," while Massachusetts made thrift education a requirement (Murphey, 1929, p. 12). By 1922 more than 3,000 schools in the country had school-based savings plans in place, and close to $4 million had been saved during the 1920-1921 school year (Bowman, 1922, p. 57).

Jacobson (2004) situates the school savings bank movement within historian David Nasaw's "schooled to order" (p. 59) description of the education goals of the new industrial economy, and what historian Lendol Calder termed the "Victorian money management ethic" (p. 61). Jacobson reported that the movement had widespread support of bankers, Christian groups, home economists, and moralists championing the virtue of frugality and self-control. Even the Boy Scouts offered a badge for opening a savings account. While bankers acknowledged the promotional benefits of school savings banks, most viewed the program as a community service rather than a profit-making venture. School savings banks were also popular with those who had a social control agenda over "poorer classes… who otherwise would be taught only the hand-to-mouth method of

earning and spending" (p. 64). The Philadelphia Savings Fund Society was particularly adept at "spreading the gospel of thrift" to immigrants and the working poor. Children in this program sang thrift-themed songs, performed thrift-themed plays, and engaged in a thrift-themed pageant. In Colorado, C.S. Morrison, a physician's wife, set up a similar Girl Scout-based banking program that she believed would help immigrant children take "their rightful places in the community, not with the socialist attitude of the parents, but [as] prosperous loyal Americans" (p. 67). Ironically, immigrants often brought entrenched savings values far stronger than those being pushed by such groups. School savings bank programs reached their zenith in the 1920s. By the end of the decade and the beginning of the Great Depression close to 15,000 schools had banking programs in place.

With war raging in Europe and prediction of scarcity at home, the Thrift Movement gained national momentum in 1915 when the International Congress for Thrift was held at the Panama-Pacific Exposition in San Francisco. Author and thrift advocate Simon W. Strauss called the event "the first time in history of the world that a body of men and women ever came together for the purpose of definitely inaugurating a national thrift movement along broad educational lines" (Strauss, 1920, p. 103). The meeting began with a call from California Governor Hiram Johnson for a "Thrift Day" in which the "people of the State, as fully as possible, devote their thoughts throughout the day to the subject of thrift" (p. 104). Strauss, a speaker at the event, argued with a religious zeal, for a national — and indeed an international — thrift movement:

> Words are incapable of describing the magnitude, significance and possibilities of this movement, if we are faithful to our duties and our opportunities. For if we

> shall lead humanity into more thrifty ways, and especially our fellow American citizens, we shall, in reality, be turning many a human soul from penury to prosperity, from want to affluence, from failure in everything to success in everything (p. 106).

Thrift fever spread across the bay where a few days later the Board of Directors of the National Education Association (NEA), meeting in Oakland, formed a Committee on Education with the mission: to investigate how best to teach thrift in the schools. The group created a thrift bibliography, and sponsored essay contests for adults and children on how best to teach thrift in the schools. More than 20,000 students, and adults from 42 states submitted essays. Winners were announced at an NEA meeting the next summer. Straus remarked: "It is doubted if there has ever been an occasion in which there was so much intensive thought on one subject as was developed in this essay contest… All of these activities tended to scatter the seeds of thrift well over America" (p. 125). Leaders of the movement equated thrift with labor and suggested that a "National Thrift Day" precede Labor Day. It is uncertain to what extent this idea to have a National Thrift Day the Sunday before Labor Day took hold. Strauss reported that some state governors acted upon this request. Library of Congress records note the creation of a Thrift Week by the Young Men's Christian Association (YMCA) in 1916 ("Guide to people, organizations, and topics in prosperity and thrift,"). Beginning on the anniversary of Ben Franklin's birthday (January 17), the week was dedicated to "educating children in the habits of saving and wisely using money."

America's entry into World War I in 1917 and the corresponding homeland sacrifices made everyday, in Strauss' words, "National Thrift Day." It also introduced saving investment concepts to children as they, along with adults, were encouraged to help finance the war through savings stamps, thrift stamps, and postal savings and liberty bonds. Murphey (1929) wrote in *Thrift Through Education* that children, and the Boys Scouts in particular, actively engaged in purchasing these savings and war-financing instruments which cost as little as 25 cents. Thrift during the war extended far beyond pocketbook and savings issues as Americans were urged to conserve all resources. Aiding them in their efforts were two booklets produced in 1919 by the Treasury Department: "Ten Lessons in Thrift," and the follow-up "Fifteen Lessons in Thrift." Designed for educators, the guides emphasized thrift and conservation in all facets of life. Murphey credited this governmental leadership for widespread savings in food, minerals, forest resources, and the popularity of home gardens. She described this effort as: "thrift in all phases of home and national life" (p. 13).

While the war necessitated conservation and thrift, the post-war boom which came to be known as the "Roaring Twenties" negated much of this fiscal control. Remarked Murphey: "It is regretted that with the close of the war, money was lavishly spent in a period of reaction" (p. 13). Marketers, of course, stoked these flames, and even ingeniously reframed consumer purchasing power. Julian Goldman, owner of a chain of east coast clothing stores ran an advertisement in the 1920s with the headline: "He makes only $3,000 a year…" The copy then points out that this middle-class "everyman" named Jim Jones can expect to earn $112,290 over his lifetime, and "wouldn't it be nice… if Jim could use some of that money now?" (Calder, 1999, p. 205).

Lendol Calder debunked the notion of a magical age of credit abstinence and fiscal purity in his 1999 *Financing the American Dream: A Cultural History of Consumer Credit*. He asserted that the use of credit was as old as "antiquity," but pegs 1915 as the birth of what he calls the "modern system of credit for consumption" (p. 17). He described the introduction of two new institutional foundations of credit during this time: the installment plan money lent and paid back at specific periods over time, which he says was "to consumer credit what the moving assembly line was to the automobile industry" (p. 17) and the increased variety of sources of credit, including small-loan lenders, retailers, industrial lenders, such as automobile manufacturers, and commercial banks, all of whom "adopted new strategies to pursue aggressively the profits to be made in consumer lending markets" (p. 18). Aggressive marketing and lending, coupled with the availability and relative affordability of major new durable goods, particularly the automobile, helped drive a consumer revolution. Author Martha L. Olney (1991) asserted in *Buy Now Pay Later: Advertising, Credit, and Consumer Durables in the 1920s* that a fundamental shift in purchasing occurred during this time. Through detailed economic analysis, Olney demonstrated that Americans significantly increased their purchasing of major durable goods (mostly automobiles but also household appliances) at the expense of minor durable items, perishables, and savings.

By 1924 efforts were underway to rekindle a sense of thrift with the holding of a National Conference of Thrift Education in Washington, DC that year. It was noted in opening remarks:

> The need for more complete understanding and application of the principles of thrift is more and more recognized. During the war, every effort was made to

conserve and save. Indeed, the war furnished an all-compelling motive for the practice of thrift and saving… But the close of the war brought a period of reaction. There began an era of almost reckless expenditure. In every walk of life it was the same. Money before saved and invested was spent lavishly and unwisely, time was frittered away and energy and effort dissipated” ("Prosperity and thrift: Introduction,").

The crowded school curriculum is recognized along with a suggestion that thrift education be interdisciplinary:

> With a school curriculum already over full, it is clear that to be effective, thrift must be taught not so much as a subject in itself as in its application in other subjects. Our courses of study in elementary and secondary schools can profitably be given a thrift setting. Arithmetic, geography, literature, the sciences, industrial arts, home economics — all may be enriched and vitalized if they be taught in the light of the principles of thrift. These principles can be integrated in such way as to make the lessons more effective and lasting, and at the same time minimize the time required in a given lesson or subject…
>
> The value of any school program is to be determined in the manner in which it meets actual life conditions. Therefore, to be most effective a school program must have the backing and support of all people — not merely those whose business it is to manage and conduct the schools ("Prosperity and thrift: Wise spending as a teacher sees it,").

The presentation titled “Wise Spending as a Teacher Sees It” by Olive M. Jones, president, National Education Associations [*sic*], was interesting for its focus on the classroom and teacher perspective, and concern about curriculum saturation.

On the subject of the classroom and teacher perspective

> I thought that if I spoke from that point of view (of a teacher) I might call to the attention of those of you who are not in the actual classroom work of schools some of the difficulties confronting teachers in regard to this subject; and maybe some of you would learn the reason that occasionally teachers do not welcome the introduction of thrift education, as possibly it would seem that they ought to ("Prosperity and thrift: Wise spending as a teacher sees it,").

On curriculum saturation

> We teachers have reached the saturation point in the inclusion in the curriculum of things to teach. Unless something is dropped from the course of study, so that the teacher is relieved, or unless the school day and the school year are lengthened, and the objections to that are just as strong from the point of view of the parent and the child as from the point of view of the teacher, we can consider no further additions. I want to have that point understood clearly. And unless much greater compensation and consideration are given to the worker who must prepare for and teach this rapidly increasing number of subjects of instruction, the end must come to the business of asking teachers to take just twenty or thirty minutes a week for this or that valuable matter of instruction. The pot in regard to

> that matter has boiled over. These special things must be included in the regular school subjects by which her children are promoted and her own success is judged.
>
> A teacher said to me recently — and this is illuminating from the point of view of the teachers — “Look at my plan of work. I have taught fire prevention, sanitation, street cleaning, thrift, safety, humaneness, memorial funds, patriotic celebrations,” — there were more of them but I have forgotten the rest that she had on her list. She turned on me with this question, “Are you going to examine my class for promotion in these things or in arithmetic and grammar?” ("Prosperity and thrift: Wise spending as a teacher sees it,").

The event closes with the recommendation that “influential organizations” promote these concepts of thrift in schools.

The thrift cause had a strong supporter in the White House. President Calvin Coolidge, who publicly endorsed the notion of thrift, was described as a standard bearer for the movement and lauded for his plain living which included dressing as a “simple New England farmer” ("Guide to people, organizations, and topics in prosperity and thrift,"). While his whitehouse.gov biography noted he “demonstrated his determination to preserve the old moral and economic precepts amid the material prosperity,” it also pointed out that he did little to check the growing economic boom or to aid industries in need, particularly agriculture. His policies were decidedly laissez-faire in regard to both business and foreign policy. Just prior to his 1933 death, and with the Great Depression

in full force, he confided to a close friend, "… I feel I no longer fit in with these times" ("About the White House: Presidents,").

The brutal economic conditions of the Great Depression, punctuated by stock market crashes, mass unemployment (as high as 25 percent in 1933), and mass bank failures (10,000 banks collapsed from 1930 through 1933), made thrift a necessity (Calder, 1999; History of the Federal Reserve,"). Much of the blame for the economic woes of the time were directed at business excess of the 1920s according to the editors of *Encyclopedia of the Consumer Movement* (Brobeck, et al., 1997, p. 587). Consumer and thrift education from the Great Depression through the end of the Second World War could be described as "anti-advertising, anti-business and pro-frugality" in which a mantra of "use it up, make it do, or do without prevailed" (Brobeck, et al., 1997, p. 141).

The Consumer Movement

The consumer movement began in the late 19th Century and was initially focused on work place and food safety, later expanding to product safety and marketing exploitation. However, several notable financial literacy books and writings came out of the early days of the movement. A 1912 essay by University of Chicago economist Wesley Mitchell, titled "The Backward Art of Spending Money," was unique not only for its title but for its focus on spending over earning, and its acknowledgment of the influence of outside forces on spending:

> In the scheme of modern life, making money and spending money are strictly correlative arts. Of the two, spending is rated as both pleasanter and easier to

> practice… the vast majority would gain as much from wiser spending as from increased earning…
>
> Important as the art of spending is, we have developed less skill in its practice than in the practice of making money… Many of us scarcely know what becomes of our money (p. 3)… To spend money is easy, to spend it well is hard. Our faults as spenders are not wholly due to wantonness, but largely to broad conditions over which as individuals we have slight control (p. 4).

Mitchell described the growing complexity of economic life brought on by the industrial revolution. He referenced both the barter system and the not-so-distant time in the United States when families were a unit of producers and compared this to the current environment where families were more likely to be employed and subject to both the opportunity *and* the uncertainty such a system spawns. He also noted that in a time of increasing consumption, it was human nature to desire more than a neighbor. “In the money economy of today,” Mitchell wrote, “where so much of our attention is devoted to business, these comparisons turn with corresponding frequency upon our pecuniary standing” (p. 15). He concluded that such an atmosphere “forms in us the habit of extravagant expenditure” (p. 16). Mitchell saw much of the burden for wise spending falling on the housewife and called for more “domestic science” in the schools. Acknowledging the limitations of the school system at the time, and the opportunities for women “at best… a small percentage of women can secure this more elaborate training” (p. 18) he suggested creating “a professional class of Doctors of Domestic Science” to

visit homes, train newlyweds, and hold public sessions (pp. 18-19). It is not clear that this idea ever came to fruition.

In 1924, Henry Harap, a professor of education at the Cleveland School of Education, together with James Mendenhall wrote *The Education of the Consumer*, a study of consumer economic patterns, which argued for the development of a curriculum based upon its results. In addition to examining consumer behavior in the areas of food, shelter, fuel and clothing, it suggested educational activities designed to make the learner a “more effective consumer of economic goods” (Harap, 1924, p. 14). Objectives, of which there were hundreds, ranged from the broad: “To become aware of the problem of marketing as it affects the consumer, with respect to quality and price of food products” (p. 59), to the specific: “To know the place of shoes in the budget” (p. 269).

In 1935 Mendenhall became the associate director of the first college level consumer education department (Brobeck, et al., 1997, p. 141). Housed at Stephens College, a women’s college in Missouri, the program was funded by the Sloan Foundation, which was created by former General Motors Chairman of the Board Alfred P. Sloan ("Life of Alfred P. Sloan,"). For his part, Harap later produced several studies of consumer education in high schools. In 1938 he found that such courses were largely taught in business, home economics, and social science classes. In 1941 he reported that home economics courses emphasized buymanship (prudent purchasing) and budgeting, while business courses stressed money management along with “general buying procedures,” and social science courses focused on governmental protection, economics problems, transportation and taxes (Brobeck, et al., 1997, p. 141). Consumer education leader and author, Rosella Bannister, writing in the *Encyclopedia of the Consumer*

Movement believed the “lack of a single disciplinary home may have discouraged the maturation and acceptance of consumer education within the academic community” (p. 141).

In 1928 Stuart Chase and F. J. Schlink released the equally important *Your Money’s Worth: A Study in the Waste of the Consumer’s Dollar*. The book opened by describing the consumer as a modern day Alice in a “Wonderland” of advertising and consumer choices. “Why do you buy one make of automobile rather than another?” the authors ask. “Why do you draw up beside a filling station pump which is painted red rather than one which is painted yellow?” (p. 1). Their observations on car shopping could almost have been written today:

> One who goes to the market to buy a motor car to-day [*sic*] is naturally confused. He has read the words *best* and *greatest* so often that they have ceased to be convincing. Where *all* is best, he reflects, there can be no best. Thousand dollar cars have been described to him in ten thousand dollar language… He finds himself a target in a war of adjectives… so he is forced to rely on chance — the advice of friends — or his own limited experience (p. 2).

The best-selling work became a consumer guide on food, medicine, cosmetics, autos, and household equipment. While the authors noted that the American Medical Association was actively working to address many of the most egregious medical claims, the organization was “a voice crying in the wilderness” (p. 137). Chase and Schlink called on the public to assume the role of product tester. They asked readers to test products with the aid of high schools and colleges, and to lobby industry and government.

"Never believe the findings of a test as advertised," the authors warn (p. 266)." The authors close with a warning to salespeople: "These instructions will make the supersalesman smile — as has every right to do to-day [*sic*]. But some day he may smile out of the other side of his mouth" (p. 267). Personal interest and reader feedback led Schlink in 1929 to form Consumers' Research, with the mission to test products and report findings. Known today as Consumers Union, the organization is the publisher of the popular consumer magazine, *Consumer Reports*.

The horrific effects of the Great Depression forced the public to focus on financial matters in ways they hadn't previously. Initial bargains on quality merchandise gave way to "shoddy" products, which only increased support for testing of products. The National Consumer League reported that after the 1929 stock market crash, minimum wage, sweatshop, and child labor laws were often ignored. While President Franklin D. Roosevelt implored state leaders to adopt wage laws and worker protection legislation, the *Encyclopedia of the History of the Consumer Movement* reports that New Deal programs failed to fully embrace consumer issues. While the National Recovery Administration (NRA) program of industrial regulation codes included consumer views, administrators "saw no need for special consumer representation" (Brobeck, et al., 1997, p. 588).

James Mendenall and Henry Harap, who wrote *The Education of the Consumer* — a 1924 study of consumer economic patterns, which argued for the development of a curriculum based upon its results teamed up again in 1943 to edit *Consumer Education: Background, Present Status, and Future Possibilities*. The 20-chapter book touched on a wide variety of consumer and financial education issues. Harold F. Clark, a professor of

education at Teachers College at Columbia University, argued in the chapter titled *Major Issues in Consumer Education*, that in order to ensure objectivity, consumer education in schools should be provided by the most “disinterested agency” (p. 30). He concluded that of the candidates schools, government, magazines, newspapers, radio and voluntary organizations schools and voluntary organizations were the most suitable agencies. While Clark believed that consumer education was best aimed at low-income groups, he noted that all current communication methods and material were targeted at higher income groups. He recommended centering consumer instruction for lower income groups on survival basics such as food, clothing and shelter. Clark acknowledged that the question of how to organize consumer education in schools was a difficult one. Questions he considered were whether it should be contained in a separate stand-alone course, which students should take it, and how to make instruction most effective. He concluded that a separate course could not suffice (p. 34). Instead, he argued for building a program of multiple courses around what he called the “Main Ideas of Living” such as food, clothing, shelter, health, and recreation. These items were “almost universal in their use” he wrote. Clark pointed out that a key challenge to such an endeavor would be shifting the current teacher-training model which was organized around separate formal subjects. Until such restructuring occurred, he concluded that “any adequate program of consumer education will be next to impossible” (p. 35). *Consumer Education: Background, Present Status, and Future Possibilities* reported that consumer education instruction at this level was largely present in consumer math, home economic, and science courses. A 1939 survey by Mendenhall estimated that 5 to 10 percent of American High Schools offered separate consumer education courses. W. Harmon Wilson and Alpheus Marshall in the chapter

Consumer Education — A Look Around, noted that the "secondary level is where we find the greatest development of special subjects and courses in consumer education" (p. 63). They wrote that consumer instruction at the collegiate level was most often found in home economics courses, and lagged secondary education in its development.

Just as boom times followed the First World War, a renewed interest in spending followed the second. Ironically, many Americans initially feared a depression as military spending subsided. Instead, just the opposite occurred. "Pent-up" consumer demand created three booms — auto, baby and home — fueling economic expansion as the country's gross national product grew from a little more than $100 billion in 1940 to close to $300 billion by 1950 ("The post war economy: 1945-1960,"). By 1953, two-thirds of Americans had purchased their first television set. Consumer credit surged during this period as Americans rushed to embrace the new mantra of "earn, spend, consume and throw away" (Brobeck, et al., 1997, p. 141). Consumer education leader and author, Rosella Bannister, writing in the *Encyclopedia of the Consumer Movement,* believed that such sentiment contributed to consumer education courses becoming a "dumping ground for low-motivated, low-achieving students" which in part "negatively influenced consumer education's acceptance as a legitimate academic subject for all students in our nation's schools" (p. 141).

By the early 1950s there were signs that Americans were struggling to meet installment payments on homes and durable goods. In response, a cohort of concerned secondary education and college teachers formed the Council on Consumer Information in 1953 to study and track consumer problems. The organization published a newsletter which looked at policy issues and offered consumer advice and held annual conferences.

Membership in the Council grew steadily. That same year J.K. Lasser, publisher of a tax guide since the early 1930s and in whose name an entity, The J.K. Lasser Institute, still publishes tax and financial books and Sylvia F. Porter, a longtime financial writer who according to her biographical sketch had the ability to translate “economic ‘bafflegab’ for common people” released *Managing Your Money*. ("Porter, Sylvia F. (1913-1991), Papers, 1939-1991 (C3977),"). Focused on family finances the book was based on the premise that readers could solve their own financial issues tailored to their “life, values, and desires” (Lasser & Porter, 1953, p. v). A precursor to the all encompassing personal finance books popular today, *Managing Your Money* ranged from budgeting and borrowing to insurance and investing, but also devoted a chapter to the relatively new concept of Social Security. Lasser and Porter wrote in 1953 that a “great ignorance exists” about Social Security. They cited a survey showing that 40 percent of eligible beneficiaries did not know they were covered, and 77 percent had “practically no knowledge of the benefits” (p. 188). The authors provided a step-by-step description of the program and its benefits.

Despite a decade of post WWII splurging which led to inflation in the late 1940s, the introduction of the first credit card (Diner’s Club) in 1950, and the purchasing of new insurance services and consumer products like the television set, national consumer activity was minimal during this time. Movement historian and author Robert Mayer (1989) pointed to the “chilling” effects of McCarthyism which sought to purge the United States of communists — as the primary reason for this disengagement. Mayer said consumer activists feared being labeled “un-American” by Senator Joseph McCarthy and

his crusaders. In fact, Consumers Union, publisher of *Consumer Reports* magazine, was labeled a “communist front” during this time (p. 25).

McCarthy’s death in 1957 coincided with the release of a cascade of influential consumer books, which helped usher in the golden era of the consumer movement. *The Hidden Persuaders* by Vance Packard in 1957 revealed for the first time the deceptive psychological practices employed by the advertising industry to manipulate consumers. *The Affluent Society* by John Kenneth Galbraith the next year explored the social effects of rampant consumerism. He described a country of haves and have-nots, and advocated for more government expenditure for the common good, particularly in the areas of education and health care. The book is also notable for Galbraith’s use of the now commonplace term “conventional wisdom” to explain broadly accepted ideas. Other notable consumer books of this era included: Rachel Carson’s *Silent Spring* in 1962, which described the health effects and damage caused by pesticides; David Caplovitz’s investigation of low-income consumers, *The Poor Pay More* in 1963; and Jessica Mitford’s uncovering of funeral home abuses in the 1963 *The American Way to Die*.

The year 1957 was also significant for the launch of the Soviet satellite Sputnik I into orbit. Cold War tensions and financial education in American schools would never be the same again. The first orbital launch cast an unflattering spotlight on American education. Congress responded by passing the National Defense Education Act of 1958 (NDEA), which called for increased curricular focus on math, science, and foreign languages at all levels of education (*NSF 88-16*). According to Herbert Kliebard, author of *Changing Course: American Curriculum Reform in the 20th Century*, the new curriculum push “was almost the polar opposite” of the “life adjustment education” focus

of the time (2002, p. 134). Randy Lively, a longtime executive in the credit industry, who was instrumental in the 1995 founding of the Jump$tart Coalition for Personal Financial Literacy an organization at the forefront of the current push for financial education and the group believed to have coined the phrase “financial literacy” draws a direct correlation between the curricular reaction to Sputnik and the decline in financial acumen. “Up until that time (the enactment of NDEA) the school curriculum was heavily laced with life skills” (personal communication, February 19, 2008). “All of the life skills stuff dried up by the middle 1960’s and we started graduating kids who knew nothing about this stuff (financial issues).” As a credit executive for Sears in the 1960s, Lively saw the first wave of consumer fiscal problems. The timing, he said, could not have been worse because just as financial instruction was exiting schools, the consumer credit industry was beginning a three decades long transformation from small local retailers offering credit to customers they knew by name to the current faceless national bank cards offered by huge financial behemoths like American Express, Discover, MasterCard and Visa. Concerned about mounting credit misuse, Lively and Sears were part of a group of large retailers including Federated Department Stores, J. C. Penney, Macy’s, and Montgomery Ward who worked with the National Foundation of Consumer Credit (NFCC) to address this issue. NFCC’s founding in 1951 to “promote the responsible use of credit” marked a growing post-Depression, post-war national shift away from thrift and avoidance of credit to the current financial education focus on wise spending and credit use (Brobeck, et al., 1997, p. 401). Collaboration with the major retailers led to the development and growth of credit counseling agencies, many of which are still in

existence today. NFCC was renamed the National Foundation for Credit Counseling in the late 1990s.

Also significant to the consumer movement was President John F. Kennedy's 1962 delivery of a proposed Consumer Bill of Rights to Congress that included the right to: (1) safety, (2) information, (3) choice among a variety of products and services at competitive practices, and (4) a fair hearing by government in the formulation of consumer policy. Mayer labeled Kennedy's message a "convenient starting point for the third era" of American consumer activism (Mayer, 1989, pp. 27-28). Unfortunately, it took another tragedy to move Congress to act. While American legislators were debating amendments to food and drug law, it was revealed that the sedative and morning sickness drug thalidomide had led to severe birth defects in Europe. The *Washington Post* reported that only through the efforts of one FDA doctor, Frances Kelsey, had the drug been kept off of the American market (as cited in Mayer, 1989, p. 27). Congress quickly passed new legislation, whose cornerstone was the requirement that new drugs had to be tested for safety in addition to efficacy prior to their release to the public.

In 1964, President Johnson created a special White House consumer affairs post. Staffed by Esther Peterson, she acted as a promoter of administration consumer policy, White House liaison with Congress, and a champion of local consumer organizations. Perhaps the most significant event of this era was the emergence of consumer-advocate Ralph Nader. His 1965 *Unsafe at Any Speed*, which linked driving accidents and fatalities to deficient automobile engineering, quickly became *The Jungle* — Upton Sinclair's 1906 exposure of the meat packing industry — of its era, and Nader became the face of the movement. Within a year the National Highway Traffic Safety Administration was

created. Nader scored numerous additional consumer successes: Wholesome Meat Act, Clean Air Act, Freedom of Information Act, establishment of Public Citizen Inc., an umbrella organization of several “semiautonomous” groups which has been described as “one of the most influential organizations” of the movement (Brobeck, et al., 1997, p. 460). Nader was aided in his efforts by the Nader Raiders, an organization made up of hundreds of “ordinary citizens”… driven by the common belief “to affect social change” ("Independent Lens," 2007, November 20).

Consumer issues received attention from ensuing Republican presidents. Richard Nixon offered a Buyers Bill of Rights in a 1969 address to Congress, which included “the right to register dissatisfaction and to have complaints heard and weighed” (Brobeck, et al., 1997, p. 592). Interestingly, his speech, which was a mix of consumer advocacy and business pragmatism, began with a nod to two of the movement’s most important authors: “Consumerism — Upton Sinclair and Rachel Carson would be glad to know-is a healthy development that is here to stay.” Nixon also warned against excessive government intrusion: “That does not mean that caveat emptor — ‘let the buyer beware’ — has been replaced by an equally harsh caveat venditor — ‘let the seller beware.’ Nor does it mean that government should guide or dominate individual purchasing decisions." Nixon also called on the creation of a new Office of Consumer Affairs within the Executive Branch, which would “be a focal point for a wide variety of government efforts to aid people who buy” (Nixon, 1969b). This suggestion eventually became law via executive order in 1971 and included the following provision: “(9) encourage, initiate, coordinate, evaluate, and participate in consumer education programs and consumer counseling [*sic*] programs” (Nixon, 1969a). Four years later President Gerald Ford

declared consumer education a “basic right” in which he professed a desire that consumer education would become an “integral part of regular school instruction, community services and educational programs” (Brobeck, et al., 1997, p. 142).

In 1979 Robert Alexander published a survey of state consumer education policies for the Bureau of Occupational and Adult Education. Alexander found that 37 states plus the District of Columbia had “specific policies that incorporate topics of consumer education” (p. 5) which he classified into four categories: (1) consumer decision-making, (2) economics, (3) personal finance, and (4) rights and responsibilities” (p. 3). Alexander reported that of these 37 states, seven required a course for high school graduation; eighteen required a “program” extending from grades K-12 in eleven states, from grades 8-12 in one state, and from grades 9-12 in seven states (p. 5). Initiatives were largely focused on consumer and traditional economics issues, though Alexander put 22 states in the category of having some degree of “personal finance” instruction requirement. While most initiatives were created in the 1970s, Nevada had the oldest (1956). It required all teachers to include ‘thrift’ in the curriculum and to emphasize: “the importance of industry, production, earning, wise spending, regular saving, safe investment and government taxes... (and) the importance of thrift in time and material” (p. 55).

In 1990, the National Coalition for Consumer Education (NCCE) released a report titled *The Status of Consumer Education in United States Schools, Grades K-12*. Based on a survey of chief state school administrators, author Charlotte Scott used virtually the same consumer education definitions and categories as Robert Alexander had in 1979: (1) consumer decision-making, (2) economics, (3) personal finance, (4) and consumer rights

(Alexander used “rights *and* responsibilities” in this latter category). While the report found that 37 states plus the District of Columbia had some type of consumer education in place, there was widespread disparity in whether consumer instruction was mandatory or optional. Nearly two thirds of the states reported that consumer topics were more likely to be taught in 1990 than 1985. State curricular changes of note included Kentucky repealing consumer education in 1984, Idaho making consumer education a requirement for graduation that same year, and in 1990 Virginia “strongly encouraging” the state department of education to “include basic business math… banking skills and financial management in… school curricular offerings at all levels” (Scott, p. 11). A core finding of the report was that “financial planning and management is the topic most frequently mentioned as one that should be included in consumer education in the 1990s” (p. 9).

Writing in the *Encyclopedia of the Consumer Movement*, Rosella Bannister noted that despite sharing a philosophy, tensions existed among the consumer movement, consumer education and economic education. One recurring question was whether or not “the more theoretical approach of economics” was superior to the “more utilitarian approach of consumer education at the K-12 level” (as cited in Brobeck, et al., 1997, p. 144). This tension was evident in a 1966 National Council on Economic Education (known today as the National Council *for* Economic Education) publication investigating the principle of economics needed for wise consumer decision-making. A split was noted between high school economics teachers and professional economists on the content of high school economics classes. The classroom teachers supported the inclusion of consumer economic concepts, while the economists opposed this (Brobeck, et al., 1997, p. 144).

The next section details the modern financial literacy movement. It includes discussion of the formation of the Jump$tart Coalition for Personal Financial Literacy, presentation of research on young adult financial literacy, and a description of government efforts both at the state and federal level to encourage financial literacy.

Modern Financial Literacy Movement

In 1995, a consortium of thirteen groups including American Financial Services Association (AFSA), National Endowment for Financial Education (NEFE), Insurance Education Foundation (IEF), Wall Street Journal Classroom, and the National Foundation for Credit Counseling (NFCC) led by Bill Odom, then chairman of Ford Credit, met in Washington, D.C. in late 1995 to address a growing concern about the lack of financial acumen among American students. Susie Irvine, president and CEO of AFSA's Education Foundation, which makes available MoneySKILL, an internet-based personal finance curriculum for students, was at the first meeting. "There were a lot of groups out there working on this issue," she said (personal communication, February 15, 2008). "But there was not a lot of communication (among these various organizations)." Meeting every couple of months, the group which eventually came to be known as the Jump$tart Coalition for Personal Financial Literacy, set about creating a vision statement and establishing benchmarks. They settled on the goal that every child in the United States should receive financial education, and released benchmarks in 1998 (updated in 2007) to achieve this goal. Randy Lively, who has served as the organization's chairman from the outset, and was CEO of AFSA at the time, described the group's working as "truly collaborative" (personal communication February 19, 2008). It is believed that Jump$tart

coined the phrase “financial literacy.” Lively recalled that the group agreed the issue was a “literacy problem” (personal communication, February 19, 2008). Current executive director, Laura Levine said in a February 15, 2008 meeting that it is difficult to pinpoint the term’s first use, but that it “probably came about with Jump$tart.” Today, with more than 130 private and public partners, the organization is one of the leading advocates for improving the financial literacy of students, and serves as a clearinghouse for financial education material. A strong case could be made that Jump$tart has been the catalyst for the modern financial education movement. Levine, who was recently appointed to the President’s Council on Financial Literacy, remarked “like most movements, we didn’t know we were one when we started.”

In 1997, Jump$tart began surveying the personal finance skills of high school seniors. The goal, according to Lively, was to establish a baseline in order to see if the organization was “moving the needle” (personal communication February 19, 2008). The exam created by Dr. Lewis Mandell, a professor at the University at Buffalo’s School of Management who specializes in investigating the financial literacy of youth covered four areas: (1) income; (2) money management; (3) saving and investing; and (4) spending and credit. Results from the stratified, random national sample of 1,532 high school seniors (drawn from the list of all public high schools as listed on the U.S. Department of Education website) revealed how great the challenge was as students scored at a 57.3 percent level. Ensuing surveys in 2001 and 2002 were even worse as students scored 51.9 percent and 50.2 percent respectively. The 2004 and 2006 investigations saw a slight up tick, with students averaging 52.3 percent and 52.4 percent respectively (Hines, 2006; Hoffman, 2008; Mandell, 2006). Scores on the most recent

examination in 2008, which was taken by 6,856 high school seniors in 40 states, plummeted to 48.3 percent. Remarked survey author Mandell: “Graduating high school seniors continue to struggle with financial literacy basics: (Hoffman, 2008, p. 1) (see **Table 1**).

Selected findings from the 2008 investigation of high school seniors

- Forty eight percent of high school students correctly said that a credit card holder who only pays the minimum amount on monthly card balances will pay more in annual finance charges than a card holder who pays their balance in full
- Eighty-seven percent correctly said that a bank savings account is the safest place to store money short term
- Forty seven percent correctly said credit score can be checked once a year for free;
- Seventeen percent correctly answered that stocks are likely to yield higher returns than savings bonds, savings accounts and checking accounts over the next 18 years;
- Thirty six percent correctly answered that when you cause a car accident, collision insurance will cover damage to your car
- When given the choice of debit card, certificate of deposit, cash and credit card, eighty-two percent correctly identified certificate of deposit as an instrument not typically associated with spending (Jump$tart, 2008)

Table 1

Jump$tart Financial Literacy Survey Results for High School Seniors: 1997-2008

(Jump$tart, 2008).

	1997	**2000**	**2002**	**2004**	**2006**	**2008**
Sample Size	1,532	723	4,024	4,074	5,775	6,856
Mean Score	57.3%	51.9%	50.2%	52.3%	52.4%	48.3%

One sign of encouragement: For the first time the 31-question survey was given to college students (1,030 full time students) who scored on average 62 percent. Scores were higher for seniors (65 percent) than freshman (59 percent). In each year of the exam, Caucasian students scored significantly higher than non-Caucasian students: 55.5 percent compared to 46.7 percent. Males and females scored almost identically on all exams: 52.71 percent to 52.75 percent. Students whose parents graduated from college scored better than those whose parents only had some high school: 56 percent to 46 percent (Peng, 2008a, p. 85). To date, the Jump$tart survey is the only nationally representative investigation of the financial literacy of American high school students. In 2008, doctoral student Tzu-Chin Martina Peng summarized recent measures of your personal finance for her dissertation Evaluating Mandated Personal Finance Education in High Schools (see **Table 2**).

Table 2

Summary of Recent Studies on Personal Financial Literacy of Young Americans

(Hoffman, 2008; Peng, 2008b, p. 25).

Author(s)/Year	**Sample**	**Result/Summary of average score**	**Topics tested**
Danes & Hira (1987)	323 college students	Low level of knowledge	Credit card, insurance, personal loans, overall financial management
Consumer Federation of America (CFA); American Express (1991)	428 high school seniors	42%	Consumer credit; checking/savings accounts; auto insurance; housing rental; food purchases; and car purchases
Volpe, Chen, & Pavlicko (1996)	454 college students	44%	Investment knowledge
Chen & Volpe (1998)	924 college students from 13 college campuses	53%	General knowledge, savings & borrowing, insurance, investment
Mandell (1998, 2001, 2002, 2004, 2006; Hoffman 2008)	1532, 723, 4024, 4074, 5775, 6856 high school seniors respectively	57.3%, 51.9%, 50.2%, 52.3%, 52.4%, 48.3%	Income; money mgt, spending & credit; saving & investing
ASEC report: Youth and Money Survey (1999)	560 high school students; 440 college students	Poor financial habit and knowledge	Financial attitudes and behavior

Table 2 Continued

Author(s)/Year	**Sample**	**Result/Summary of average score**	**Topics tested**
Warwick & Mansfield (2000)	381 undergrad and graduate students	Poor knowledge on credit card	Financial knowledge related to credit card (interest rate, credit limit, & outstanding balance)
ACEC report: National Survey of High School	801 high school seniors	35%	Financial knowledge and financial behavior
Jones (2005)	216 freshmen	Poor financial literacy	Credit
Hoffman (2008)	1030 college students	62%	Income; money mgt, spending & credit; saving & investing

In 2000, the Fannie Mae Foundation commissioned a comprehensive study on the state of financial education in the United States (Vitt, et al., 2000). The goal of the report, which was titled *Personal Finance and the Rush to Competence: Financial Literacy Education in the U.S,* was to identify financial education trends, challenges, and to recognize effective strategies and practices. Project director Lois A. Vitt and her fellow researchers (Jurg Siegenthaler, Carol Anderson, Jamie Kent, Deanna Lyter & Jeremy Ward) obtained information from a broad list of sources: (1) literature; (2) telephone, in-person and faxed interviews with program directors from a sample of 90 personal financial education programs; (3) site visits to six of the programs (4) focus group or individual interviews with 78 participants of selected programs; and (5) interviews with

industry leaders. Vitt and her team found that financial literacy was increasing in all United States sectors due to pubic initiatives calling on Americans to save more in order to insure financial independence, concerns about Social Security solvency, and the migration from employer-directed pension plans to employee-directed 401(k)-type plans (p. xxi). The report began by identifying recent private and governmental initiatives to increase financial education:

- (1995) American Savings Education Council (ASEC) — a coalition of public and private entities with the goal of making saving and planning a "vital concern of Americans" (p. 6)
- (1995) Jump$tart Coalition for Personal Financial Literacy — a national coalition of organizations dedicated to improving financial literacy in the schools using established guidelines.
- (1998) Securities and Exchange Commission (SEC) campaign called "Get the Facts on Saving and Investing"
- (2000) National Partners for Financial Empowerment (NPTE), a public-private partnership created by Treasury Secretary Lawrence Summers

Vitt and her fellow authors examined a broad group of financial education programs including: workplace, military, faith-based, community college, community programs, women's programs, home buyer education programs, and internet sites. Selected findings included:

- Sixty-five percent of programs began in the 1990s. Seventy-five percent started in late 1990s or 2000 (p. xiv)

- Program frequency ranged from one hour to 120 hours
- Thirty-four percent of programs used computer technology

According to the researchers, program challenges fell into one or more of three categories: (1) having inadequate resources to design, revise, or expand programs; (2) inexperience in socio-cultural aspects of program design, marketing and evaluation; and (3) the need to attract or expand programs to reach many more participants than they presently do (p. xv).

Vitt and her team identified Seven Dimensions of Effective Personal Financial Education Programs:

1. Unambiguous Mission and Purpose — "… a clearly articulated mission defines the program's scope of operations, reflects its values, priorities and goals" (p. 37).
2. Targeted Outreach — "Organizations that use creative recruitment techniques tend to be flexible, market driven and knowledgeable about their target audience." (p. 38).
3. Adequate Staffing and Administration
    - The ability to recruit and train qualified teachers;
    - Adequate funding or contributed resources for operations, not just materials or marketing
    - The availability of qualified staff and/or teaching volunteers, when and as needed

- The ability to recruit staff with the necessary language and cultural know-how; and
- Skills that match the mission (p. 39).

4. Successful Evaluation and Follow-up — "Effective programs are flexible enough to change direction, even curriculum, when evaluations signal that such changes will add to the value of a course" (p. 40). Establish baseline knowledge; seek student-centered feedback; follow up to see: if news skills are being applied, value of new skill and impact on life, and if there is need for further education.
5. Program Accessibility — "Decisions regarding the scale of a program relate directly to time frame, scope of curriculum, geographic and community program delivery locations, and program duration" (p. 41).
6. Relevant Curriculum — "Program participants must know 'what's in it for me?' (p. 42).
7. Dynamic Partnering — "… refers to the practice of two-way service and sharing… a commercial bank or mortgage banker can be a good community partner, provide help with curriculum design, find committed teachers, and post notices of financial literacy courses (p. 43).

Selected recommendations from Vitt and her team:

- Workplace financial education is the venue for reaching most people (Weyerhaeuser, an international forest products company, which began a

program in 1984, and UPS, which began a program in 2000, are singled out as particularly effective at providing workplace financial education) (p. xviii).

- Faith-based and other community-based organizations provide the most comfortable setting for many people. For under-served populations, these organizations offer hope, motivation, and emotional support.
- Socioculturally sensitive teaching methods should be incorporated into financial literacy education curricula.
- Topics, terminology, and teaching materials need to be developed that emphasize financial "discovery," the learning process that many participants actually experience.
- Life planning approaches should increasingly be built into curricula in order to help pre-retirement populations learn proactive ways to think about the future.
- Financial education for older Americans should become a national priority.
- Technological teaching methods must be employed to reduce the cost and widely increase the availability of personal financial education.
- Financial literacy is two-dimensional… there must be a willingness by the financial services industry to meet the *document literacy needs* of the public by producing clear, plain English contracts, and other documents.

The authors of *Rush to Competence* close by commenting that on the subject of financial literacy, America has "passed the tipping point." They argue, albeit

patriotically, that with “financial literacy education comes renewed access to *opportunity,* the essence of the American Dream” (p. 141).

In 2005, researchers Vitt, Kent and Siegenthaler — joined by Gwen Reichback — updated the status of financial education in the United States with the release of *Goodbye to complacency: financial education in the United States 2000-2005*. Commissioned by the American Association of Retired Persons (AARP), the authors describe a movement which “exploded onto the contemporary scene” in the late 1990s, and is only multiplying as a coalition of private and public entities coalesce around a desire to increase financial literacy (Vitt, Reichback, Kent, & Siegenthaler, 2005, p. 6). Since 2000, the authors report that the American Savings Education Council (ASEC), the Jump$tart Coalition, the National Endowment for Financial Education (NEFE), National Council on Economic Education (NCEE), AARP, the U.S. Department of Treasury along with other federal and state organizations, have either joined or stepped up efforts to increase financial education in the United States. In addition to documenting the surge of organizations working to improve financial acumen, Vitt et al. looked at the effectiveness of these efforts. Researchers gathered information from: (1) literature; (2) telephone and in-person interviews with program directors, educators, and searchers; (3) program site visits; (4) focus group interviews with participants who attended courses or seminars at the sites we visited; (5) interviews with industry leaders from both the public and private sectors, (6) Internet research of 250 active websites and (7) an analysis of the materials that were submitted by benefits educators competing for the publication *Pensions & Investments* Eddy Awards, which recognize plan sponsors (employers) who have done a superior job educating employees about investing. Selected findings included:

- Workplace education continues to hold the most promise for reaching the largest number of participants. Unfortunately, many workplace programs have retreated from basic financial education programs, and now offer more limited “benefits education” instead (Vitt, et al., 2005, p. 9)
- Relevant curricula, qualified instructors, and prospective partners are more readily available in 2005 than they were in 2000
- Youth programs have “proliferated.” Surveyed youth programs successfully engaged both students and teachers, and in many cases even family members (p. 10)
- Preference for instructors not tied to financial services industry
- Electronic methods (computer and internet) are widely employed, but are more effective when combined with human contact

The authors cited the following as continued areas of concern:

1. Funding to facilitate program sustainability (p. 11)
2. The need for better program evaluation methods and the resources to gather post-program data to measure effectiveness and enhance the education process
3. Improved ways of marketing to target populations
4. Convincing more people to take advantage of saving and investment opportunities, particularly 401(k) participation.
5. Eliminating poor financial decision-making behaviors.

Vitt and her team closed by stating that Americans “can no longer afford to be complacent about their future financial well-being. Policymakers, employers, financial institutions, and financial educators cannot become complacent either. The need for financial literacy education in the U.S. is “on high alert” (Vitt, et al., 2005).

In 2003, Congress established the Financial Literacy and Education Commission to improve financial education in the United States. Established under the Financial Literacy and Education Improvement Act part of the Fair and Accurate Credit Transaction (FACT) Act of 2003 the legislation called for the Secretary of Treasury to coordinate the federal effort to improve financial literacy (Commission, 2006). Since its formation, the Commission has created the following resources:

- MyMoney.gov — available in both English and Spanish, the site serves as “one-stop shop for federal financial literacy and education programs, grants and other information.”
- 1-888-MyMoney — a toll-free hotline that fields questions in both English and Spanish about federal financial literacy materials and resources.
- Taking Ownership of the Future: The National Strategy for Financial Literacy — “a comprehensive blueprint for improving financial literacy in a America” covering 13 areas and 26 specific calls to action (Commission, 2006).

A sampling of recommendations from the Commission’s *Taking Ownership of the Future: The National Strategy for Financial Literacy 2006*:

- Shifting public discussion from consumption to saving (p. 84)
- Increasing understanding of credit

- Finding room in the K-12 curriculum and its “tightly regimented course schedules” for personal finance instruction — recommendation to integrate into existing subjects such as math and social studies
- Acknowledgment that teachers may not be sufficiently prepared or “comfortable” to teach personal finance concepts (p. 88)

In December 2006, the U.S. Government Accountability Office (GAO) reported on the Commission’s progress to date. In testimony before the Subcommittee on Oversight of Government Management, the Federal Workforce, and the District of Columbia, Committee on Homeland Security & Governmental Affairs, U.S. Senate, the GAO described The National Strategy for Financial Literacy as a “useful first step” but one that was “largely descriptive” and lacking in “clear and specific goals and performance measures” (Office, 2006, p. 3). The website was lauded for being “an effective portal to existing federal financial literacy sites” but in need of testing for usability and customer satisfaction. The volume of calls to the hotline was deemed “limited.” GAO recommendations included:

- Establish concrete definition of financial literacy (p. 36)
- Set clear, specific goals and performance measures
- Cultivate sustainable partnerships with nonprofit and private entities

In January 2008, the White House announced the formation of the President’s Advisory Council on Financial Literacy. Comprised of representatives from business, the clergy, and the non-profit sector including Jump$tart and several of its partners, the

Council set out to “better educate people from all walks of life about matters pertaining to their finances and their future” ("President Bush announces president’s advisory council on financial literacy," 2008). At the close of 2008, the Council announced its progress to date. Acknowledging the severe economic slump, the organization highlighted its accomplishments, which included:

- Launch of the first-ever National Financial Literacy Challenge, a personal finance exam taken by 46,000 high school students in May 2008 (Literacy, 2008, p. 2)
- Endorsed the creation of the Workplace Honor Roll program, which acknowledges effective workplace financial education programs
- Collaborated with the Financial Literacy Education Commission to coordinate federal efforts

The Council listed 15 recommendations; most notable for educators was recommendation one: “The United States Congress or state legislatures should mandate financial education in all schools for students grades Kindergarten through 12” (Literacy, 2008, p. 3). It is unclear what role the Council will play in President Obama’s administration.

Biennially since 1998, the National Council on Economic Education (NCEE) has published survey results on the state of financial education in schools (see Table 3 and Table 4). In opening comments in the 2004 report, NCEE President and CEO Robert F. Duvall remarked that the solution to financial education “begins in our schools, because economic and financial literacy is not intuitive. It is learned” ("Survey of the states:

Economic, personal finance & entrepreneurship education in our nation’s schools in 2007," 2007, p. 1). The report noted that while there has been little change in the status of economic education in schools since the previous report, there has been a marked improvement in “advancing personal finance education” in the schools ("Survey of the states: Economic, personal finance & entrepreneurship education in our nation’s schools in 2007," p. 2). The report was compiled using a web-based survey distributed to state councils on economic education affiliated with NCEE, and social studies and family and consumer science education “specialists” in each state plus the District of Columbia.

Selected economic findings include:

- Forty-eight plus the District of Columbia states include economics in their standards (unchanged from 2004) (p. 4).
- Seventeen states require an economics course to be offered (up from 16 in 2004).
- Seventeen states require an economics course to be taken (up from 14 in 2004).
- Twenty-three states require testing of economic concepts (down from 25 in 2004).

Selected personal finance findings include:

- Forty states include personal finance in their standards (up from 34 in 2004) (p. 10).
- Nine states require a personal finance course to be offered (up from 7 in 2004).

- Seven states require a personal finance course to be taken (up from 6 in 2004).
- Nine states require testing of personal finance concepts (up from 8 in 2004).

Future goals:

- Ensure that economic and personal finance education is a “relevant component” of the No Child Left Behind legislation (p. 2).
- Work to ensure that economic and personal finance instruction be included in the core curriculum K-12 of all 50 states.

Table 3

Personal Finance 1998-2007

("Survey of the states: Economic, personal finance & entrepreneurship education in our nation’s schools in 2007," 2007, p. 10).

Topic	**1998 Survey Findings**	**2000 Survey Findings**	**2002 Survey Findings**	**2004 Survey Findings**	**2007 Survey Findings**
Include personal finance in their standards	21 states	40 states	31 states	34 states	40 states
Standards required to be implemented	14 states	16 states	17 states	20 states	28 states
High School course required to be offered	Information not available	7 states	4 states	7 states	9 states

Table 3 Continued

Topic	**1998 Survey Findings**	**2000 Survey Findings**	**2002 Survey Findings**	**2004 Survey Findings**	**2007 Survey Findings**
High School course required to be taken	1 state	4 states	4 states	6 states	7 states
Student testing of personal finance concepts required	1 state	6 states	8 states	8 states	9 states

Research on the effectiveness of personal finance mandates will now be presented.

Effectiveness of Personal Finance Mandates

In 1997 researchers Douglas Bernheim, Daniel Garrett, and Dean Maki examined the long-term effects of high school financial literacy mandates in 29 states occurring between 1957 and 1985. Drawing on data compiled by Alexander (1979), Scott (1990) and others, Bernheim et al. sought to determine whether exposure to these mandates had any lasting effect in adulthood. The authors used a 1995 cross-sectional household survey of 2,000 adults between the ages of 30 and 49 in which respondents were asked, among other questions, the state in which they attended high school and “recollections” concerning financial education they received in that state (p. 2). Researchers made comparisons across states and over time using non-adopting states as a benchmark. The

authors concluded that mandates “significantly increase exposure to financial education, and ultimately elevate the rates of which individuals save and accumulate wealth during their adult lives” (pp. 29-30). However, they point out that there was no way to determine or control for quality and content of financial instruction from state to state. Interestingly, the authors reported that women and African Americans were “far more likely to receive consumer/financial education” than other groups. The authors posit that this may have had to do with gender-specific home economics courses, and a stronger focus on “practical skills” at schools serving lower socio-economic populations and/or African American communities (p. 17). Despite the noted shortcoming, this investigation is significant for being the first systematic national look at the effectiveness of personal finance instruction.

In 2001 Tennyson and Nguyen looked at the effectiveness of financial literacy mandates. Using data from the 1997 Jump$tart Coalition for Personal Financial Literacy exam of 1,532 high school seniors in randomly selected public high schools, the researchers found no significant difference in test scores between students in states with curriculum mandates (56.9 percent correct), and students in states with no mandate (56.5 percent correct). This fact, Tennyson and Nguyen write, “raises questions” about the implementation of policy at the school district level, (p. 259). Tennyson and Nguyen did, however, find that the Jump$tart test scores of students in states requiring a specific personal finance course (59.1 percent correct) were “significantly” higher than states with no personal finance mandate (p. 250). This result suggests the importance of the form the mandate takes. Simply mandating the creation of personal finance standards and guidelines cannot be expected to lead to higher exam performance. Tennyson and

Nguyen caution that it is unknown whether higher test scores of students taking a required personal finance course will lead to improved consumer behavior. In conclusion, the authors suggest further research on how policy is implemented, the makeup of student coursework and teacher training, and the impact of mandated education on consumer behavior.

In 2008, doctoral student Tzu-Chin Martina Peng built on the work of Tennyson and Nguyen (2001) for her dissertation *Evaluating Mandated Personal Finance Education in High Schools*. In addition to looking at information from the 1997 Jump$tart survey, Peng also examined data from subsequent investigations by the organization in the years 2002, 2004, and 2006. In organizing her analysis, she compared data of states with no mandate to data of states in the following three categories: (1) Standard Mandate — states requiring the creation of personal finance standards and/or guidelines; (2) Course Mandate — states requiring the taking of a specific personal finance course; and (3) Test Mandate — states requiring the taking of a personal finance test. Similar to the findings of Tennyson and Nguyen (2001), Peng found the greatest impact on student financial literacy as judged by scores on the Jump$tart Survey in states that required the taking of a specific course. These students tallied an average mean score on all tests of 54.8 percent compared to those in states with no mandate who scored at a 52.9 percent level. The fact that students in states with no mandate scored slightly more than one percent point on average better than students in states that had in place a "Standard Mandate" (requiring the creation of standards and guidelines) raises real questions about the effectiveness of such loose guidelines. Interestingly, the non-mandated group also outscored students in states requiring the taking of a personal

finance test 52.9% vs. 52.06%). Peng concluded that the form the personal finance mandate takes is the most important factor in determining student success on the Jump$tart exam. The course requirement mandate has a positive relationship with student performance. She questions the value of the “Standard Mandate” and the “Test Mandate” as such directives, as judged by this exam, have no positive impact on student performance. Peng noted that according to the Performance Indicators in the School Effectiveness and School Improvement (SIPI) theoretical framework, the characteristics of the teacher are “key factors” of student success (p. 126). These factors are: professional development training, coursework and attitude toward subject matter. None of these components are measured or revealed in the Jump$tart survey.

Research on teacher understanding of economic, consumer and personal finance concepts follows.

Teacher Understanding of Economic, Consumer and Personal Finance Concepts

A nationwide assessment of the consumer knowledge of graduating prospective teachers training in all academic disciplines was conducted in 1977 by E. Thomas Garman. The goal of the examination was to (1) determine the consumer education literacy of soon-to-be teachers; and (2) examine the relationship between performance and selected student and demographic information. A total of 84 National Council for Accreditation of Teacher Education (NCATE) member schools participated in the study. These institutions were selected from a pool of 461 NCATE member schools (out of 540) that responded to a census survey seeking to determine the total number of graduates at member institutions. Responding schools were then grouped into six different size strata.

The 84 participating schools were randomly selected from this grouping. A total of 5,602 perspective teachers completed the exam. Usable data was provided by 4,309 participants. Garman used the 55-item *Test of Consumer Competencies*, a validated instrument designed to measure consumer knowledge in 14 consumer education areas (such as: recreation, clothing, furnishings and appliances, food, economic understanding of the marketplace, savings and investment, taxes). Additionally, he developed questions designed to obtain demographic and personal information including a question about the father's occupation. Answers to this question were later converted to a numerical two-digit code based on O.D. Duncan's "A Socioeconomic Index for All Occupations."

The average mean score for all participants was slightly less than 60 percent. The 508 participants who had taken one or more consumer education related courses scored slightly higher (62 percent correct) than the 3,801 teachers who had not taken such a course (59 percent). Teachers majoring in Social Studies, History or Geography and Home Economics scored higher (63.9 and 63.8 percent respectively) than teachers in Special Education (57.5 percent); Art and Music (56.7 percent); and Physical Education and Health (56.4 percent). Overall, prospective teachers scored highest in the areas of Recreation (76 percent), Clothing (73 percent) and Furnishing and Appliances (68 percent). They scored lowest in Savings and Investment (50 percent), Food (48 percent) and Taxes (45 percent). Teachers in Western, Mountain Plains and North Central institutions scored higher than those in the East and South. There was no significant difference in achievement on the exam and soci-economic status as measured by father's occupation. Since numerous states at the time required consumer concepts to be included in the elementary and secondary curriculum, Garman concluded that many teachers were

not prepared to effectively teach this subject. He suggested that it may be necessary to require teachers seeking certification to take a consumer education course.

In 1979, Wendy Lofgren and Warren Suzuki investigated the subject matter competency of practicing secondary consumer education teachers in the state of Oregon and found better scores than Garman (1979), though they used a different instrument. Lofgren and Suzuki's examination had two procedural stages. After developing a 50-item survey instrument based on the state's Personal Finance Education Guide — which covered employment and income, money management, credit, the purchase of goods and services, and rights and responsibilities in the market place — the survey was mailed to 320 teachers in the following disciplines: business education (52 participants), home economic (50 participants), mathematics (45 participants), and social studies (38 participants). It is unclear how the sample was chosen. A total of 185 teachers submitted usable data. The mean score on the 50-item test for all teachers was 34.43 points correct (69 percent). Home economic teachers scored the highest on average at 38.44 points correct (76 percent). Social studies, business education and mathematics teachers scored 67 percent, 65 percent, and 65 percent respectively. None of the teachers individually scored above 90 percent. In the analyses of variance on the concept area mean scores in Employment and Income, Credit, Purchases of Goods and Services, and Rights and Responsibilities in the Marketplace, teachers did not differ significantly, However, mathematics teachers scored significantly higher (by about 10 percent) in the money management concept area. While Lofgren and Suzuki believed that teacher concept knowledge needed to be upgraded, they did not believe that teaching responsibility should be assigned exclusively to one of the four disciplines. The researchers hoped their

study and findings would assist other teacher educators in designing and evaluating consumer education programs.

In 1983, researcher Mark Schug investigated elementary teacher views on economic issues. His rationale for the study was that teachers, like all people, make value judgments on economic systems, and he surmised that this assessment could influence their economic instruction, which at the time was gaining some traction at the elementary level; a total of 16 states had programs calling for the teaching of economics at K-8 or K-12 levels. Elementary and secondary teachers were randomly selected from a computer listing of all teachers in this Midwest state. A total of 170 teachers — 105 elementary and 65 secondary social studies — participated. Approximately two thirds of the elementary teachers were women, while a similar number of secondary teachers were men. Using *Riddle's Survey of Opinions on Economic Issues*, Schug found that elementary teachers held "moderate" views on economic issues (supported unions and existing economic organizations), but strongly opposed concepts such as government guaranteed employment. He reported secondary social studies teachers were more liberal in their views. He found that they were more open to greater government role in business. Schug recommended that teachers take at least one economics course as part of their teacher training, but acknowledged the challenge of adding another course to the pre-service requirement.

More recently, researcher Caezilia Loibl of Ohio State University led a team in 2007 that investigated the state of personal finance instruction in Ohio schools in advance of that state's 2010 requirement that financial literacy be taught to high school students. The investigators were interested in learning: (1) financial topics covered; (2) teachers

teaching subject matter; (3) students taking personal finance course; (4) personal finance knowledge base of teachers; and (5) teacher curriculum sources. Loibl's team contacted each of the 1,145 public, private, parochial, urban, suburban and rural schools in the state of Ohio offering courses in business, family and consumer science, social studies and economics. A total of 710 teachers completed the online survey (of which 687 responses were used). Teachers were not asked specific policy implementation, curriculum development or professional development questions (though some shared their thoughts on these subjects in an open-ended question). Selected findings from the 53-question survey include:

- Personal finance was occurring in the following four content areas: Family and Consumer Sciences (38%), Business Education (33%), Social Studies (20%), and Mathematics, Science, Technology, and Agricultural Sciences (6%) (p. 9)
- 86% of students were identified by their teachers as "white" (p. 10)
- 55% of students receiving financial instruction were female
- Majority of students were taught personal finance concepts in 12^{th} grade
- Common challenges faced by teachers included lack of allotted instructional time, lack of instructional material, and lack of professional development (p. 14)
- Top eight financial topics covered were: credit, investing, insurance, taxes, budget, goals, interest, and limited-resources (p. 17)
- Mean scores on financial knowledge by teachers was below 50% in all four core content areas (p. 32)

- Business education teachers mean score on financial knowledge was the highest (49.3%)
- Science teachers mean score on financial knowledge was the lowest (36.1%)
- Only two teachers (out of 687) answered all nine financial knowledge questions correctly
- In most schools, personal finance was a one-semester elective course (p. 45)

At the conclusion of the survey teachers were given an open-ended space for any additional thought(s) they might like to share. Many of the comments pointed to a need for professional development:

- I love teaching it and the kids love to learn about it! They go home and tell their parents about things they have learned! (p. 55).
- After reading the questions, I don’t know as much as I should.
- I definitely need more financial literacy education! (p. 56)
- I’d like a summer course on teaching finances to high school students
- I would like to attend financial and economic workshops or classes if they were offered. I think they need to help us with the topics we cover.
- Professional development training is needed to relate finance literacy to today’s teens (p. 57)
- We desperately need more “externship” opportunities and education. It would be nice if OSU could plan the professional development course activities for all business teachers for graduate credit.
- We need professional development for faculty to stay current

- With the new (2010) requirements, more professional development needs to be made available for educators who would be required to teach it. Most teachers find the concepts confusing and frightening for their own money

Another university-based financial literacy investigation that polled classroom teachers was conducted by the Networks Financial Institute at Indiana State University in 2007. Called the *Benchmark Survey of K-12 Educator Financial Literacy Practices*, the national survey sought to gauge the state of financial education in the following areas: (1) financial literacy topics covered; (2) teaching techniques employed; (3) assessments used; (4) curriculum sources; (5) and barriers to teaching financial literacy (Godsted, 2007). There were two phases to the investigation. The initial investigation consisted of an online survey of 650 K-12 teachers. Follow-up one-on-one telephone interviews were conducted with 15 teachers. It was not clear how the population was selected for either of the phases. Selected finding included:

- Saving, spending and budgeting were the top three concepts covered (this differs from the Loibl study in which insurance, credit and investing were the top three subjects covered) (Godsted, 2007).
- Tests, quizzes and teacher-created worksheets were main formal assessments.
- A majority used a combination of pre-developed and self-developed materials; teachers also mentioned using simulations, websites, and inviting guest speakers.
- Lack of time, lack of state requirement and lack of demand were top three challenges faced by teachers; lack of materials, funding and professional

development were also listed as challenges (respondents not asked what professional development should look like; a teacher did state: “I would first want to be educated on it myself.”).

- Majority familiar with term “financial literacy;” individuals define the term differently
- Teachers did not rate their financial literacy highly (respondents were not asked knowledge questions).
- 8 in 10 teachers believe it important to each financial literacy.
- 20 percent believe it is not the job of schools to teach financial literacy.

The theoretical framework guiding this investigation is presented next.

Theoretical Framework

The theoretical framework driving this investigation is the centrality of the teacher role in successful instruction. While education policy is crafted, pushed and cajoled by numerous stakeholders, ultimately its success is largely dependent on the classroom teacher. To put it more bluntly, as *The Wall Street Journal* did in a story on the impact of teachers on student achievement, “It’s the Teachers, Stupid” (Wessel, 2006). The link between teacher and student achievement is strong and growing (Brophy & Good, 1986; Nye, et al., 2004; Palardy & Rumberger, 2008; Sanders & Rivers, 1996; Tschannen-Moran, et al., 1998). Just recently, the Bill and Melinda Gates Foundation which has invested billions of dollars in smaller schools and reducing class size in an effort to improve student achievement announced that it had reached the same

conclusion: teachers matter most ("Gates Foundation Says Good Teachers are Key," 2009). Palardy & Rumberger (2008), who examined teacher background qualifications, teacher attitude, and teacher instructional practices, described the overall teacher effect on student learning as “substantial” (p. 127). They found teacher attitude and instructional practices to be more of a factor in student achievement than teacher background qualifications. The Rand Change Agent Study of four diverse 1970s-era federally mandated educational programs found ineffective policy implementation when teachers were excluded from project development. Intentionally or not, this exclusion signaled a “mechanistic role” for instructors resulting in ineffective implementation (McLaughlin, 1991, p. 146). One of the timeless lessons to come out of this study, according to McLaughlin, was that no matter how well intentioned, policy makers cannot mandate what matters because policy success depends on two broad factors: local capacity and will. Local capacity is the infrastructure required to execute policy (financial resources, training capacity, etc.). While often a budgetary challenge, this factor can be addressed monetarily. Will, on the other hand, is the “attitudes, motivation, and beliefs” that underlie a teacher’s response to the policy and is much harder to influence (McLaughlin, 1987, p. 172). As Handal and Herrington wrote in 2003: “Teachers are those who ultimately decide the fate of any educational enterprise. Consequently, teachers’ attitudes, feelings, and perceptions must be recognized well before the launching of any innovation” (p. 65). Martin is even more direct: “Curriculum implementation approaches that do not consider teacher beliefs have a temporary life” (as cited in Handal & Herrington, 2003, p. 62).

Summary

Financial education in the United States has waxed and waned in reaction to economic and political conditions, and has not been without controversy. Often influenced by Victorian, patriotic, religious and business principles, it has walked tightropes between thrift promotion and consumption preparation, and traditional economic principles and "pocketbook" issues (Brobeck, et al., 1997; Jacobson, 2004). Financial education played bit roles in the various consumer and home economic movements that began in the nineteenth century (Beecher, 1977; Brobeck, et al., 1997). It played a larger role in the thrift movement of the early twentieth century, which emphasized waste reduction (Gray, 1931; Strauss, 1920). While never central to the curriculum, its presence embedded in home economic and consumer education courses was diminished in public schools following the 1957 launch of the Soviet satellite Sputnik I (2008; Kliebard, 2002). This perceived security threat led the nation to rapidly adopt a curriculum focused on math and science, often at the expense of so-called "Life Skills" courses. Changing retirement funding responsibility, the growing complexity of financial instruments, increasing debt loads and mortgage default, financial education, or "financial literacy" as it has been re-christened, began enjoying a rebirth in the early 1990s. Led by the formation of the Jump$tart Coalition for Personal Financial Literacy in 1995 — a Washington, D.C. based financial literacy education and advocacy organization — the financial literacy movement gained federal momentum in 2003 when Congress established the Financial Literacy and Education Commission. Housed in the Office of the Treasury, the group released *Taking Ownership of the Future: The National Strategy for Financial Literacy 2006,* which included 26 specific calls to action

(Commission, 2006). Currently, 40 states have developed personal finance standards, 28 require these standards to be implemented, and seven states require students to take a specific personal finance course; several states will be adding this latter requirement over the next few years ("Survey of the states: Economic, personal finance & entrepreneurship education in our nation’s schools in 2007," 2007, p. 10).

Despite the increased focus on personal finance instruction, the financial literacy of adults and student in the United States is not strong (Hines, 2006; Hoffman, 2008; Lusardi & Mitchell, 2006; Lusardi & Tufano, 2008; Mandell, 2006; Markow & Bagnaschi, 2005; Peng, 2008a). The limited measures of teacher understanding of financial concepts yield similar findings (Garman, 1979; Lofgren & Suzuki, 1979; Loibl, 2008). Investigations into the success of personal finance mandates found the most positive effect in states mandating the taking of a specific personal finance course (Peng, 2008a; Tennyson & Nguyen, 2001).

The link between teacher and student academic achievement is strong and growing (Brophy & Good, 1986; Nye, et al., 2004; Palardy & Rumberger, 2008; Sanders & Rivers, 1996; Tschannen-Moran, et al., 1998). Just recently, the Bill and Melinda Gates Foundation which has invested billions of dollars in smaller schools and reducing class size in an effort to improve student achievement announced that it had reached the same conclusion: teachers matter most ("Gates Foundation Says Good Teachers are Key," 2009). A link between successful policy implementation and teacher involvement has also been established (McLaughlin, 1987). Despite the centrality of the teacher in student and policy success, there is little evidence that teachers have played a role in crafting personal finance policy. Two recent university-based studies did investigate

classroom teachers on the topic of financial literacy. The investigations found support for personal finance instruction and calls for more professional development (Godsted, 2007; Loibl, 2008).

CHAPTER THREE

METHODOLOGY

This chapter explains the general methods used to carry out this study. Detailed procedures for conducting the study are presented. The data analysis methods are provided.

General Perspective

While primarily a quantitative study, the research reported here also embodied a qualitative perspective. The intent of this investigation was to learn teacher attitudes and beliefs about personal finance instruction, and to learn teacher understanding of a few core financial concepts. The population for this survey was comprised of classroom teachers from two school districts in two states. This was a descriptive investigation. Survey methodology was employed to answer two broad questions: (1) What are teacher attitudes and beliefs about personal finance instruction and (2) What are teacher understanding of a few core personal finance concepts.

Research Context and Participants

The population consisted of 1,120 classroom teachers in two public school districts in two states. A total of 995 teachers were from a large school district in the southwest. A total of 125 teachers were from a small school district in the Midwest. These research sites were chosen for access.

Instrumentation

Survey methodology was chosen for its ability to measure attitudes, beliefs, and knowledge (Fraenkel & Wallen, 2006). It is also the primary methodology for describing a population (Glatthorn & Joyner, 2005). A survey was constructed after a review of the research literature on personal finance investigations of high school students, adults and teachers, and a pilot study of 287 classroom teachers (Appendix A). The following categories of questioning emerged from this process: (1) policy; (2) instruction; (3) professional development; and (4) concept knowledge.

Questions were drawn from three tested instruments: (1) *Survey of Financial Education in Ohio Schools* (Loibl, 2008), (2) *Debt Literacy, Financial Literacy and Planning: Implications for Retirement Wellbeing* (Lusardi & Mitchell, 2006), and (3) *Financial Experience, and Overindebtedness* (Lusardi & Tufano, 2008). These instruments have been used in large, wide-scale surveys of financial literacy. Validity and reliability information for these surveys is not available. The Loibl (2008) study was conducted to learn the state of financial literacy instruction in Ohio high schools in advance of that state's 2010 requirement that financial literacy be taught to high school students. Questionnaires were sent to all public and private high schools in Ohio. A total of 710 high school classroom teachers completed the online survey. Mean score on financial knowledge was below 50 percent. Common challenges faced by teachers were lack of instruction time, lack of quality curriculum, and lack of professional development opportunities. The second survey (Lusardi & Mitchell, 2006) was a purpose-built module on financial literacy that was inserted into the 2004 *Health and Retirement Study* (HRS), a nationally representative, longitudinal dataset of Americans over the age of 50 that

tracks health, assets, liabilities, and patterns of well-being in older households. Findings from 1,269 randomly selected participants in the 2004 HRS study indicated a low level of financial literacy, with Blacks and Hispanics performing particularly poorly. Lusardi and Mitchell found a strong correlation between education level and financial literacy. The final questionnaire (Lusardi & Tufano, 2008) sought to gauge debt literacy. Participants in this investigation were representative of the U.S. population with respect to income, gender, age, household size, region, and market size. A total of 1,000 responses from a phone survey were used. Findings indicated that debt literacy was low, especially among the elderly. Questions were also drawn from a pilot study of 287 classroom teachers. Findings from this investigation revealed widespread support for personal finance instruction. While not asked specific personal finance questions, participants reported a lack of confidence in their own understanding of personal finance concepts, and doubt about their ability to teach personal finance topics. Additional questions on policy implementation and professional development were developed following guidelines described in *Asking Questions: The Definitive Guide to Questionnaire Design* (Bradburn, Wansink, & Sudman, 2004).

Two additional small-scale pilot studies were conducted. An updated version of the survey which included the insertion of questions designed to gauge financial literacy was given to four university colleagues, each of whom possessed classroom teaching and curriculum design experience. Following incorporation of their suggestions, a final version of the survey was given to a fifth university colleague, who also had classroom teaching and curriculum design experience. This implementation served as a final check for errors.

Upon approval of the research proposal and instrument by the dissertation committee, approval of the Institutional Review Board for Human Research Protections (IRB) at the University of New Mexico was sought. The IRB reviewed the proposed study and granted exemption status (Appendix B).

Data Collection

The survey instrument was designed and administered using SurveyMonkey online software (www.surveymonkey.com). Distribution of the survey via a web link was handled by a representative from each school district. There was no direct contact with participants. Guidelines from Dillman's (2007) Tailored Design Method (TDM) were followed. TDM is a protocol tool for implementing effective mail and Internet survey research. Validity and reliability were sought through the modified piloting procedures suggested in TDM. The following TDM strategies were employed for this survey:

1. Respondent-friendly questionnaire
2. Up to five contacts
3. Personal correspondence
4. Token financial incentive (p. 149)

As suggested in strategies two and three, multiple personnel correspondences were sent to all teachers in both school districts (Appendix C). In each instance the email correspondence came from a school district official. As an incentive, a copy of my book *Teach and Retire Rich*, which details the workings of teacher retirement plans, was sent to all participants. In order to maintain the anonymity of the subjects, distribution of

books was handled by officials at each school district. Dillman recommends conducting surveys between January and March (p. 176). Due to a variety of reasons — survey design completion, IRB approval, district schedule — each survey was conducted in May.

Data Analysis

Descriptive statistical methods were used to analyze survey responses. Results were compared to those found by Lusardi & Mitchell (2006), Loibl (2008) and the 2007 *Benchmark Survey of K-12 Educator Financial Literacy Practices* conducted by Networks Financial Institute at Indiana State University in 2007 (Godsted). Applicable findings were compared to the pilot study of 287 classroom teachers. The Lusardi & Mitchell study found widespread lack of financial literacy among adult Americans. The Loibl study found a lack of financial literacy among teachers of financial literacy, and the following barriers to effective financial literacy instruction: lack of instruction time, lack of quality curriculum, and lack of professional development opportunities. The Networks Financial Institute study found strong support for financial literacy instruction. Teachers in that study cited the following barriers to effective financial literacy instruction: lack of instructional time, lack of state requirement, and lack of demand. The pilot study of 287 classroom teachers found widespread support for personal finance instruction, and doubt about ability to teach personal finance topics. Results were also compared between elementary and secondary teachers on selected questions.

Summary of Methodology

This chapter has explained the methods used in this study of teacher attitudes and beliefs about personal finance instruction, and teacher understanding of a few core financial concepts. Surveys were emailed to all 1,120 classroom teachers in two school districts in two states. All members of this population were offered multiple opportunities to participate. A total of 300 teachers responded to some degree for an initial response rate of 26.5 percent. Participants failing to complete a question pertaining to the two research questions were excluded from this study leaving a total of 181 “completers.” The next chapter presents the results of the data collected.

CHAPTER FOUR

RESULTS

As stated in Chapter 1, the study reported here sought classroom teacher attitudes and beliefs about personal finance instruction, and their understanding of a few core personal finance concepts. This chapter is organized in terms of the two specific research questions posed in Chapter 1. After reporting demographic information, it reports teacher attitudes and beliefs about teaching personal finance; it then presents teacher understanding of a few core personal finance concepts.

Respondent Demographic Information

The population for this study consisted of classroom teachers from two school districts in two states. A representative from each of the two districts distributed the online survey to 1,120 potential participants. The initial survey response rate was 26.5 percent for a total of 300 responses. Participants who did not complete the entire survey were excluded, leaving a final response rate of 16 percent or 181 classroom teachers. A majority of this group (35.9 percent) were K-5 elementary school teachers. About half of the participants were either middle school (24.3 percent) or high school teachers (24.3 percent). The remaining respondents (15.5 percent) identified themselves as “other” classroom personnel (see **Table 4**). Single subject instructors, generally considered to be those not teaching elementary school, were spread among a variety of single subjects. Core subject areas were represented as follows: language arts (21.6 percent); mathematics (15.5 percent); and science and social studies each at 8.6 percent (see **Table 5**).

Participant demographics were largely in line with national teacher statistics, which report an aging workforce that is overwhelmingly female and white (Feistritzer & Haar, 2005). While just over 20 percent of respondents in this survey were in their first three years of teaching, almost half of the respondents had been teaching for more than 10 years .(see **Table 6)**. The average age of participants in this study was 43.1 years. A majority of the teachers (74.1 percent) were female. Ethnicity information is provided in **Table 7**. A handful of the "completers" did not provide gender and or age and or ethnicity information. Few teachers have taught personal finance concepts in school. Of the less than 15 percent who had, instruction consisted of a single concept or concepts embedded in other coursework. Most teachers had not taken a college level course, continuing education course, or workshop on personal finance in the past year(see **Table 8** and **Table 9**). Finally, a majority of respondents report having curriculum and instruction autonomy (see **Table 10** and **Table 11).**

Table 4

Frequencies and Percent Scores for Teaching Level (N=181)

Grade	**Frequency**	**Percent**
K-5	65	35.9
Middle school (6-8)	44	24.3
High school (9-12)	44	24.3
Other	28	15.5

Note. Those who identified themselves as "other" generally provided special support services such as special education, gifted services, and reading support.

Table 5

Frequencies and Percent Scores for Single Subject Taught (N=116)

Single Subject Area Taught	**Frequency**	**Percent**
Language Arts	25	21.6
Mathematics	18	15.5
Science	10	8.6
Social Studies	10	8.6
Special Education	6	5.2
Library	5	4.3
Physical Education	4	3.4
Reading	4	3.4
Music	3	2.6
Theater	2	1.7
World Language	2	1.7
Other	27	23.3

Note. Does not equal 100 due to rounding.

Table 6

Frequencies and Percent Scores for Number of Years Teaching (N=181)

Years	**Frequency**	**Percent**
1	9	5.0
2	15	8.3
3	14	7.7
4	8	4.4
5	8	4.4
6	8	4.4
7	6	3.3
8	5	2.8
9	5	2.8
10	11	6.1
11	4	2.2
12	8	4.4
13	7	3.9
14	2	1.1
15	9	5.0
16	4	2.2
17	7	3.9
18	3	1.7
19	2	1.1

Table 6 Continued

Years	**Frequency**	**Percent**
20	6	3.3
21	3	1.7
22	6	3.3
23	1	0.6
24	3	1.7
25	5	2.8
26	2	1.1
27	1	0.6
28	2	1.1
29	2	1.1
30	1	0.6
31	3	1.7
32	4	2.2
33	1	0.6
34	2	1.1
35	1	0.6
37	1	0.6
40	1	0.6
43	1	0.6

Note. Does not equal 100 due to rounding.

Table 7

Frequencies and Percent Scores for Ethnicity (N=177)

Ethnicity	**Frequency**	**Percent**
White	142	80.2
Spanish/Hispanic or Latino	11	6.2
Black, African American, or Negro	2	1.1
American Indian or Alaska Native	13	7.3
Asian	3	1.7
Other	6	3.4

Note. Four participants did not answer this question. Does not equal 100 due to rounding.

Table 8

Frequencies and Percent Scores for Number of College Level Personal Finance Courses Taken in Past Year (N=181)

None	**One**	**Two**	**Three**	**More than three**
(138) 76.2%	(26) 14.4%	(11) 6.1%	(2) 1.1%	(4) 2.2%

Table 9

Frequencies and Percent Scores for Number of Continuing Education Courses or Workshops on Personal Finance Taken in Past Year (N=181)

None	**One**	**Two**	**Three**	**More than three**
(147) 81.2%	(25) 13.8%	(5) 2.8%	(0) 0.0%	(4) 2.2%

Table 10

Frequencies and Percent Scores for Curriculum Autonomy (N=181)

None	**Minimal**	**Some**	**Great Deal**
(17) 9.4%	(60) 33.2%	(71) 39.2%	18.2% (33)

Table 11

Frequencies and Percent Scores for Instruction Methodology Autonomy (N=181)

None	**Minimal**	**Some**	**Great Deal**
(7) 3.9%	(33) 18.2%	(67) 37.0%	(74) 40.9%

The participants in this survey are a mix of elementary, middle and high school classroom teachers. Demographic information was in line with national statistics on teacher makeup which describe a workforce that is largely female, white, and aging (Feistritzer & Haar, 2005). Few teachers in this survey have taken college level courses or professional development workshop on personal finance concepts in the past year. The most surprising finding is the degree of curriculum and teaching autonomy expressed by

respondents. Other researchers have not found such academic freedom (Ingersoll, 2007; Quiocho & Stall, 2008). The next section will present results on teacher attitudes and beliefs about personal finance instruction.

What Are Teacher Attitudes and Beliefs About Personal Finance Instruction?

The results of this research question are presented in three sections: policy, instruction, and professional development.

Policy

Teachers in this survey support financial literacy instruction in schools. Close to 83 percent agree or strongly agree with the statement, “It is important for schools to teach financial literacy” (see **Table 12**). A similar percentage of teachers agree or strongly agree with efforts to include personal finance instruction in the curriculum. A small number of teachers strongly disagreed with these sentiments. Answers to an open-ended question seeking policy implementation recommendations included: “The future of our country depends on monetary savvy citizens”; “Would the economy today be different if we taught personal finance in school?” and “Just do it!” Teachers also remarked “Don’t pass another unfunded mandate”; and “Don’t make more work for teachers.”

Table 12

Frequencies and Percent Scores for Attitude Towards Financial Literacy Policy (N=181)

Statement	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
It is important for schools to teach financial literacy	(9) 5.0%	(3) 1.7%	(19) 10.5%	(83) 45.9%	(67) 37.0%
I support efforts to include financial literacy in the curriculum	(10) 5.5%	(3) 1.7%	(22) 12.2%	(81) 44.8%	(65) 35.9%

Note. Does not equal 100 due to rounding.

Teachers at all levels — elementary, middle school, and high school — favor starting personal finance instruction in elementary school (see **Table 13**). A majority of teachers believed personal finance instruction should begin in kindergarten believed personal finance instruction should begin in kindergarten (see **Table 14**). While less than 10 percent of middle school teachers selected kindergarten as the grade level to begin personal finance instruction, just over 20 percent of high school teachers favored this level (see **Table 15**). Close to 30 percent of elementary teachers selected kindergarten as the grade level to begin teaching personal finance concepts. Most teachers believed personal finance instruction should be embedded in other courses (see **Table 16**). The courses most suggested to embed personal finance concepts were math and social studies (see **Table 17**).

Table 13

Frequencies and Percent Scores for School Level Personal Finance Instruction Should Begin (N=153)

Current Grade Level	Elementary School	Middle School	High School	College
Elementary school (N=65)	(48) 73.8%	(9) 13.8%	(8) 12.3%	(0) 0.0%
Middle school (N=44)	(25) 56.8%	(10) 22.7%	(8) 18.2%	(1) 2.3%
High school (N=44)	(27) 61.4%	(11) 25.0%	(6) 13.6%	(0) 0.0%

Note. Elementary school is K-5; middle school is 6-8; high school is 9-12. The 28 teachers who responded "other" for current grade level were excluded from this table. Not all totals equal 100 due to rounding.

Table 14

Frequencies and Percent Scores for Grade Level Personal Finance Instruction Should Begin (N=181)

Grade	Frequency	Percent
Kindergarten	38	21.0
1st	15	8.3
2nd	11	6.1
3rd	22	12.2
4th	16	8.8
5th	18	9.9

Table 14 Continued

Grade	**Frequency**	**Percent**
6th	11	6.1
7th	11	6.1
8th	13	7.2
9th	13	7.2
10th	6	3.3
11th	4	2.2
12th	2	1.1
College	1	0.6
I don't believe students should learn personal finance concepts in school	0	0.0

Note. Does not equal 100 due to rounding.

Table 15

Frequencies and Percent Scores for Selecting Kindergarten as the Grade Level to Begin Personal Finance Instruction (N=153)

Current Grade Level	**Kindergarten**
Elementary school [K-5] (N=65)	(19) 29.2%
Middle school [6-8] (N=44)	(4) 9.1%
High school (9-12) (N=44)	(10) 22.7%

Note. The 28 teachers who responded "other" for current grade level were excluded from this table.

Table 16

Frequencies and Percent Scores for Best Method for Students to Learn Personal Finance Concepts (N=181)

Method	**Frequency**	**Percent**
I don't believe students should learn personal finance concepts in school	2	1.1
Separate stand-alone financial literacy course (different than traditional economics course)	44	24.3
Embedded in an economics course	31	17.1
Embedded in other course(s)	95	52.5
None of the above	0	0.0
Do not know	9	5.0

Table 17

Frequencies and Percent Scores for Course(s) to Embed Personal Finance Concepts (N=95)

Suggested Course(s) to Embed Personal Finance	**Frequency**	**Percent**
Math	66	49.3
Social Studies	32	23.9
Language Arts	5	3.7
Across the curriculum	4	3.0
Home Economics	3	2.2
History	3	2.2

Table 17 Continued

Suggested Course(s) to Embed Personal Finance	Frequency	Percent
Reading	3	2.2
Life Skills	2	1.5
Math in Elementary/Stand Alone Course in High School	2	1.5
Business, Careers, Civics, Consumer Math, Economics, English, Literature, Political Science, Psychology, Science, Senior Skills (in H.S.), Social and Personal Skills for Younger Ages, Statistics, Writing	1	0.8

Note. Respondents could suggest more than one course.

Instruction

More respondents thought teaching personal finance would be enjoyable than those who thought teaching it would unenjoyable (see **Table 18**). By a strong majority more teachers (29.8 percent) thought teaching personal finance was important compared to those who saw it as unimportant (1.1 percent) (see **Table 19**). Overall, teachers believed that teaching personal finance would be challenging (see **Table 20** and **Table 21**).

Table 18

Frequencies and Percent Scores for Degree to Which Teaching Personal Finance Concepts Would Be Enjoyable (N=181)

For me, teaching personal finance topics would be (or is)...						
Unenjoyable 1	2	3	Neutral 4	5	6	Enjoyable 7
(13) 7.2%	(11) 6.1%	(7) 3.9%	(60) 33.1%	(23) 12.7%	(32) 17.7%	(35) 19.3%

Table 19

Frequencies and Percent Scores for Degree to Which Teaching Personal Finance Topics Would Be Important (N=181)

For me, teaching personal finance topics would be (or is)...						
Unimportant 1	2	3	4	5	6	Important 7
(2) 1.1%	(5) 2.8%	(3) 1.7%	(38) 21.0%	(44) 24.3%	(35) 19.3%	(54) 29.8%

Table 20

Frequencies and Percent Scores for Degree to Which Teaching Personal Finance Topics Would Be Challenging (N=181)

For me, teaching personal finance topics would be (or is)...						
Routine 1	2	3	4	5	6	Challenging 7
(5) 2.8%	(17) 9.4%	(9) 5.0%	(48) 26.5%	(42) 23.2%	(37) 20.4%	(23) 12.7%

Table 21

Frequencies and Percent Scores for Degree to Which Teaching Personal Finance Topics Would Be Hard (N=181)

For me, teaching personal finance topics would be (or is)...						
Easy 1	2	3	4	5	6	Hard 7
(15) 8.3%	(21) 11.6%	(17) 9.4%	(44) 24.3%	(45) 24.9%	(28) 15.5%	(11) 6.1%

Note. Does not equal 100 due to rounding.

Teachers indicated that the major challenges to teaching personal finance would be (a) lack of suitable curriculum, (b) lack of classroom materials, tied with (c) lack of instruction time, and (d) lack of subject matter knowledge (see Table 22). Only 8 teachers said there would be no major challenges.

Table 22

Frequencies and Percent Scores of Major Challenges to Teaching Personal Finance (N=181)

Major Challenge	**Frequency**	**Percent**
Lack of subject matter knowledge	77	42.1
Lack of suitable curriculum	105	57.4
Lack of classroom materials such as lesson plans and student hand-outs	86	47.0
Lack of classroom instruction time	86	47.0

Table 22 Continued

Major Challenge	**Frequency**	**Percent**
Lack of interest in this topic on part of administration	37	20.2
Lack of interest in this topic on part of students	31	16.9
I would struggle with selecting financial information and classroom materials among the many available resources	35	19.1
Teaching personal finance would be tedious	17	9.3
Lack of time to stay current with changes in personal finance	45	24.6
Lack of state requirement to teach financial literacy	47	25.7
There would be no major challenges	8	4.4
Other	13	7.1

Note. Participants were free to pick all that apply.

Professional Development

Teachers strongly believed that a workshop setting was the single best way to learn how to teach personal finance concepts (see Table 23), and the single best way to improve their own understanding of personal finance concepts (see Table 24). While more than 13 percent of teachers strongly agreed with the statement that "the chance to learn how to teach personal finance concepts" would motivate them to attend a personal finance workshop, nearly triple this number (37.6 percent) strongly agreed with the statement "the chance to improve my own understanding of personal finance concepts" would motivate them to attend a personal finance workshop (see Table 25).

Table 23

Frequencies and Percent Scores for Single Best Way to Learn How to Teach Personal Finance (N=181)

Method	Frequency	Percent
From a book	9	5.0
From a workshop	104	57.5
From other teachers	24	13.3
From a web page	4	2.2
On their own	6	3.3
None of the above	1	0.6
Do not know	11	6.1
Other	22	12.2

Note. Does not equal 100 due to rounding.

Table 24

Frequencies and Percent Scores for Single Best Way for Teachers to Improve Their Own Understanding of Personal Finance Concepts (N=181)

Method	Frequency	Percent
From a book	20	11.0
From a workshop	106	58.6
From other teachers	17	9.4
From a web page	7	3.9

Table 24 Continued

Method	Frequency	Percent
On their own	10	5.5
None of the above	0	0.0
Do not know	6	3.3
Other	15	8.3

Table 25

Frequencies and Percent Scores of Factors That Would Motivate a Teacher to Attend a Personal Finance Workshop (N=181)

Factor	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
The chance to learn how TO TEACH personal finance concepts.	(24) 13.3%	(82) 45.3%	(48) 26.5%	(19) 10.5%	(8) 4.4%
The chance to improve MY OWN UNDERSTANDING of personal finance concepts.	(68) 37.6%	(84) 46.4%	(23) 12.7%	(3) 1.7%	(3) 1.7%
The chance to do BOTH of the above, learn how TO TEACH personal finance concepts, and improve MY OWN UNDERSTANDING of personal finance concepts	(53) 29.3%	(82) 45.3%	(33) 18.2%	(7) 3.9%	(6) 3.3%

Note. Second factor does not equal 100 due to rounding.

Teachers were asked a variety of questions about the structure of a personal finance workshop. A majority of teachers believed that a financial literacy workshop

should occur during the workweek (see Table 26). Consistent with this response, a majority strongly disagreed that it should occur during the summer or during a teacher break. There was also strong sentiment that the workshop should occur over at least two days. Other findings about workshop structure included support for (a) peer-to-peer interaction; (b) establishment of a post-workshop support network; and (c) the ability to earn professional development or college credit for participation.

Table 26

Frequencies and Percent Scores of Teacher Attitudes Toward Structure of Personal Finance Workshop (N=181)

Factor	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
It should occur during the work week	(39) 21.5%	(81) 44.8%	(33) 18.2%	(18) 9.9%	(10) 5.5%
It should occur on a weekend	(7) 3.9%	(25) 13.8%	(31) 17.1%	(60) 33.1%	(58) 32.0%
It should occur during the summer or during teacher time off	(18) 9.9%	(42) 23.2%	(43) 23.8%	(33) 18.2%	(45) 24.9%
It should last no more than several hours	(23) 12.7%	(73) 40.3%	(49) 27.1%	(27) 14.9%	(9) 5.0%
It should occur over at least 2 days	(22) 12.2%	(62) 34.3%	(56) 30.9%	(25) 13.8%	(16) 8.8%
It should involve peer-to-peer interaction	(41) 22.7%	(90) 49.7%	(35) 19.3%	(10) 5.5%	(5) 2.8%

Table 26 Continued

Factor	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
There should be supplemental follow-up training	(42) 23.2%	(110) 60.8%	(20) 11.0%	(6) 3.3%	(3) 1.7%
An ongoing support network should be established	(42) 23.2%	(106) 58.6%	(24) 13.3%	(4) 2.2%	(5) 2.8%
Participants should be able to earn professional development or college credit.	(71) 39.2%	(85) 47.0%	(19) 10.5%	(4) 2.2%	(2) 1.1%
Participants should be paid.	(54) 29.8%	(64) 35.4%	(50) 27.6%	(6) 3.3%	(7) 3.9%

Note. Not all factors totaled 100 due to rounding.

Answers to an open-ended question soliciting workshop recommendations included: “Make it meaningful and something we have to do”; “A great idea!” and “Not too short (crammed) or too long (weary).” One teacher remarked: “Teachers are already committed to other demands and another additional topic is over the top. When do teachers get to say ‘uncle’?”

What Are Teacher Understandings of a Few Core Financial Concepts?

The results of this research question are presented in two sections: financial literacy self-grade, and scores on personal finance knowledge questions.

Final Literacy Self Assessment

Prior to answering the 12 personal finance questions, teachers were asked to rate their own understanding of personal finance matters on an A+ through F scale. The majority of teachers (21 percent) rated their understanding at the B level. A small number of teachers (4) gave themselves an F. An even smaller number (2) gave themselves an A+ (see **Table 27**). There was little difference in self-assessment among elementary, middle and high school teachers (see **Table 28**, **Table 29** and **Table 30**).

Table 27

Frequencies and Percent Scores for Self-Grade of Understanding of Personal Finance Concepts (N=181)

Grade	**Frequency**	**Percent**
F	4	2.2
D-	5	2.8
D	7	3.9
D+	12	6.6
C-	13	7.2
C	23	12.7
C+	18	9.9
B-	21	11.6
B	38	21.0
B+	17	9.4
A-	13	7.2

Table 27 Continued

Grade	**Frequency**	**Percent**
A	8	4.4
A+	2	1.1

Table 28

Frequencies and Percent Scores for Elementary Teacher Self-Grade of Understanding of Financial Matters (N=65)

Grade	**Frequency**	**Percent**
F	2	3.1
D-	2	3.1
D	2	3.1
D+	6	9.2
C-	4	6.2
C	11	16.9
C+	6	9.2
B-	6	9.2
B	13	20.0
B+	6	9.2
A-	5	7.7
A	1	1.5
A+	1	1.5

Note. Elementary school is grades K-5. Does not equal 100 due to rounding.

Table 29

Frequencies and Percent Scores for Middle School Teacher Self-Grade of Understanding of Financial Matters (N=44)

Grade	**Frequency**	**Percent**
F	0	0.0
D-	2	4.5
D	2	4.5
D+	4	9.1
C-	3	6.8
C	6	13.6
C+	5	11.4
B-	3	6.8
B	9	20.5
B+	5	11.4
A-	1	2.3
A	4	9.1
A+	0	0.0

Note. Middle school is grades 6-8.

Table 30

Frequencies and Percent Scores for High School Teacher Self-Grade of Understanding of Financial Matters (N=65)

Grade	**Frequency**	**Percent**
F	2	4.5
D-	1	2.3
D	1	2.3
D+	2	4.5
C-	2	4.5
C	2	4.5
C+	6	13.6
B-	7	15.9
B	10	22.7
B+	5	11.4
A-	2	4.5
A	3	6.8
A+	1	2.3

Note. High school is grades 9-12. Does not equal 100 due to rounding.

Personal Finance Knowledge Questions

Teachers were asked 12 personal finance knowledge questions. The mean score for these 12 questions was 4.5 (see **Table 31**). A score of 4 was the most frequent mark. The highest score recorded was a 10, which was achieved by two teachers (see **Table**

32). Eleven teachers recorded no correct answers. High school teachers scored best (5.4 average), followed by middle school teachers (4.9 average), and elementary school teachers (3.6 average) (see **Table 33**).

Table 31

Mean, Median and Standard Deviation for All Financial Literacy Questions (N=181)

	M	***Median***	***SD***
12 Personal finance knowledge questions	4.5	5	2.4

Note. Score out of 12.

Table 32

Frequencies and Percent Scores for All Financial Literacy Questions (N=181)

Score	**Frequency**	**Percent**
0	11	6.1
1	13	7.2
2	11	6.1
3	22	12.1
4	33	18.2
5	31	17.1
6	24	13.3
7	15	8.3
8	12	6.7

Table 32 Continued

Score	Frequency	Percent
9	7	3.9
10	2	1.1
11	0	0.0
12	0	0.0

Table 33

Mean Score by Grade Level (N=153)

	M
Elementary Teachers	3.6
Middle Score Teachers	4.9
High School Teachers	5.4

Note. Score out of 12; Elementary school is K-5; middle school is 6-8; high school is 9-12. The 28 teachers who responded "other" for current grade level were excluded from this table.

Within the 12 financial knowledge questions were three questions that specifically measured debt literacy. Developed by Annamaria Lusardi of Dartmouth College, and Peter Tufano of Havard Business School, the questions measured: (1) understanding of interest compounding; (2) the working of credit card debt; and (3) understanding of the more advantageous mean of payment between two options (Lusardi & Tufano, 2008). The mean score on these questions was 0.8 (see **Table 34**). A total of six teachers got all three debt literacy questions correct. Eighty-four teachers got no questions correct (see

Table 35). High school teachers scored best (1.07 average), followed by middle school teachers (1.02 average), and elementary teachers (0.49) (**Table 36**). Wording of each question, concept measured, answer choices, frequencies and percent score appear in **Table 37**. A majority of respondents felt they had the “right amount of debt” (see **Table 38**).

Table 34

Mean Scores for Three Lusardi-Tufano Debt Literacy Questions (N=181)

	N	***M***	***SD***
Debt literacy questions developed by Lusardi and Tufano	3	0.80	0.87

Table 35

Frequencies and Percent Scores for Three Lusardi-Tufano Debt Literacy Questions (N=181)

Score	**Frequency**	**Percent**
0	84	46.4
1	55	30.4
2	36	19.9
3	6	3.3

Table 36

Mean Score for Three Lusardi-Tufano Debt Literacy Questions Items by Grade Level (N=153)

	M
Elementary Teachers	0.49
Middle Score Teachers	1.02
High School Teachers	1.07

Note. Score out of 3; Elementary school is grades K-5; middle school is grades 6-8; high school is grades 9-12. The 28 teachers who responded "other" for current grade level were excluded from this table.

Table 37

Lusardi-Tufano Debt Literacy Questions, Answer Choices, and Frequencies and Percent Scores (N=181)

Question 1	**Answer Choices**	**Frequency and Percent**
Suppose you owe $1,000 on your credit card and the interest rate you are charged is 20% per year compounded annually. If you didn't pay anything off, at this interest rate, how many years would it take for the amount you owe to double?	2 years	(23) 12.7
	Less than 5 years	**(68) 37.6**
	Between 5 to 10 years	(18) 9.9
	More than 10 years	(19) 10.5
	Not sure	(53) 29.3

Note. This question measures understanding of interest compounding. Correct answer in bold.

Table 37 Continued

Question 2	Answer Choices	Frequency and Percent
You owe $3,000 on your credit card. You pay a minimum payment of $30 each month. At an Annual Percentage Rate of 12% (or 1% per month), how many years would it take to eliminate your credit card debt if you made no additional new charges?	Less than 5 years	(3) 1.7
	Between 5 to 10 years	(20) 11.0
	Between 10 and 15 years	(41) 22.7
	Never, you will continue to be in debt	(65) 35.9
	Not sure	(52) 28.7

Note. This question measures understanding the working of credit card debt. Correct answer in bold.

Table 37 Continued

Question 3	Answer Choices	Frequency and Percent
You purchase an appliance which costs $1,000. To pay for this appliance, you are given the following two options: a) Pay 12 monthly installments of $100 each; b) Borrow at a 20% annual interest rate and pay back $1,200 a year from now. Which is the more advantageous offer?	Option (a)	(82) 45.3
	Option (b)	**(12) 6.6**
	They are the same	(60) 33.2
	Not sure	(27) 14.9

Note. This question measures understanding of the more advantageous mean of payment between two options. Correct answer in bold.

Table 38

Lusardi-Tufano Debt Position Questions, Answer Choices, and Frequencies and Percent Scores (N=181)

Debt position question	**Answer Choices**	**Frequency and Percent**
Which of the following best describes your debt position?	I have too much debt right now and I have or may have difficulty paying it off	(50) 27.6
	I have about the right amount of debt right now and I face no problems with it	(112) 61.9
	have too little debt right now. I wish I could get more	(4) 2.2
	I just don't know	(1) 0.6
	Prefer not to answer	(14) 7.7

Within the 12 financial knowledge questions were three specific financial literacy questions given to selected participants in the 2004 Health and Retirement Study (HRS), a nationally representative, longitudinal dataset of Americans over the age of 50. Developed by Annamaria Lusardi of Dartmouth College, and Olivia S. Mitchell of The Wharton School, these researchers contend that financial literacy can be gauged from three "basic but fundamental" questions, each measuring a core financial concept: compound interest, inflation, and risk diversification (Lusardi & Mitchell, 2006). In order to be considered financially literate, according to the researchers, a respondent must get all three questions correct (Lusardi, 2008). The mean score on these questions was 2.04

(see **Table 39**). A total of 80 teachers got all three questions correct. Twenty-two teachers recorded no correct answers (see **Table 40**). High school teachers scored best (2.3 average), followed by middle school teachers (2.2 average), and elementary teachers (1.7 average) (see **Table 41**). Wording of each question, concept measured, answer choices, frequencies and percent score appear in **Table 42**.

Table 39

Mean Scores for Three Lusardi-Mitchell Financial Literacy Questions (N=181)

	N	***M***	***SD***
Financial literacy questions developed by Lusardi and Mitchell	3	2.04	1.04

Table 40

Frequencies and Percent Scores for Three Lusardi-Mitchell Financial Literacy Questions (N=181)

Score	**Frequency**	**Percent**
0	22	12.2
1	28	15.5
2	51	28.2
3	80	44.2

Note. Does not equal 100 due to rounding.

Table 41

Mean Score for Three Lusardi-Mitchell Financial Literacy Questions Items by Grade Level (N=153)

	M
Elementary Teachers	1.7
Middle Score Teachers	2.2
High School Teachers	2.3

Note. Score out of 3; Elementary school is K-5; middle school is 6-8; high school is 9-12. The 28 teachers who responded "other" for current grade level were excluded from this table.

Table 42

Lusardi-Mitchell Financial Literacy Questions, Answer Choices, and Frequencies and Percent Scores (N=181)

Question 1	**Answer Choices**	**Frequency and Percent**
Suppose you had $100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?	**More than $102**	(133) 73.5
	Exactly $102	(10) 5.5
	Less than $102	(9) 5.0
	Not sure	(29) 16.0

Note. This question measures understanding of compound interest. Correct answer in bold.

Table 42 Continued

Question 2	Answer Choices	Frequency and Percent
Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, would you be able to buy more than, exactly the same as, or less than today with the money in this account?	More than today	(5) 2.8
	Exactly the same as today	(6) 3.3
	Less than today	(123) 68.0
	Not sure	(47) 26.0

Note. This question measures understanding of inflation. Correct answer in bold. Does not equal 100 due to rounding.

Table 42 Continued

Question 3	Answer Choices	Frequency and Percent
Do you think that the following statement is true or false? "Buying a single company stock usually provides a safer return than a stock mutual fund."	True	(5) 2.8
	False	(114) 63.0
	Not sure	(62) 34.3

Note. This question measures understanding of risk diversification. Correct answer in bold. Does not equal 100 due to rounding.

Lusardi recommended adding a fourth more complicated question on asset pricing to "differentiate among different levels of financial sophistication" (A. Lusardi, personal

communication, October 8, 2008). A total of 45 participants got this fourth question correct (see **Table 43**). Only 30 teachers got the three financial literacy questions plus the additional question correct (see **Table 44**). Of this group, 12 were high school teachers, 9 were middle school teachers, 6 were elementary school teachers, and 3 identified themselves as "other" classroom personnel (see **Table 45**).

Table 43

Extra Lusardi-Mitchell Financial Literacy Question, Answer Choices, Frequencies and Percent Scores (N=181)

Question 4	**Answer Choices**	**Frequency and Percent**
What normally happens to bond prices when interest rates increase?	Rise	(35) 19.3
	Fall	(45) 24.9
	Stay the same	(17) 9.4
	Not sure	(84) 46.4

Note. This question measures understanding of asset pricing. Correct answer in bold.

Table 44

Frequency and Percent of Participants Getting All Four Lusardi-Mitchell Financial Literacy Questions Correct

(N=181)

Frequency	**Percent**
30	16.6

Table 45

Frequencies and Percent of Participants Getting All Four Lusardi-Mitchell Financial Literacy Questions Correct by Grade Level

(N=181)

Grade Level	**Frequency and Percent**
Elementary	(6) 20.0
Middle School	(9) 30.0
High School	(12) 40.0
Other	(3) 10.0

The results presented above indicate that teachers are very supportive of efforts to include personal finance concepts in schools. Teachers believed financial instruction should begin at the elementary level, and that it should be embedded in a variety of courses. The main barriers to personal finance instruction cited were (a) lack of suitable curriculum; (b) lack of classroom materials; (c) lack of instruction time; and (d) lack of subject matter knowledge. By a strong margin, teachers believed the best way to both

learn how to teach personal finance concepts, and to improve their own understanding of personal finance concepts was through a multi-day workshop. A majority of teachers gave themselves a B for their understanding of personal finance concepts. While the average score on the 12 personal finance knowledge questions did not bare this out (average score of 4.5 or 37.5 percent), more than 80 teachers got a perfect score (3) on the three specific questions gauging degree of financial literacy. A more detailed summary and a discussion of the findings are presented in the next chapter.

CHAPTER FIVE

SUMMARY AND DISCUSSION

This final chapter of the dissertation restates the research problem, reviews the methodology used in the study, and summarizes and discusses the results of the study. A vision for personal finance professional development along with suggestions for additional research is also presented.

As explained in Chapter 1, the study reported here was a quantitative study, using a survey instrument that sought to characterize teacher attitudes and beliefs about teaching personal finance, as well as teacher understanding of a few core personal finance concepts. The decision to look at personal finance issues was made because of the growing movement to include personal finance instruction in schools. To date, forty states have developed financial literacy standards or guidelines, while seven states require a specific personal finance course ("Survey of the states: Economic, personal finance & entrepreneurship education in our nation's schools in 2007," 2007). The decision to look specifically at teacher attitudes, beliefs, and knowledge was made because of the centrality of the teacher on student achievement and curriculum implementation success (Brophy & Good, 1986; McLaughlin, 1987; Nye, et al., 2004; Palardy & Rumberger, 2008; Sanders & Rivers, 1996; Tschannen-Moran, et al., 1998). As Handal and Herrington noted in 2003: "Teachers are those who ultimately decide the fate of any educational enterprise. Consequently, teachers' attitudes, feelings, and perceptions must be recognized well before the launching of any innovation" (p. 65). Martin was even more direct: "Curriculum implementation approaches that do not consider teacher beliefs have a temporary life" (as cited in Handal & Herrington, 2003, p. 62).

Despite evidence of the centrality of the teacher in student and policy implementation success, there is little evidence of teacher role or teacher voice in the growing movement to develop and implement financial literacy policy. Two recent studies surveyed teachers on financial literacy, but were largely focused on the state of financial literacy instruction (Godsted, 2007; Loibl, 2008; Miller, 2007).

Survey methodology was chosen for its ability to measure attitudes, beliefs, and knowledge (Fraenkel & Wallen, 2006). A survey instrument was constructed after a review of the research literature on personal finance investigations of high school students, adults and teachers, and a pilot test of 287 classroom teachers (Appendix A). The following categories of questioning emerged from this process: (1) policy; (2) instruction; (3) professional development; and (4) concept knowledge. Questions were drawn from three tested instruments: (1) *Survey of Financial Education in Ohio Schools* (Loibl, 2008); (2) *Debt Literacy, Financial Literacy and Planning: Implications for Retirement Wellbeing* (Lusardi & Mitchell, 2006); and (3) *Financial Experience, and Overindebtedness* (Lusardi & Tufano, 2008). For this study additional questions on policy implementation and professional development were created following guidelines described in *Asking Questions: The Definitive Guide to Questionnaire Design* (Bradburn, et al., 2004) and Dillman's (2007) Tailored Design Method (TDM). TDM is a protocol tool for implementing effective mail and Internet survey research. Validity and reliability were sought through the modified piloting procedures suggested in TDM.

The main research questions were: (1) What are teacher attitudes and beliefs about personal finance instruction and (2) What are teacher understandings of a few core personal finance concepts. The population for this study consisted of classroom teachers

from two school districts in two states. A representative from each of the two districts distributed the online survey to a total of 1,120 potential participants. Descriptive statistical methods were used to analyze survey responses.

Summary of the Results

The initial survey response rate was 26.5 percent for a total of 300 responses. I excluded participants who did not complete the entire survey, leaving a final response rate of 16 percent or 181 classroom teachers. A majority of this group (35.9 percent) were K-5 elementary school teachers. About half of the participants were either middle school (24.3 percent) or high school teachers (24.3 percent). The remaining respondents (15.5 percent) identified themselves as "other" classroom personnel.

Findings from the four areas of investigation financial literacy policy, teaching financial literacy, professional development, and financial knowledge will now be presented.

Policy

Teachers in this survey support financial literacy instruction in schools. Close to 83 percent agreed or strongly agreed with the statement, "It is important for schools to teach financial literacy." A similar percentage of teachers (80.7 percent) agreed or strongly agreed with the statement: "I support efforts to include financial literacy in the curriculum." Only a small number of teachers strongly disagreed with these statements (9 and 10 percent respectively). A similar attitude of support was evident in responses to a question asking participants to rate the importance of personal finance instruction using a

7-level Likert scale. With a 1 indicating “unimportant,” a 4 indicating “neutral,” and a 7 indicating “important,” a majority of respondents (29.8 percent) selected 7 or “important.” Only 1.1 percent of respondents selected 1 or “unimportant.” More than 73 percent of participants selected Likert item 5, 6, or 7 on this question of importance. These findings are consistent with a national study of 650 K-12 teachers commissioned by Networks Financial Institute at Indiana State University. Eight in 10 teachers in that study believed it was important to teach financial literacy, with middle and high school teachers being particularly supportive (95 percent) (Godsted, 2007). The findings are also consistent with results from a pilot survey of 287 teachers in which close to 90 percent of the respondents felt it was important or very important for K-12 students to be financially literate.

Teachers at all grade levels — elementary, middle, and high school —favor starting personal finance instruction in elementary school. Elementary teachers were most supportive of beginning instruction during this time (73.8 percent), followed by high school teachers (61.4 percent), and middle school teaches (56.8 percent). A majority of teachers (21 percent) believe personal finance instruction should begin in kindergarten. These results are the antithesis of how personal finance instruction is delivered today. If it occurs at all, it occurs in the latter years of high school (Loibl, 2008; National standards in k-12 personal finance education (3rd ed.)," 2007; Survey of the states: Economic, personal finance & entrepreneurship education in our nation’s schools in 2007," 2007). More than half of the respondents (53 percent) believed that the best method for teaching personal finance concepts was to embed instruction in other courses. The two most frequently selected courses were math (49.3 percent) and social studies (23.9 percent).

Close to 25 percent of respondents felt the best method for teaching personal finance concepts was through a separate stand-alone financial literacy course (different from traditional economics course). Researcher Tzu-Chin Martina Peng (2008a) compared data of states with no financial literacy mandate to data of states in the following three categories: (1) Standard Mandate — states requiring the creation of personal finance standards and/or guidelines; (2) Course Mandate — states requiring the taking of a specific personal finance course; and (3) Test Mandate — states requiring the taking of a personal finance test. Peng found the greatest impact on student financial literacy as judged by scores on the 2002, 2004, and 2006 Jump$tart Survey, a measure of high school seniors in states that required the taking of a specific course. She did not look at states offering embedded personal finance curriculum.

Participants in my study were offered an opportunity to share their comments in an open-ended question seeking policy implementation recommendations. Feedback included: “The future of our country depends on monetary savvy citizens,” “Don’t expect students to learn financial literacy at home,” and “Would the economy today be different if we taught personal finance in school?”

Instruction

While respondents thought teaching personal finance would be enjoyable, many thought it would also be a challenge. On a 7-level Likert scale with a 1 indicating that teaching financial literacy would be “easy,” a 4 indicating teaching financial literacy would be “neutral,” and a 7 indicating that teaching financial literacy would be “hard,” 46.5 percent of teachers selected Likert item 5, 6, or 7 compared to 29.3 percent who

selected Likert item 1, 2, or 3. On a similar Likert scale, with 1 indicating that teaching financial literacy would be “routine,” a 4 indicating teaching financial literacy would be “neutral,” and a 7 indicating teaching financial literacy would be “challenging,” 56.3 percent of teachers selected Likert item 5, 6, or 7 compared to 17.2 percent who selected Likert item 1, 2, or 3.

Teachers in this study believed that the major challenges to teaching personal finance would be: (a) lack of suitable curriculum; (b) lack of classroom materials; and (c) a tie between lack of instruction time; and (d) lack of subject matter knowledge. Only 8 teachers said there would be no major challenges. These sentiments compare to the Networks Financial Institute study where teachers cited (a) lack of time; (b) lack of state requirement; and (c) lack of demand as the top three challenges to teaching personal finance concepts (Godsted, 2007). In a study investigating the state of financial literacy in Ohio, high school teachers currently teaching the topic reported their top challenges to be: (a) allocated instructional time; (b) lack of instructional material; and (c) lack of professional development (Loibl, 2008).

Table 46

Top Three Barriers to Successful Implementation of Personal Finance Instruction as Reported by Three Studies

This study	**Networks Financial Institute study (Godsted, 2007) (N=650)**	**Ohio study (Loibl, 2008) (N=710)**
1. Curriculum	Time	1. Time
2. Instructional material	Lack of state requirement	2. Instructional material
3. (tie between) Time and subject matter knowledge	Lack of demand	3. Professional development

Finally, more respondents in this study thought teaching personal finance would be enjoyable than those who thought teaching it would unenjoyable. On a 7-level Likert scale with a 1 indicating "unenjoyable," a 4 indicating "neutral," and a 7 indicating "enjoyably," a majority of respondents (19.3 percent) selected 7 or "enjoyable" when asked what teaching personal finance would be to them. A total of 7.2 percent of participants chose 1, or "unenjoyable." While close to half of the respondents selected 5, 6, or 7 on this question, less than 18 percent selected 1, 2 or 3.

Professional Development

Overwhelmingly, teachers believed that a workshop setting was the single best way to learn how to teach personal finance concepts (over a web page, book, other teachers, and on their own). Popular "other" responses included: college class, continuing education class, online class and webinar. When asked what would motivate them to

attend a financial literacy workshop, more than 13 percent of respondents strongly agreed that the opportunity to learn how to teach personal finance concepts would be a motivating factor. Just over 45 percent of respondents agreed with this sentiment. But when asked about a workshop format that both taught them how to teach personal finance concepts *and* worked to improve their own financial literacy, over 45 percent of respondents agreed that such a workshop would motivate them to attend and close to 30 percent of respondents strongly agreed. To put it another way: 135 out of 181 survey respondents strongly agreed or agreed that the chance to both learn how to teach personal finance concepts *and* improve their own understanding of personal finance concepts would motivate them to attend a financial literacy workshop. The support for a workshop format that solely focused on improving teacher financial literacy was even stronger. Close to 38 percent of respondents strongly agreed that such a format would motivate them to attend a financial literacy workshop, and more than 46 percent of respondents agreed with this sentiment. In other words, 152 out of 181 teachers strongly agreed or agreed that the chance to improve their own financial literacy would motivate them to attend a financial literacy workshop. Clearly, teachers in this study are interested in improving their own financial literacy. Other findings about the structure of a financial literacy workshop included strong support for: (1) peer-to-peer interaction; (2) follow-up supplemental training; and (3) formation of an ongoing support network. These results are consistent with findings that the most successful professional development is collaborative and sustained over time (L. Darling-Hammond & McLaughlin, 1995). Answers to an open-ended question soliciting workshop recommendations included: "Make it meaningful and something we have to do" and "Not too short (crammed) or too

long (weary).” One teacher remarked: “Teachers are already committed to other demands and another additional topic is over the top.”

Concept Knowledge

While a majority of respondents rated their understanding of personal finance concepts at a B level on an A+ through F scale they did not score well on the 12 financial knowledge questions. The mean number of correct answers was 4.5. High school teachers performed best (5.4 average), followed by middle school teachers (4.9 average), and elementary school teachers (3.6 average). A score of 4 was the most frequent mark, achieved by just over 18 percent of participants. The highest score recorded was a 10, which was achieved by two teachers. Eleven teachers (6 percent) recorded no correct answers.

Within the 12 financial knowledge questions were three questions designed to gauge general financial literacy. Developed by Annamaria Lusardi of Dartmouth College, and Olivia Mitchell of the Wharton School, these researchers believe that financial literacy can be measure by a question on each of the following three concepts: (1) compound interest, (2) inflation, and (3) risk diversification. According to Lusardi and Mitchell, in order to achieve a basic level of financial literacy respondents must get all three questions correct. Approximately 74 percent of teachers got the first question (on interest compounding) correct, while 68 percent of teachers got the second question (on inflation) correct. The third question (on risk diversification) was answered correctly by 63 percent of teachers. Participants in this study did slightly better on the compounding question and the risk diversification question than selected participants in the 2004

Health and Retirement Study (HRS) — a nationally representative, longitudinal dataset of more than 22,000 Americans over the age of 50 that tracks health, assets, liabilities, and patterns of well-being in older households. Lusardi and Mitchells questions were part of a special experimental module used that year and completed by 1,269 randomly selected participants. In that investigation, just over 67 percent of respondents got the first question (on risk diversification) correct, close to 75 percent of respondents got the second question (on inflation) correct, and just under 53 percent of respondents got the third question (on risk diversification) correct (Lusardi & Mitchell, 2006).

Table 47

Comparison of Scores with Lusardi-Mitchell (2006) Study

Financial literacy concept measured	**Percent correct this study (N=181)**	**Percent correct Lusardi & Mitchell study (N=1,269)**
Interest compounding	73.5	67.1
Inflation	68.0	75.2
Risk diversification	63.0	52.3

In a personal correspondence Lusardi recommended adding a fourth more complicated question on asset pricing to “differentiate among different levels of financial sophistication” (A. Lusardi, personal communication, October 8, 2008). This fourth question was not included in the module used in the 2004 *Health and Retirement Study,* but it was included in my investigation. A total of 45 teachers got this fourth question correct. However, only 30 participants got all four questions correct. According to

Lusardi, answering all four questions indicates a more sophisticated level of financial literacy.

Within the 12 financial knowledge questions were three questions that specifically measured debt literacy. Developed by Lusardi and Peter Tufano of Havard Business School, the questions measured: (1) understanding of interest compounding; (2) the working of credit card debt; and (3) understanding of the more advantageous mean of payment between two options (Lusardi & Tufano, 2008). Approximately 38 percent of teachers got the first question (on interest compounding) correct, while close to 36 percent of teachers got the second question (on the working of credit card debt) correct. The third question which presented two repayment options was answered correctly by less than 7 percent of teachers. These results are remarkably similar to a nationally representative investigation of 1,000 Americans that used the same three questions. In that study, close to 36 percent of respondents got the first question correct, close to 36 percent of respondents got the second question correct, and just under 7 percent of respondents got the third question correct (Lusardi & Tufano, 2008).

Table 48

Comparison of Scores with Lusardi-Tufano (2008) Study

Debt literacy concept measured	**Percent correct this study (N=181)**	**Percent correct Lusardi & Tufano study (N=1,000)**
Interest compounding	37.6	35.9
Working of credit card	35.9	35.4
Best repayment option	6.6	6.9

Discussion of Results

The primary goal of this investigation was to learn about teacher attitudes and beliefs about teaching personal finance, and to learn teacher understanding of a few core financial concepts. Participants in this survey strongly support the teaching of personal finance concepts in school, the earlier the better. However, they lack the deep knowledge necessary for teaching. Participants in this survey want meaningful professional development, curriculum, and time to devote to this area of study. Their preferred professional development format is workshops that increase their own financial literacy.

Teachers also raised legitimate implementation concerns. Comments in response to an open-ended question that asked for policy implementation advice included: “Don't make more work for teachers, please!”; “Don't pass another unfunded mandate!”; Don’t “add more topics schools are responsible for teaching,” and “When do teachers get to say "uncle"?” These sentiments were remarkably similar to those of a teacher at a 1924 conference on thrift education.

> I thought that if I spoke from that point of view (of a teacher) I might call to the attention of those of you who are not in the actual classroom work of schools some of the difficulties confronting teachers in regard to this subject; and maybe some of you would learn the reason that occasionally teachers do not welcome the introduction of thrift education, as possibly it would seem that they ought to… We teachers have reached the saturation point in the inclusion in the curriculum of things to teach. Unless something is dropped from the course of study, so that the teacher is relieved, or unless the school day and the school year are

lengthened, and the objections to that are just as strong from the point of view of the parent and the child as from the point of view of the teacher, we can consider no further additions. I want to have that point understood clearly. And unless much greater compensation and consideration are given to the worker who must prepare for and teach this rapidly increasing number of subjects of instruction, the end must come to the business of asking teachers to take just twenty or thirty minutes a week for this or that valuable matter of instruction. The pot in regard to that matter has boiled over. These special things must be included in the regular school subjects by which her children are promoted and her own success is judged. A teacher said to me recently — and this is illuminating from the point of view of the teachers — "Look at my plan of work. I have taught fire prevention, sanitation, street cleaning, thrift, safety, humaneness, memorial funds, patriotic celebrations," — there were more of them but I have forgotten the rest that she had on her list. She turned on me with this question, "Are you going to examine my class for promotion in these things or in arithmetic and grammar?" ("Prosperity and thrift: Wise spending as a teacher sees it,").

Sentiments both then and now reflect a teaching workforce burdened with curriculum demands. Furthermore, research suggests that teachers have limited authority to implement a curriculum, even one they support. Richard M. Ingersoll, the author of the *Who Controls Teachers' Work? Power and Accountability in America's Schools,* described a teaching workforce long on responsibility, yet short on control. He wrote that "organizational control" undermines teacher motivation (2007, p. 25). A 2008

investigation of elementary, middle and high school classroom teachers enrolled in a graduate program found widespread lack of teaching and curriculum autonomy (Quiocho & Stall). An October 2009 report described a national teacher workforce in which two in five teachers were disheartened or disappointed with their jobs (Yarrow, 2009).

Surprisingly, teachers in this study felt a degree of curriculum and instruction autonomy. Just over 57 percent of the respondents felt they had some or a great deal of curriculum autonomy, while more than 77 percent of the respondents believed they had some or a great deal of instruction autonomy. The fact that these two districts allowed their teachers to participate may indicate a more collegial environment. These findings may also indicate that teachers who are satisfied may be more likely to participate in this type of survey.

One fact seems to be certain: teachers in this study have insufficient knowledge of personal finance concepts. This finding is hardly unusual. Teachers in Ohio, *currently teaching personal finance concepts*, scored on average below 50 percent on a measure of financial knowledge (Loibl, 2008). These findings have widespread implications for effective personal finance instruction. As Lee Shulman has written, in order to be effective, teachers must possess a deep knowledge of subject matter (1987). And in order to think deeply about the subject matter, their knowledge base must go beyond facts (Shulman, 1986). In their *Framework for Understanding Teaching and Learning*, Linda Darling-Hammond and John Brandford describe knowledge of subject matter as a core area of professional knowledge required by teachers in a changing world (L. Darling-Hammond, Bransford, J, 2005, p. 11).

In the next section I describe one professional development approach to improving teacher financial literacy.

Vision for Professional Development

My vision for professional development would capitalize on two major findings from this study: (1) teacher support for the inclusion of personal finance instruction in the curriculum, and (2) teacher interest in improving their own financial literacy. I would model professional development after the best practices of the National Writing Project (NWP), one of the longest running and most successful peer-to-peer professional development networks in the country. Founded in 1974 by James Gray at the Graduate School of Education at the University of California, Berkley, NWP training has been shown to improve teacher writing, writing instruction, and teacher enthusiasm for writing instruction ("National Writing Project: Results,"). At the heart of the NWP's mission is a belief that teachers, particularly those in the K-12 setting, are the "best change agents for reform" (Kaplan, 2008, p. 337). This sentiment dovetails well with findings about the role of the teacher on student success and policy implementation success (Brophy & Good, 1986; McLaughlin, 1987, 1991; Nye, et al., 2004; Palardy & Rumberger, 2008; Sanders & Rivers, 1996; Tschannen-Moran, et al., 1998). Furthermore, NWP's format — month-long peer-to-peer collaboration, with on-going support — has been shown to have both an empowering and transformational effect on teachers (Whitney, 2008). As a graduate of a NWP Summer Institute, I can confirm these findings. For me, it was the most effective, most meaningful professional development experience of my 10 year plus teaching career.

The NWP It is based on the following principles, each of which is, I believe, adaptable to personal finance professional development:

1. Educational change begins with teachers, and partnerships between k-12 educators and colleges and universities is a logical way to initiate such change;
2. Writing is an essential topic that should be taught at all grade levels, and teacher development programs should provide a space for educators to discuss and investigate the movement of this teaching across grade levels;
3. The teaching of writing is best conducted by those teachers whose knowledge of the subject includes exposure to theory, research, and practice that includes actually engaging in writing processes themselves;
4. There is no right way to teach writing, though some methods are better than others and these methods are best discovered in dialogue among committed educators;
5. Well-informed and dedicated teachers are best qualified to educate other teachers ("National Writing Project: About NWP,")

It may be misguided to believe that financial instruction could have the emotional impact of a professional development experience centered around writing. In her study on the transformational effect of the NWP, Whitney (2008) described the role of writing as a “potent factor” in teacher learning experience: “Writing and interactions with colleagues around writing seemed to initiate and/or enhance the effects of experience at each stage of the learning process,” (pp. 176-177). However, the emotional impact of money cannot be understated. Certified financial planner Rick Kahler capitalizes on this element in his

work with clients. In a 2009 interview for *The Wall Street Journal*, he detailed how he helps clients unearth their “money scripts,” beliefs around money formed in childhood that often derail sound financial action. Kahler described a client whose father was frequently away on business trips. Prior to departing, the father would furnish his daughter with a credit card and instructions to “buy herself something nice.” Later, in times of duress, the daughter would overspend, eventually getting into deep credit card debt. Another client was raised to believe that shopping at discount retailers was a sign of failure. Despite mounting debt, this client failed to alter shopping habits. Only after revealing their “money scripts” to a group of friends and family were these clients able to recognize root causes of their money issues. Public sharing of “money scripts” is a core part of the process, according to Kahler: “You’ve got to get feedback from other people," he said (Coombes). Such an approach, honest public sharing with honest public feedback, is a key component of NWP practice and would transfer well to personal finance professional development.

One of the biggest challenges to effective personal finance professional development would be curriculum design. Potential subject matter for inclusion is virtually limitless. In fact, the number and complexity of personal finance products has been cited as one reason for widespread financial illiteracy (Organisation for Economic Co-operation and Development., 2005). However, as researchers Lusardi and Mitchell have argued, basic financial literacy can be demonstrated by the understanding of three core concepts: (1) compound interest; (2) inflation; and (3) risk diversification (Lusardi & Mitchell, 2006). Personal finance professional development should be focused on these three core concepts. Why? An understanding of these principles would prepare an

individual for virtually any key personal finance decision. Credit use? Compound interest. Portfolio assembly? Risk diversification. Planning for retirement? Inflation. In fact, it is hard to cite a financial decision (car purchase, home purchase, credit card use, stock investment, retirement planning, etc.) that does not require knowledge of at least one of these three principles.

Professional development must, of course, do more than focus on these three concepts. It must also critically examine broader economic themes. Topics such as free trade and consumerism, to name only a few, deserve exploration. In her book *The Travels of a T-shirt in the Global Economy: an Economist Examines the Markets, Power, and Politics of World Trade*, Georgetown economics professor Pietra Rivoli examined a core economic assumption about free trade: “international market competition creates a tide of wealth that (at least eventually) will lift all boats” (p. x). She was challenged to re-examine this principle following a World Trade Organization (WTO) protest on the Georgetown campus. “Who made your T-shirt?” attendees at the peaceful 1999 gathering were asked. “Was it a child in Vietnam, chained to a sewing machine without food or water?” (p. viii). Rivoli couldn’t answer the question at the time. But her initial reaction was that protestors failed to understand the virtues of markets. The question, however, launched a world-wide quest to discover exactly how a T-shirt in this case one purchased in Fort Lauderdale, Florida came to be. The findings, which surprised Rivoli, reveal a more complex picture:

> The key events in the T-shirt’s life are less about competitive markets than they are about politics, history, and creative maneuvers to avoid markets. Even those who laud the effects of highly competitive markets are loathe to experience them

> personally, so the winners at various stages of my T-shirt's life are adept not so much at competing in markets but at avoiding… My T-shirt's life is a story of the wealth-enhancing possibilities of globalization in some settings but a 'can't win' trap in others, a trap where power imbalances and poorly functioning politics and markets seem to doom economic future (pp. x-xi).

Examining such complexity might foster not only more thoughtful personal spending decisions, but also a better understanding of the global interconnectedness of such decisions. This type of personal reflection could naturally segue into a critical examination of consumerism. As described in Chapter 2, the history of financial education in the United States has often been a reaction, albeit belated, to abuse of the consumer. The recent financial crisis, fed in part by predatory lending and overzealous marketing of credit, is only the latest example. As far back as 1935 it was noted that the main economic problem facing the industrial world was distributing an inexhaustible amount of goods (Barber, 2007, p. 11). Author Benjamin R. Barber wrote in *Consumed: How Markets Corrupt Children, Infantilize Adults, and Swallow Citizens Whole* that from the perspective of business, they were not producing too much, "consumers were purchasing too little" (p. 11). The solution? Manufacture need. Today, youth are particularly vulnerable to this ethos. "Kids are the epicenter of American consumer culture," wrote Boston College cultural critic Juliet B. Schor (as cited in Barber, p. 14). Barber argues that a key goal of child marketing is to separate kids from a protective environment (their parents): "A child embedded in a family community makes a poor

shopper" (2007, p. 32). Consumerism in general, and serial targeting of youth in particular, cannot be challenged and interrupted if not examined and understood.

Finally, curriculum is highly political. As Michael Apple (2003) has written "the politics of curriculum doesn't end with the knowledge itself. It also involves who should select it, how it should be organized…" (p. 7). In *High Schools Add Classes Scripted by Corporations*, reporter Anne Marie Chaker (2008) detailed how some of America's largest corporations such as Deloitte, McDonald's Corp., and Yum Brands Inc.'s Pizza Hut influence the school curriculum. Joel Spring (2005) has labeled this practice "fast-food education" (p. 466). No one professional development approach can overcome all barriers to and influences over effective financial literacy instruction. However, one modeled after the National Writing Project could potentially challenge consumerism and corporate curriculum influence. It could also improve teacher financial literacy and subsequently the teaching of personal finance. Research has shown the empowering and transformational effect of the NWP on teachers (Whitney, 2008), and its effect on teacher advocacy for writing instruction (Kaplan, 2008). It is reasonable to believe that a personal finance professional development experience modeled after the NWP could eventually achieve similar results.

Personal finance instruction in the United States has never been central to the curriculum. Its presence — embedded in home economic and consumer education courses — was greatly diminished in public schools following the 1957 launch of the Soviet satellite Sputnik I (2008; Kliebard, 2002). More than 50 years later, amidst the worst financial crisis since the Great Depression, the reality is that despite calls for improved financial literacy from well-meaning individuals and organizations, very little

meaningful action has been taken. Currently, only seven states (Georgia, Idaho, Illinois, Louisiana, Missouri, South Dakota, and Utah) require the taking of specific personal finance course ("Survey of the states: Economic, personal finance & entrepreneurship education in our nation’s schools in 2007," 2007). Research has shown the most effect on student achievement in states that require the taking of a specific personal finance course (Peng, 2008a). Robert Shiller, a professor of economics and finance at Yale who accurately predicted the technology stock bubble of the late 1990s and the recent collapse of the home market, has called for a “major program to subsidize personal financial education for everyone” (Shiller, 2009). He posits that lack of financial acumen played no small role in the financial crisis of 2008 and 2009, and points out that financial advice is generally only available to the wealthy. While complimentary of recent government efforts, he said they are akin to handing out computer manuals to the computer illiterate. As much potential as personal finance professional development modeled after the National Writing Project offers, it will mean nothing until systematic, widespread personal finance instruction is adopted; that or the creation of an entirely new paradigm for the delivery of personal finance instruction.

Suggestions for Additional Research

This study provided feedback on teacher attitudes and beliefs about teaching financial literacy, and teacher understanding of a few core financial concepts. While teachers in two separate school districts in two separate states were investigated, similar research from a nationally representative sample would be highly beneficial. It would also be valuable to learn how much of teacher attitude and belief about financial literacy

was influenced by the current financial crisis, which has been dubbed the "Great Recession" (Gibbs, 2009; Isidore, 2009). Qualitative studies could be especially helpful in answering this question.

An investigation of teachers who take part in personal finance professional development would be beneficial; particularly one modeled after the National Writing Project. The influence of such training on teacher will to implement financial literacy could be learned. Additionally, data on how teachers process and understand financial literacy material could come from such a study.

Finally, future investigations should investigate the student perspective. What are student attitude and beliefs about financial literacy? What knowledge do students currently possess? Current investigations focus on high school seniors and college students. What do elementary students know? What do middle school students know? What do students of all ages *want* to know? Such research on students could be used in conjunction with research on teachers to craft truly effective financial literacy curriculum.

REFERENCES

About the White House: Presidents. *Calvin Collidge 1923-1929* Retrieved March 9, 2008, from http://www.whitehouse.gov/about/presidents/calvincoolidge/

About: home economics. Retrieved February 25, 2008 from http://hearth.library.cornell.edu/h/hearth/about.html

Alexander, R. J. (1979). *State Consumer Education Manual* Retrieved January 25, 2008. from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/35/cd/62.pdf.

Apple, M. W., & Aasen, P. (2003). *The state and the politics of knowledge*. New York ; London: RoutledgeFalmer.

Average credit statistics (2008). Retrieved December 3, 2008, from http://www.myfico.com/CreditEducation/AverageStats.aspx

Barber, B. R. (2007). *Consumed: how markets corrupt children, infantilize adults, and swallow citizens whole* (1st ed.). New York: W.W. Norton & Co.

Beecher, C. (1977). *Treatise on domestic economy*. New York: Schocken Books.

Bernheim, B., Garret, D., & Maki, D. (1997). Education and saving: The long-term effects of high school curriculum mandates. Retrieved January 24, 2008, from http://www.nber.org/papers/w6085

Bowman (1922). The School Savings Bank. *The Elementary School Journal*, *23*(2), 56-67.

Bradburn, N. M., Wansink, B., & Sudman, S. (2004). *Asking questions : the definitive guide to questionnaire design--for market research, political polls, and social and health questionnaires* (Rev. ed.). San Francisco: Jossey-Bass.

Brobeck, S., Mayer, R. N., & Herrmann, R. O. (Eds.). (1997). *Encyclopedia of the consumer movement*. Santa Barbara, Calif.: ABC-CLIO.

Brophy, J., & Good, T. (1986). Teacher behavior and student achievement. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (pp. 328-375). New York: Macmillan.

Calder, L. G. (1999). *Financing the American dream : a cultural history of consumer credit*. Princeton, N.J.: Princeton University Press.

Chaker, A. M. (2008). High school classes add classes scripted by corporations. *The Wall Street Journal*. Retrieved from http://online.wsj.com/article/SB120476410964115117.html#printMode

Chase, S., & Schlink, F. J. (1928). *Your money's worth: a study in the waste of the consumer's dollar*. New York,: The Macmillan Company.

Commission, F. L. E. (2006). *Taking ownership of the future: The national strategy for financial literacy 2006*. Retrieved February 10, 2008. from www.mymoney.gov/pdfs/ownership.pdf.

Coombes, A. (2009, January 10). To do in '09: Overcome your money issues. *The Wall Street Journal*. Retrieved from http://online.wsj.com/article/SB123163126147371253.html?mod=article-outset-box

Darling-Hammond, L., Bransford, J (Ed.). (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco: John Wiley & Sons.

Darling-Hammond, L., & McLaughlin, M. W. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan, 76*(8), 597-604.

Dillman, D. A. (2007). *Mail and internet surveys : the tailored design method* (2nd ed.). Hoboken, N.J.: Wiley.

Dominguez-Lund, D. (2008, May 20). Money matters: Education in all things financial is becoming a higher priority in New Mexico high schools. *Albuquerque Journal*, p. B1 B2.

Feistritzer, E., & Haar, C. K. (2005). Profile of teachers in the U.S. 2005 Retrieved October 2, 2009, from http://www.ncei.com/POT05PRESSREL3.htm

Fraenkel, J. R., & Wallen, N. E. (2006). *How to design and evaluate research in education* (6th ed.). Boston: McGraw-Hill.

Franklin, B. (2007). *Poor Richard's Almanack*. New York: Skyhorse Pub., Inc.

Garman, T. (1979). The cognitive consumer education knowledge of prospetive teachers: A national assessment. *Journal of Consumer Affairs, 13*(1), 54-63.

Gates Foundation Says Good Teachers are Key. (2009). *Teacher Magazine*. Retrieved from http://www.teachermagazine.org/login.html?source=http://www.teachermagazine.org/tm/articles/2009/05/28/gatesgoodteachers_ap.html&destination=http://www.teachermagazine.org/tm/articles/2009/05/28/gatesgoodteachers_ap.html&levelId=1000

Gibbs, N. (2009). The Great Recession: America becomes thrift nation. *Time*. Retrieved from http://www.time.com/time/nation/article/0,8599,1891527,00.html

Glatthorn, A. A., & Joyner, R. L. (2005). *Writing the winning thesis or dissertation : a step-by-step guide* (2nd ed.). Thousand Oaks, Calif.: Corwin Press.

Godsted, D. (2007). National K-12 financial literacy qualitative and quantitative research. Retrieved March 1, 2009, from http://www.networksfinancialinstitute.org/SiteCollectionDocuments/NationalK12FinancialLiteracyStudy.pdf

Gray, A. (1931). *Thrift in education*. Los Angeles: Manual Arts High School.

Guide to people, organizations, and topics in prosperity and thrift. *The Thrift Movement* Retrieved March 9, 2008, from http://memory.loc.gov/ammem/coolhtml/coolensz.html#ttmThe%20Thrift%20Movement

Handal, B., & Herrington, A. (2003). Mathematics teachers' beliefs and curriculum reform. *Mathematics Education Research Journal, 15*(1), 59-69.

Hanna, A. K. (1922). *Home economics in the elementary and secondary schools*. Boston,: Whitcomb & Barrows.

Harap, H. (1924). *The education of the consumer*. New York,: The Macmillan company.

Hines, S. (2006). Financial literacy shows slight improvement among nation's high school students Retrieved March 30, 2008, from http://www.jumpstart.org/fileuptemp/2006GeneralReleaseFinal%202.doc

History of the Federal Reserve. *1929-1933: The Market Crash and the Great Depression* Retrieved March 13, 2008, from http://www.federalreserveeducation.org/fed101/History/index.cfm

Hoffman, E. (2008). Financial Literacy Still Declining among High School Seniors, Jump$tart Coalition's 2008 Survey Shows. Retrieved September 22, 2008, from http://www.jumpstart.org/fileindex.cfm

Hughes, D. M. (1918). *Thrift in the household*. Boston: Lothrop, Lee & Shepard Co.

Independent Lens (2007, November 20). *An unreasonable man Ralph Nader: How do you define a legacy?* Retrieved March 17, 2008, from http://www.pbs.org/independentlens/unreasonableman/beyondraiders.html

Ingersoll, R. M. (2007). Short on power, long on responsibility. *Educational Leadership, 65*(1), 20-25.

Isidore, C. (2009). The Great Recession. *CNNMoney.com* Retrieved July 30, 2009, 2009, from http://money.cnn.com/2009/03/25/news/economy/depression_comparisons/index.htm

Jacobson, L. (2004). *Raising consumers: children and the American mass market of the early twentieth century*. New York: Columbia University Press.

Jump$tart (2008). 2008 Survey of Personal Financial Literacy Among High School Students Retrieved May 22, 2009, from http://www.jumpstart.org/fileindex.cfm

Kaplan, J. S. (2008). The National Writing Project: Creating a professional learning community that supports the teaching of writing. *Theory Into Practice, 47*(5), 9.

Kingsbury, K. (2006, November 6). Pressure on your benefits. *Time, 168*, 53-54.

Kliebard, H. (2002). *Changing course: American curriculum reform in the 20th century*. New York: Teachers College Press.

Lasser, J. K., & Porter, S. F. (1953). *Managing your money*. New York,: Holt.

Life of Alfred P. Sloan. Retrieved February 29, 2008, from http://www.sloan.org/sloanbio.shtml

Literacy, P. s. A. C. o. F. (2008). *2008 Annual Report to the President*.

Lofgren, W., & Suzuki, W. (1979). An asessment of the comptency of secondary school teachers in consumer education. *Journal of Consumer Affairs, 12*(2), 380-385.

Loibl, C. (2008). Survey of financial education in Ohio's high schools: Assessment of teachers, programs, and legislative efforts Retrieved December 6, 2008, from http://p12.osu.edu/reports/Loibl.PersonalFinanceEducation.pdf

Louis, B. (2009). Las Vegas, Fort Myers, Florida Lead U.S. Cities in Foreclosures from http://www.bloomberg.com/apps/news?pid=20601103&sid=aZejjD7U1FNw

Lusardi, A. (2008). Are You Financially Literate? Do this Simple Test to Find Out Retrieved July 12, 2008, from http://annalusardi.blogspot.com/2008/07/how-financial-literate-are-you.html

Lusardi, A., & Mitchell, O. (2006). Financial literacy and planning: Implications for retirement Retrieved December 4, 2008, from http://www.dartmouth.edu/~alusardi/Papers/FinancialLiteracy.pdf

Lusardi, A., & Tufano, P. (2008). Debt literacy, financial experience and overindebtedness Retrieved December 4, 2008, from http://www.dartmouth.edu/~alusardi/Papers/lusardi_tufano.pdf

Mandell, L. (2006). Financial literacy: If it is so important, why isn't it improving? Retrieved May 21, 2009, from http://www.networksfinancialinstitute.org/Lists/Publication%20Library/Attachments/30/2006-PB-08_Mandell.pdf

Markow, D., & Bagnaschi, K. (2005). What American teens & adults know about economics Retrieved December 4, 2008, from http://207.124.141.218/WhatAmericansKnowAboutEconomics_042605-3.pdf

Mayer, R. N. (1989). *The consumer movement : guardians of the marketplace*. Boston: Twayne Publishers.

McLaughlin, M. (1987). Learning from experience: Lessons from policy implementation. *Educational Evaluation and Policy Analysis, 9*(2), 171-178.

McLaughlin, M. (1991). The Rand change agent study: Ten years later. In A. R. Odden (Ed.), *Education Policy Implementation* (pp. 143-156). Albany: State University of New York Press.

Mendenhall, J. E., & Harap, H. (1943). *Consumer education*. New York, London,: D. Appleton-Century company.

Miller, S. (2007). Networks Financial Institute Publishes Benchmark Survey of K-12 Educator Financial Literacy Practices [Press release] Retrieved March 1, 2009, from http://www.networksfinancialinstitute.org/News/Pages/PressReleasesArchive.aspx?PressReleaseID=5

Mitchell, W. C. (1937). *The backward art of spending money, and other essays* (1st ed.). New York, London,: McGraw-Hill Book Company, Inc.

Murphey, C. (1929). *Thrift through education*. New York,: A.S. Barnes and Company.

National standards in k-12 personal finance education (3rd ed.) (2007). Retrieved February 10, 2008, from http://www.jumpstart.org/guide.html

National Writing Project: About NWP. Retrieved October 27, 2009, 2009, from http://www.nwp.org/cs/public/print/doc/about.csp

National Writing Project: Results. Retrieved November, 1, 2009, from http://www.nwp.org/cs/public/print/doc/results.csp

Nixon, R. (1969a). Executive order 11583 — Office of Consumer Affairs. *The American Presidency Project* Retrieved March 18, 2008, from http://www.presidency.ucsb.edu/ws/print.php?pid=59092

Nixon, R. (1969b). Special message to the Congress on consumer protection. *The American Presidency Project* Retrieved March 18, 2008, from http://www.presidency.ucsb.edu/ws/index.php?pid=2299

Nye, B., Konstantopoulos, S., & Hedges, L. (2004). How large are teacher effects? *Educational Evaluation and Policy Analysis, 26*(3), 237-257.

Office, U. S. G. A. (2006). *Financial literacy and education commission: Further progress needed to ensure an effective national strategy*.

Olney, M. L. (1991). *Buy now, pay later : advertising, credit, and consumer durables in the 1920s*. Chapel Hill: University of North Carolina Press.

Organisation for Economic Co-operation and Development. (2005). *Improving financial literacy: Analysis of issues and policies*. Paris: Organisation for Economic Co-operation and Development.

Palardy, G., & Rumberger, R. (2008). Teacher effectiveness in first grade: The importance of background qualifications, attitudes, and instructional practices for student learning. *Educational Evaluation and Policy Analysis 30*(2), 111-140.

Peng, T.-C. M. (2008a). *Evaluating Mandated Personal Finance Education in High Schools.* Unpublished Dissertation, The Ohio State University, Columbus.

Peng, T.-C. M. (2008b). Table 3.1: Summary of recent studies on personal financial literacy of young Americans

Poor Richard's Almanac. Retrieved February 25, 2008, from http://www.answers.com/topic/poor-richard-s-almanac

Porter, Sylvia F. (1913-1991), Papers, 1939-1991 (C3977). Retrieved March 13, 2008, from http://whmc.umsystem.edu/invent/3977.html

Powell, R. (2008). Home is where the nest egg is: Dramatic drop in home values will crimp some homeowners' retirement plans, from http://www.marketwatch.com/story/dramatic-drop-in-home-values-will-crimp-some-retirement-plans

President Bush announces president's advisory council on financial literacy (2008). Retrieved February 25, 2008, from http://georgewbush-whitehouse.archives.gov/news/releases/2008/01/20080122-7.html

Prosperity and thrift: Introduction. Retrieved March 6, 2008, from http://memory.loc.gov/cgi-bin/query/r?ammem/cool:@field(DOCID+@lit(lg262))

Prosperity and thrift: Wise spending as a teacher sees it. Retrieved March 6, 2008, from http://memory.loc.gov/cgi-bin/query/r?ammem/cool:@field(DOCID+@lit(lg2610))

Quiocho, A., & Stall, P. (2008). NCLB and teacher satisfaction. *The Association of California Administrators, 37*(5), 3.

Recent books for home economics in high schools (1919). *The School Review, 27*(3), 15.

Rivoli, P. (2005). *The travels of a t-shirt in the global economy : an economist examines the markets, power and politics of world trade*. Hoboken, N.J.: John Wiley & Sons.

Sanders, W., & Rivers, J. (1996). *Cummulative and Residual Effects of Teachers on Future Student Achievement*. Knoxville: University of Tennessee.

Schug, M. C. (1983). Elementary Teachers' Views on Economic Issues. *Theory & Research in Social Education, 11*(1), 55-64.

Scott, C. (1990). *The Status of Consumer Education in United States Schools, Grades K-12. 1990 National Survey*. Chatham, NJ: National Coalition for Consumer Education Inc.

Shiller, R. J. (2009). How about a stimulus for financial advice? New York Times *New York Times*. Retrieved May 29, 2009, from http://www.nytimes.com/2009/01/18/business/economy/18view.html?_r=1&ref=economy.

Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review, 57*(1), 1-22.

Spring, J. H. (2002). *Educating the consumer : a history of the marriage of schools, advertising, and media*. Mahwah, NJ: Lawrence Erlbaum.

Spring, J. H. (2005). *The American school, 1642-2004* (6th ed.). Boston: McGraw-Hill.

Stage, S., & Vincenti, V. B. (Eds.). (1997). *Rethinking home economics : women and the history of a profession*. Ithaca: Cornell University Press.

Strauss, S. W. (1920). History of the thrift movement in America Retrieved from Hearth Cornell University database Available from http://hearth.library.cornell.edu/cgi/t/text/pageviewer-idx?c=hearth;cc=hearth;sid=0cb0195374e92f75edc83b34d493d816;rgn=full%20text;idno=4286325;view=image;seq=0013

Survey of the states: Economic, personal finance & entrepreneurship education in our nation's schools in 2007 (2007). Retrieved May 22, 2009, from http://www.councilforeconed.org/about/survey2007/NCEESurvey2007.pdf

Taber, C. W., & Wardall, R. A. (1923). *Economics of the family*. Philadelphia, London [etc.]: J. B. Lippincott company.

Tennyson, S., & Nguyen, C. (2001). State curriculum mandates and student knowledge of personal finance. *Journal of Consumer Affairs, 35*(21), 241-262.

The employment-based pension system: Evolution or revolution? (2007). *Notes* Retrieved February 9, 2008, from http://www.ebri.org/pdf/notespdf/EBRI_Notes_07-20061.pdf

The post war economy: 1945-1960. *Economics* Retrieved March 13, 2008, from http://economics.about.com/od/useconomichistory/a/post_war.htm

The school savings bank (1887). Retrieved March 2, 2008, from http://query.nytimes.com/mem/archive-free/pdf?_r=1&res=9D02E0DF153DE633A25757C1A96E9C94669ED7CF&oref=slogin

Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research, 68*(2), 202-248.

Vitt, L., Anderson, C., Kent, J., Lyter, D., Siegenthaler, J., & Ward, J. (2000). *Personal finance and the rush to competence: Financial literacy education in the U.S.* Middleburg: The Fannie Mae Foundation.

Vitt, L., Reichback, G. M., Kent, J. L., & Siegenthaler, J. K. (2005). *Goodbye to complacency: Financial education in the US 2000-2005*. Middleburg: AARP.

Wessel, D. (2006, April 6). It's the Teachers, Stupid. *The Wall Street Journal*, p. A2.

Whitney, A. (2008). Teacher transformation in the National Writing Project. *National Council of Teachers of English*, *43*(2), 44. Retrieved from http://www.nwp.org/cs/public/download/nwp_file/12106/Whitney_teachertransformation.pdf?x-r=pcfile_d

Yarrow, A. (2009). State of mind: America's teaching corps is made up of three groups with distinct attitudes about their profession, which has implications for policymakers. *Education Week*, 5. Retrieved from http://www.edweek.org/ew/articles/2009/10/21/08publicagenda_ep.h29.html?tkn=WPTFuZfm39%2BEi793LtN5GEcqmEQEI6LQ%2FsBa&print=1

APPENDIX A

SURVEY INSTRUMENT

Merge_Completers

1. Original ID

1. ID #

2. A Few Questions Abour Your Teaching

2. What grade level do you currently teach?

- K - 3
- 4 - 5
- Middle School (generally considered to be grades 6 - 8)
- High School
- Other (please specify)

3. Including this year, how many years have you taught?

Enter a number

4. In your current teaching position, how much autonomy and voice do you feel you have regarding curriculum (content) decisions?

	None	Minimal	Some	Great Deal
Choose one	◯	◯	◯	◯

5. In your current teaching position, how much autonomy and voice do you feel you have regarding teaching methodology (how content is taught)?

	None	Minimal	Some	Great Deal
Choose one	◯	◯	◯	◯

6. Personal finance refers to individual financial planning including budgeting, saving and investing decisions. Have you ever taught (or currently teach) a course that covers personal finance topics?

- Yes
- No

If yes, what was the context?

Page 1

7. Does your state require the teaching of personal finance topics?

- ◯ Yes
- ◯ No
- ◯ Don't Know

3. Your Background in Personal Finance

8. How many college-level courses have you taken on personal finance topics (does not include traditional economics courses)?

- ◯ None
- ◯ One
- ◯ Two
- ◯ Three
- ◯ More than three

9. How many continuing education courses or workshops related to personal finance have you taken in the last two years?

- ◯ None
- ◯ One
- ◯ Two
- ◯ Three
- ◯ More than three

4. Financial Literacy Policy

One definition of financial literacy is: The ability to use knowledge and skills to manage one's financial resources effectively for lifetime financial security. Financial literacy skills are also referred to as personal finance skills.

10. Do you disagree or agree with the following statements about financial literacy?

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
It is important for schools to teach financial literacy	◯	◯	◯	◯	◯
I support efforts to include financial literacy in the curriculum	◯	◯	◯	◯	◯

11. What grade should students begin to learn personal finance concepts?

◯ I don't believe students should learn personal finance concepts in school

◯ Kindergarten

◯ 1st grade

◯ 2nd grade

◯ 3rd grade

◯ 4th grade

◯ 5th grade

◯ 6th grade

◯ 7th grade

◯ 8th grade

◯ 9th grade

◯ 10th grade

◯ 11th grade

◯ 12th grade

◯ College

12. What would be the best way for STUDENTS to learn personal finance concepts at school?

- ◯ I don't believe students should learn personal finance concepts in school
- ◯ Separate stand-alone financial literacy course (different than traditional economics course)
- ◯ Embedded in an economics course
- ◯ Embedded in other course(s)
- ◯ None of the above
- ◯ Do not know

If you chose "Embedded in other courses" what course or courses should it be embedded in?

[ ]

13. What single piece of advice would you give policy makers interested in improving personal finance instruction in schools?

[ ]

5. Teaching Financial Literacy Topics

One definition of financial literacy is: The ability to use knowledge and skills to manage one's financial resources effectively for lifetime financial security. Financial literacy skills are also referred to as personal finance skills. The terms "financial literacy" and "personal finance" are used interchangeably in this survey.

14. For me, teaching personal finance topics would be (or is)... [Unenjoyable to enjoyable]

	1	2	3	4	5	6	7
Choose one	◯	◯	◯	◯	◯	◯	◯

15. For me, teaching personal finance topics would be (or is)... [Unimportant-Important]

	1	2	3	4	5	6	7
Choose one	◯	◯	◯	◯	◯	◯	◯

16. For me, teaching personal finance topics would be (or is)... [Routine-Challenging]

	1	2	3	4	5	6	7
Choose one	◯	◯	◯	◯	◯	◯	◯

17. For me, teaching personal finance topics would be (or is)... [Easy-Hard]

	1	2	3	4	5	6	7
Choose one	◯	◯	◯	◯	◯	◯	◯

Merge_Completers

18. If you were to teach a personal finance course (or if you have taught or currently teach a personal finance course), what do you feel would be your major challenge(s)? (check all that apply)

- ☐ Lack of subject matter knowledge
- ☐ Lack of suitable curriculum
- ☐ Lack of classroom materials such as lesson plans and student hand-outs
- ☐ Lack of classroom instruction time
- ☐ Lack of interest in this topic on part of administration
- ☐ Lack of interest in this topic on part of students
- ☐ I would struggle with selecting financial information and classroom materials among the many available resources
- ☐ Teaching personal finance would be tedious
- ☐ Lack of time to stay current with changes in personal finance
- ☐ Lack of state requirement to teach financial literacy
- ☐ There would be no major challenges

Other (please specify)

19. What grade would you give yourself for your understanding of financial matters?

- F
- D-
- D
- D+
- C-
- C
- C+
- B-
- B
- B+
- A-
- A
- A+

6. Professional Development

20. What do you think would be the SINGLE best way for teachers to LEARN HOW TO TEACH personal finance concepts?

- From a book
- From a workshop
- From other teachers
- From a web page
- On their own
- None of the above
- Do not know
- Other (please specify)

21. What do you think would be the SINGLE best way for teachers to IMPROVE THEIR OWN UNDERSTANDING of personal finance topics?

- From a book
- From a workshop
- From other teachers
- From a web page
- On their own
- None of the above
- Do not know
- Other (please specify)

22. Do you agree or disagree with the following statements about factors that might MOTIVATE YOU TO ATTEND a personal finance workshop?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The chance to learn how TO TEACH personal finance concepts.					
The chance to improve MY OWN UNDERSTANDING of personal finance concepts.					
The chance to do BOTH of the above, learn how TO TEACH personal finance concepts, and improve MY OWN UNDERSTANDING of personal finance concepts.					

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23. Do you agree or disagree with the following statements regarding how a financial literacy workshop should be structured?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
It should occur during the work week	○	○	○	○	○
It should occur on a weekend	○	○	○	○	○
It should occur during the summer or during teacher time off	○	○	○	○	○
It should last no more than several hours	○	○	○	○	○
It should occur over at least 2 days	○	○	○	○	○
It should involve peer-to-peer interaction	○	○	○	○	○
There should be supplemental follow-up training	○	○	○	○	○
An ongoing support network should be established	○	○	○	○	○
Participants should be able to earn professional development or college credit.	○	○	○	○	○
Participants should be paid.	○	○	○	○	○

24. Is there anything else you would like to share about financial literacy professional development?

7. FL Definition

25. One definition of financial literacy is: The ability to use knowledge and skills to manage one's financial resources effectively for lifetime financial security. In one sentence, what is your definition of financial literacy?

○ Agree with this one

○ Do not know

Or write your own

8. A Few Questions About Personal Finances

For these few questions on personal finance concepts, if you are not sure of an answer, feel free to

select "Not sure."

26. In an FDIC-insured financial institution, up to what amount is an individual's account insured?

- ◯ Up to $250,000
- ◯ Up to $100,000
- ◯ Up to $25,000
- ◯ Up to $10,000
- ◯ Not sure

27. Negative financial information can stay on your credit report for how many years?

- ◯ 5 to 7 years
- ◯ 7 to 10 years
- ◯ 10 to 15 years
- ◯ Not sure

28. Credit scores range from 300 to 850. What do you think is the average credit score in the United States as reported in credit reports?

- ◯ Not sure

Answer below

____

29. If your credit card was stolen and used to charge items you didn't authorize, you are responsible for what amount?

- ◯ Nothing
- ◯ Up to $50
- ◯ Up to $500
- ◯ All unauthorized charges
- ◯ Not sure

Merge_Completers

30. If you have caused an accident, which type of automobile insurance would cover damage to your own car?

- ◯ Collision insurance
- ◯ Comprehensive insurance
- ◯ Liability insurance
- ◯ Term insurance
- ◯ Not sure

31. Suppose you owe $1,000 on your credit card and the interest rate you are charged is 20% per year compounded annually. If you didn't pay anything off, at this interest rate, how many years would it take for the amount you owe to double?

- ◯ 2 years
- ◯ Less than 5 years
- ◯ 5 to 10 years
- ◯ More than 10 years
- ◯ Not sure

32. You owe $3,000 on your credit card. You pay a minimum payment of $30 each month. At an Annual Percentage Rate of 12% (or 1% per month), how many years would it take to eliminate your credit card debt if you made no additional new charges?

- ◯ Less than 5 years
- ◯ Between 5 and 10 years
- ◯ Between 10 and 15 years
- ◯ Never, you will continue to be in debt
- ◯ Not sure

33. You purchase an appliance which costs $1,000. To pay for this appliance, you are given the following two options:

a) Pay 12 monthly installments of $100 each;
b) Borrow at a 20% annual interest rate and pay back $1,200 a year from now.

Which is the more advantageous offer?

- ◯ Option (a)
- ◯ Option (b)
- ◯ They are the same
- ◯ Not sure

34. Which of the following best describes your current debt position?

- ◯ I have too much debt right now and I have or may have difficulty paying it off
- ◯ I have about the right amount of debt right now and I face no problems with it
- ◯ I have too little debt right now. I wish I could get more
- ◯ I just don’t know
- ◯ Prefer not to answer

35. Suppose you had $100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?

- ◯ More than $102
- ◯ Exactly $102
- ◯ Less than $102
- ◯ Not sure

36. Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, would you be able to buy more than, exactly the same as, or less than today with the money in this account?

- ◯ More than today
- ◯ Exactly the same as today
- ◯ Less than today
- ◯ Not sure

37. Do you think that the following statement is true or false? "Buying a single company stock usually provides a safer return than a stock mutual fund."

- ◯ True
- ◯ False
- ◯ Not sure

38. What normally happens to bond prices when interest rates increase?

- ◯ Rise
- ◯ Fall
- ◯ Stay the same
- ◯ Not sure

9. General Participant Information

These last questions are used for statistical purposes only. If you do not feel comfortable answering a question, feel free to leave it blank.

39. What is your sex?

- ◯ Female
- ◯ Male

40. How old were you on your last birthday?

Enter a year __________

Merge_Completers

41. What is your race?

- [ ] White
- [ ] Spanish/Hispanic or Latino
- [ ] Black, African American, or Negro
- [ ] American Indian or Alaska Native
- [ ] Asian
- [ ] Other (please specify)

10. Additional Feedback, Receiving a Copy of Teach and Retire Rich, and Thank Y...

42. Is there anything else you would like to share about teaching financial literacy?

43. Where do you work?

- ( ) Kansas
- ( ) New Mexico

APPENDIX B

IRB APPROVAL

THE UNIVERSITY *of* NEW MEXICO

Main Campus Institutional Review Board
Human Research Protections Office
1717 Roma NE, MSC05 3180
1 University of New Mexico—Albuquerque, NM 87131-0001
http://hsc.unm.edu/som/research/HRRC/

24-Feb-2009

Responsible Faculty: Lucretia Pence
Investigator: Dan Otter
Dept/College: Language Literacy Sociocultural LL

SUBJECT: IRB Determination of Exempt Status
Protocol #: 09-073
Project Title: Teachers and financial literacy: Attitudes and understandings
Approval Date: 24-Feb-2009

The Main Campus Institutional Review Board has reviewed the above-mentioned research protocol and determined that the research is EXEMPT from the requirements of Department of Health and Human Services (DHHS) regulations for the protection of human subjects as defined in 45CFR46.101(b) under category 2, and the Food and Drug Administration (FDA) regulations as defined in 21CFR50.1 and 21CFR56.101 do not apply to research. Therefore, this research project is not subject to continuing review.

<u>Changes to the Research:</u> It is the responsibility of the Principal Investigator to inform the IRB of any changes to this research. A change in the research may disqualify this project from exempt status. Reference the protocol number and title in all documents related to this protocol.

Sincerely,

J. Scott Tonigan, PhD
Chair
Main Campus IRB

APPENDIX C

THREE CONTACTS

First Contact — Prenotice email

Dear Classroom Teacher:

I am writing to ask for your help. In several days you will receive an email with a link to a short, confidential online survey on financial literacy. It was created by Dan Otter, a doctoral student at the University of New Mexico who is looking at financial literacy issues. Dan was the individual who spoke to our school district last year about teacher retirement plans. As far as his doctoral work goes, he is particularly interested in getting the classroom teacher perspective on teaching financial literacy. This survey is being conducted as part of a dissertation study, and the results will be used to help improve financial literacy instruction.

You are under no obligation to participate in the study. However, your feedback would be extremely helpful. In exchange for our participation, Dan has agreed to provide 100 copies of his book *Teach and Retire Rich* to the district.

Again, your completion of the anonymous survey will be extremely helpful, but you are under no obligation to participate in this study. Thank you for considering this request.

Sincerely,

District Representative

Second Contact — Letter with link to survey

Dear Classroom Teacher:

I am writing to ask for your help in a study on financial literacy being conducted by Dan Otter, a doctoral student at the University of New Mexico. Dan was the individual who spoke to our school district last year about teacher retirement plans. This short online survey is part of his dissertation study. Dan is particularly interested in getting the classroom teacher perspective on teaching financial literacy.

Your answers will be completely confidential. This survey is voluntary. In exchange for our participation, Dan has agreed to provide 100 copies of his book *Teach and Retire Rich* to the district.

To participate, click this link
http://www.surveymonkey.com/s.aspx?sm=MP2ThYaC_2bKNL8Z4RPRSwwg_3d_3d
or copy and paste it in your browser. Details on completing the survey, withdrawing from the survey, privacy assurances, and other important information are provided at the beginning of the survey.

If you have any questions, you may contact Dan directly at: otterpops@earthlink.net

Thank you again for considering this request.

Sincerely,

District Representative

Third Contact — Reminder and thank you

Dear Classroom Teacher:

Last week a link to an anonymous, online questionnaire on financial literacy was emailed to you. If you have already completed the survey thank you.

If you haven't had a chance, we would really appreciate you taking the time to complete the short, online questionnaire. In exchange for our participation, Dan has agreed to provide 100 copies of his book *Teach and Retire Rich* to the district.

To participate, click this link
http://www.surveymonkey.com/s.aspx?sm=MP2ThYaC_2bKNL8Z4RPRSwwg_3d_3d
or copy and paste it in your browser. Details on completing the survey, withdrawing from the survey, privacy assurances, and other important information are provided at the beginning of the survey.

Sincerely,

District Representative