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Teacher Attitudes and Beliefs About Teaching Financial Literacy

A Survey of California K-12 Teachers

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by Dan Otter

Director of Pollinate, the Teacher Financial Literacy Project
and Owner of 403(b)wise

202.374.1100

dan@403bwise.com

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Pollinate Project

pollinateproject.org

Abstract

The purpose of *Teacher Attitudes and Beliefs About Teaching Financial Literacy: A Survey of California K-12 Teachers* was to learn teacher attitudes and beliefs about teaching personal finance and to determine teacher understanding of several core personal finance concepts. The population consisted of 2,776 California classroom teachers from across the state. Data were gathered using a survey instrument. Questions were divided into four categories: (a) policy, (b) instruction, (c) professional development, and (d) concept knowledge. Descriptive statistical methods were used to analyze survey responses. Participants in this survey strongly support the teaching of personal finance topics in K–12 schools. Close to 80% of respondents “agree” or “strongly agree” with the statement “I support efforts to include financial literacy in the curriculum.” Teachers in this survey believe personal finance instruction should begin in elementary school, with kindergarten and sixth grade the most popular grade levels to begin exposure. Respondents believe the best way to deliver personal finance instruction is through both a stand-alone course and embedding concepts in other courses. Lack of time, lack of state requirement, and lack of suitable curriculum were identified as the top challenges to teaching personal finance concepts. Respondents expressed interest in a professional development workshop that also seeks to increase teacher financial literacy. Participants in this survey scored well on a measure of basic financial literacy.

Teacher Attitudes and Beliefs About Teaching Financial Literacy:

A Survey of California K-12 Teachers

This paper provides the results from a survey of 2,776 classroom teachers regarding their beliefs about teaching personal finance concepts and their understanding of several core personal finance concepts—compound interest, inflation, and risk diversification.

The current financial crisis, which has been dubbed “The Great Recession,” (Gibbs, 2009) has cast a sudden spotlight on the acute need for personal finance knowledge in the United States (Bernanke, 2008; Dominguez-Lund, 2008; Royden, 2010). It could be argued, however, that for the individual the crisis has been more than 40 years in the making. In 1960 roughly half of all private-sector employees in the United States were covered by a traditional pension plan (EBRI, 2007). Similar to Social Security, retirement payout is based upon a combination of years worked and salary earned, and usually guaranteed until death. All investment decisions are made by the manager(s) of the plan. In 2005, only 21% of employees were covered by such a plan. Instead, about half of all private sector employees were now covered by a self-directed 401(k)-type plan, which requires the individual to make all investment decisions, not least of which is assuring that savings lasts until death. In effect, employees are being asked to assume the role of financial planner with no evidence of their preparedness to do so. In fact, measures of adult financial literacy are not encouraging (Lusardi & Mitchell, 2006; Lusardi & Tufano, 2008; Markow & Bagnaschi, 2005). Financial literacy is particularly poor among high school students (Mandell, 2006, 2008). The federal government and the states have not been blind to these trends. In 2003, Congress established the Financial Literacy and Education Commission. 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. In 2008, the President's Advisory Council on Financial Literacy was created to "assist the American people in their understanding of and addressing financial matters" ("President's Advisory Council on Financial Literacy," 2009). To date, 44 states have developed personal finance standards; 34 require these standards to be implemented; and 13 states require students to take a specific personal finance course (Council for Economic Education [CEE], 2009).

Despite the push to improve financial literacy in the United States, there is little evidence that teachers are being included in this process in a meaningful way. While education policy is crafted, pushed, and cajoled by numerous stakeholders, its ultimate success is largely dependent on the classroom teacher (Brophy & Good, 1986; Darling-Hammond & Bransford, 2005; McLaughlin, 1987, 1991; Thornton, 2005). 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).

This paper describes the results from an investigation to learn classroom teacher perspective on teaching personal finance concepts and teacher understanding of a few core personal finance concepts.

Literature

The link between a high quality, effective teacher and student achievement is strong and growing (Brophy & Good, 1986; Thornton, 2005). A link between teacher involvement in policy and curriculum development and policy implementation success has also been identified (Darling-Hammond & Bransford, 2005; McLaughlin, 1987, 1991). 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. Currently, 44 states have developed personal finance standards; 34 require these standards to be implemented; and 13 states require students to take a specific personal finance course (CEE, 2009). While these developments are encouraging, a notable absence is apparent: meaningful involvement by and perspective of the classroom teacher. Efforts to include personal finance in the K–12 curriculum in New Mexico, for example, were not driven by teachers or those with a classroom perspective and background but instead by a well-meaning legislator (Dominguez-Lund, 2008). While the President’s Advisory Council on Financial Literacy boasts that each of its 15 members represents an industry “involved with the delivery” of financial instruction, not one of these individuals is a current classroom teacher or represents a K–12 organization ("President's Advisory Council on Financial Literacy," 2009) ¹. This is not to criticize these individuals or their efforts. In fact, many on the Council are focused on improving K–12 personal finance instruction. It is simply to point out the absence or limited role of those charged with implementing personal finance instruction: classroom teachers.

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. Intentional 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

¹ Ted Beck, National Endowment for Financial Education; John Bryant, Operation HOPE, Inc.; Theodore Daniels, Society for Financial Education and Professional Development; Vice Admiral (retired) Cutler Dawson, Navy Federal Credit Union; Dr. Robert Duvall, Council for Economic Education; Dr. Tahira Hira, Iowa State University; Jack Kosakowski, Junior Achievement USA; Sharon Lechter, Lechter Development Group; Dr. Robert Lee, FreshMinistries, Inc.; Laura Levine, Jump\$tart Coalition for Personal Financial Literacy; David Mancini, Office of Financial Literacy of the Wisconsin Department of Financial Institutions; Don McGrath, Bancwest Corporation; Janet Parker, Society of Human Resource Management; Ignacio Salazar, SER-Jobs for Progress National, Inc.; Charles Schwab, Charles Schwab Corporation (Chairman).

is the infrastructure required to execute policy—financial resources, training capacity, and so forth. Because it is often a budgetary challenge, this factor can be addressed monetarily. Will, on the other hand, is comprised of the “attitudes, motivation, and beliefs” that underlie a teacher’s response to the policy, and it is much harder to influence (McLaughlin, 1987, p. 172). As Handal and Herrington (2003) wrote: “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). Educational researcher 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).

It is important not only to include teachers in the curriculum development and implementation process but also to ensure that teachers possess sufficient knowledge to effectively deliver curriculum (Darling-Hammond & Bransford, 2005; Shulman, 1986, 1987). Lee Shulman, a long time researcher in the area of teacher content knowledge, has written that in order to be effective, teachers must possess 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). To gauge understanding of core personal finance concepts, teachers in this survey were given an option to take a four-question personal finance quiz.

Method

Participants

The participants in this study were 2,776 classroom teachers teaching in California at the time of the study. This population represented the following teaching levels: 1,077 K–5 teachers (39%); 573 middle school teachers (21%); and 1,126 high school teachers (40%). Teachers at the

secondary level primarily taught one of the four core subject areas of English, math, social studies, or science. Participants were chiefly white, female, and over 40 years of age.

Survey Design

The Web-based survey included 28 questions divided among four categories: policy, instruction, professional development, and knowledge. Many of the questions had been pilot tested by the author in two previous studies. Participants were provided with the Jump\$tart Coalition for Personal Financial Literacy definition of financial literacy: “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). This definition was supplemented with the following statement: “Financial literacy skills are also referred to as personal finance skills.”

The four personal finance questions were designed by Annamarie Lusardi of Dartmouth College and Olivia Mitchell of the Wharton School. The first three questions measured understanding of a different core personal finance concept (compound interest, inflation, and risk diversification, respectively). The more difficult fourth question measured understanding of asset pricing and was designed to differentiate among levels of knowledge (A. Lusardi, personal communication, October 8, 2008). The first three questions have been used in large-scale national investigations such as the *2004 Health and Retirement Survey*, 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 (Lusardi & Mitchell, 2006).

Procedure

The Web-based survey was distributed in November 2009 by the California State Teachers’ Retirement System (CalSTRS), an organization that provides benefits and services to

public school and community college teachers in California. CalSTRS possessed e-mail addresses for approximately one third of its more than 460,000 active members. The survey was sent via e-mail to 39,000 active K–12 teachers using stratified random sampling by age groupings that reflect the California K–12 teaching population: 20–29 (5%); 30–39 (24%); 40–49 (23%); and 50–59 (33%). Teacher responses were distributed across the age groupings as follows: 20–29 (1%); 30–39 (14%); 40–49 (19%); and 50–59 (48%).

Results

Teachers in this survey (a) support efforts to include personal finance in the K–12 curriculum, (b) believe instruction should begin in elementary school and that the best way to deliver personal finance instruction is through both a stand-alone course and embedding concepts in other courses, (c) see time constraint as the biggest barrier to personal finance instruction, and (d) possess a basic level of financial literacy.

Policy

This population of teachers supports efforts to include financial literacy in the curriculum. Close to 80% of respondents “agree” or “strongly agree” with the statement “I support efforts to include financial literacy in the curriculum” (see Table 1). Teachers in this survey believe personal finance instruction should begin in elementary school, with kindergarten and sixth grade the most popular grade levels to begin exposure (see Table 2). Respondents believe the best way to deliver personal finance instruction is through both a stand-alone course and embedding concepts in other courses (see Table 3). The courses identified as best suited to embed personal finance curriculum were math (61%) and social studies (26%).

Instruction

Teachers indicated that the major challenges to teaching personal finance concepts would be (a) time, (b) lack of suitable curriculum, (c) and lack of a state mandate. Only 9% of respondents indicated that there would be no major “challenges” to teaching personal finance (see Table 4). Responses to an open-ended question soliciting feedback on teaching personal finance included: “Listen to teachers in the classroom,” “Try consulting with classroom teachers as to how to integrate new curricula before you mandate it,” “Make it easy and non-threatening,” and “Offer parent education courses as well.”

Professional Development

Teachers in this survey report an interest in attending a professional development workshop whose goal would be to improve personal finance instruction. They showed even more interest in a professional development opportunity whose goal would be to improve both personal finance instruction and teacher financial literacy (see Table 5).

Teacher Financial Literacy

More teachers in this survey felt confident about their understanding of personal finance concepts than did not. While 42% of teachers indicated they were “not at all confident” or “somewhat confident” in their understanding of personal finance concepts, 47% described themselves as “confident” or “very confident” (see Table 6).

Survey participants were given an option to take a four-question personal finance quiz. Close to 70% of respondents agreed to take the quiz. Each of the first three questions measured one core personal finance concept (compound interest, inflation, and risk diversification, respectively). An identical percentage of teachers (94%) answered the first two questions correctly (see Table 7 and Table 8), while 88% of teachers answered the third question correctly

(see Table 9). The fourth question measured understanding of asset pricing. Less than half (46%) of teachers answered this question correctly (see Table 10). Eighty-three percent of teachers answered the first three questions correctly, while 42% answered all four questions correctly.

Discussion

Teachers in this survey support teaching personal finance concepts in K–12 schools. Nearly 80% agreed or strongly agreed with the statement “I support efforts to include personal finance instruction in the K–12 curriculum.” This finding is 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 (Godsted, 2007). However, only 9% of respondents in *Teacher Attitudes and Beliefs About Teaching Financial Literacy: A Survey of California K-12 Teachers* report that there would be no major challenges to teaching personal finance concepts. Lack of time was selected as the biggest challenge followed by lack of a state mandate and lack of suitable curriculum. Time was also cited as the top challenge to delivery of personal finance instruction in two recent studies of teachers (Godsted, 2007; Loibl, 2008; Otter, 2009) (see Table 11). Comments to an open-ended question in *Teacher Attitudes and Beliefs About Teaching Financial Literacy: A Survey of California K-12 Teachers* soliciting feedback on teaching personal finance included, “Do NOT add anything else to the curriculum without taking something away” and “Teachers are OVERWHELMED with the mandated state standards. Until something is done to modify/reduce the burden on teachers, NOTHING ELSE should be added.” While there is growing consensus on the need for personal finance instruction in schools, it is hard to imagine effective instruction occurring without the allotment of meaningful instruction time.

A majority of teachers (65%) believe that financial literacy instruction should begin in elementary school (defined as grades K–6), with most respondents choosing kindergarten and sixth grade as the grade levels most suitable for beginning instruction. A majority of respondents in a 2009 survey of classroom teachers also selected kindergarten as the optimal grade level for beginning personal finance instruction (Otter, 2009). Beginning instruction in the elementary grades, particularly kindergarten, is the opposite of the way in which financial literacy is currently delivered in this country. If instruction happens at all, it occurs in the latter part of high school (CEE, 2009; Loibl, 2008). The finding that instruction should begin in the early part of elementary school may be further evidence of the importance teachers place on this subject.

Teachers in this survey showed an interest in a professional development workshop that also seeks to improve their financial literacy. While 45% of teachers were “interested” or “very interested” in a workshop that seeks to improve their ability to teach personal finance concepts, 55% indicated they were “interested” or “very interested” in a professional development experience that seeks to also improve their understanding of financial concepts. Professional development seminars or classes should capitalize on this interest which would have the added benefit of developing teacher content knowledge.

In the midst of the greatest economic crisis since the Great Depression, enthusiasm for improving student financial literacy is strong. While the population of teachers in this study supports such efforts, the question remains: will the classroom teacher play a meaningful role in crafting and implementing personal finance instruction?

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Table 1

*Percent Scores for Support of Financial Literacy Instruction in the K–12 Curriculum
(N=2,776)*

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I support efforts to include financial literacy in the K–12 curriculum.	9%	2%	10%	31%	48%

Table 2

Percent Scores for Grade Level Personal Finance Instruction Should Begin (N=2,477)

Grade	Percent
Kindergarten	13
1st	6
2nd	4
3rd	9
4th	11
5th	9
6th	13
7th	7
8th	5
9th	8
10th	5
11th	5
12th	3
College	0
I don't believe students should learn personal finance concepts in school.	0

Table 3

*Percent Scores for Best Method for Students to Learn Personal Finance Concepts
(N=2,467)*

Method	Percent
Separate stand-alone financial literacy course (different than traditional economics course)	14
Embedded in an economics course	12
Embedded in other course(s)	19
Both a stand alone course AND embedded in other course(s)	48
None of the above	1
Do not know	6

Table 4

Percent Scores of Challenges to Teaching Personal Finance (N=2,438)

Major Challenge	Percent
Lack of suitable curriculum	34
Lack of classroom instruction time	51
Lack of subject matter knowledge	23
Lack of administrative interest	18
Lack of student interest	12
Lack of state requirement	38
There would be no major challenges	9
Prefer not to answer	5

Table 5

Percent Scores of Factors That Would Motivate a Teacher to Attend a Personal Finance Workshop (N=2,733)

Statement	Not very interested	Somewhat interested	Neutral	Interested	Very interested
How interested would you be in a professional development session whose goal was to teach you how to teach personal finance concepts?	21%	20%	14%	22%	23%
How interested would you be in a professional development session whose goal was to improve your understanding of personal finance concepts?	14%	20%	10%	28%	27%

Table 6

Percent Scores for Teacher Confidence in Understanding of Personal Finance Concepts (N=2,746)

Level of confidence	Percent
Not at all confident	10
Somewhat confident	31
Neutral	12
Confident	29
Very confident	18

Table 7

Lusardi & Mitchell Compound Interest Question, Answer Choices, and Percent Scores (N=1,914)

Question 1	Answer choices	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	94
	Exactly \$102	1
	Less than \$102	4
	Do not know	1
	Prefer not to answer	0

Note. Correct answer in bold.

Table 8

Lusardi & Mitchell Inflation Question, Answer Choices, and Percent Scores (N=1,913)

Question 2	Answer choices	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	1
	Exactly the same as today	2
	Less than today	94
	Do not know	2
	Prefer not to answer	1

Note. Correct answer in bold.

Table 9

Lusardi & Mitchell Risk Diversification Question, Answer Choices, and Percent Scores (N=1,914)

Question 3	Answer choices	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	2
	False	88
	Do not know	10
	Prefer not to answer	1

Note. This question measures understanding of risk diversification. Correct answer in bold.

Table 10

Lusardi & Mitchell Asset Pricing Question, Answer Choices, and Percent Scores (N=1,911)

Question 4	Answer choices	Percent
What normally happens to bond prices when interest rates increase?	Rise	25
	Fall	46
	Stay the same	5
	Do not know	23
	Prefer not to answer	1

Note. Correct answer in bold.

Table 11

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

Teacher Attitudes and Beliefs About Teaching Financial Literacy: A Survey of California K-12 Teachers (N=2,776)	Networks Financial Institute study (Godsted, 2007) (N=650)	Ohio study (Loibl, 2008) (N=710)
1. Time	Time	1. Time
2. Lack of state requirement	Lack of state requirement	2. Instructional material
3. Lack of suitable curriculum	Lack of demand	3. Professional development