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TEACHER INVOLVEMENT IN IMPLEMENTING

STATE PERSONAL FINANCE MANDATES

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ABSTRACT

This study examined strategies teachers are implementing for personal finance instruction in answer to the state financial-literacy mandates in Central Texas. One-on-one interviews, focus groups, and document analysis found that teachers are relying on personal experience, community resources, and Internet resources to instruct in personal finance in absence of personal finance curricula. No data emerged that school districts were providing resources; however, administrators are willing to provide resources if they were available. Teachers are using a variety of creative methods to enhance personal financial literacy in the classroom. Sporadic in-service/professional-development opportunities were available to train teachers in personal financial-literacy instruction; however, many teachers opted not to participate in those events, selecting to depend on their own personal experiences as background. Data from this study also found that there was no evidence of teachers being involved in the curriculum-change process for personal financial-literacy education.

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CHAPTER 1

INTRODUCTION

A consequence of the 2008 Great Recession, a coin termed by researchers and analysts (Bivens, Fieldhouse & Shierholtz, 2013), was a renewed awareness of the need and importance of financial literacy across the lifespan (Gibbs, 2009; Lusardi, 2011; Lusardi & Mitchell, 2007). Financial literacy has always been important; however, the outcomes of the 2008 Great Recession—such as increased unemployment, decreased benefits and poor financial decisions in the housing market—brought the illiteracy of Americans into clearer focus. These outcomes placed many Americans in unfamiliar financial territory. For those Americans already in unstable financial circumstances, the outcomes of the recession, particularly the loss of jobs and benefits, was devastating. The change in employer-managed pension plans to employee-managed pension plans, employers passing more health care costs on to employees, high unemployment and debt, as well as the financial housing crises contributed to this renewed recognition of the need for financial literacy.

Many private-sector employers have decreased or terminated traditional pension plans and instead are asking employees to manage their own 401(k) or 403(b)-type plans, which cannot be done successfully without some financial literacy (Copeland, 2012). A report by Senator Bob Casey (Pennsylvania), Chairman of the Joint Economic Committee (Casey, 2012), reported three areas that Americans depend on to provide sufficient resources for retirement: Social Security, employer-based pensions and personal retirement savings. The Great Recession of 2008 impacted employer-based pensions and personal retirement savings the most and, according to Senator Casey's report, retirement insecurity has increased across all age levels. Retirement accounts for middle- and lower-income families are rare so the impact of managing one's own retirement can be daunting without financial-literacy skills to make sound saving and/or investment decisions.

Health care costs can be challenging and detrimental to financial stability, as well as subsidizing health-care costs outside of an employer-provided plan. Until 2007, the primary source of private health insurance was obtained through employers (Centers for Disease Control, 2013). However, health insurance premiums are proving too costly for both employers and employees as the cost has risen by 114 percent since 2000, and annual worker health-care contributions have increased by $293 for an individual and $1,364 for family coverage since 2000 (CDC, 2013). The daunting task of navigating through insurance guidelines and paying premiums, deductibles, and copays leave many families foregoing medical care. In 2012, over 47 million Americans under the age of 65 were uninsured (The Kaiser Corporation, 2013).

The high unemployment caused by the recent recession has also caused a cash-flow crunch for Americans, specifically in reducing their debt or adding to savings. According to the Federal Reserve (as cited on nerdwallet.com), the average credit card debt per American household was $15,270 in 2013. Credit card debt is the third largest outstanding debt Americans have behind mortgage and student loan debt. In addition, home equity is normally an asset Americans have "in their back pocket" in tough financial times. Due to the recent recession, about 64 million Americans are "upside down" on their home mortgage loans, meaning they owe more to the bank than the home is worth (Carlyle, 2013). Texans, despite having lower debt than most Americans, have the lowest credit scores in the country, primarily due to making late payments on their bills (Fay, 2012). Austin, San Antonio, and Houston are cities with the most per-person credit card debt in the country (Fay, 2012).

One positive outcome with the renewed focus on financial education across the lifespan was that policy makers began creating laws mandating financial education in schools. The field of family and consumer sciences is a "comprehensive body of skills. . .that helps people make informed decisions about their well-being. . .and find resources to achieve optimal quality of life" (American Association of Family and Consumer Sciences, n.d.). Most states that still offer family and consumer science teacher-education programs require students to take consumer education courses. But other teacher-preparation programs typically do not have that requirement (Way & Holden, 2009). Prior to the recent recession, financial education has received little attention outside the FCS discipline. Previous literature related to the impact of financial-literacy education has produced conflicting results (Council for Economic Education, 2005; Jump$tart Coalition for Personal Financial Literacy, 2008b; Martin, 2007). A majority of the research studies have focused on financial literacy among high school and college students, believing that acquiring financial-literacy skills is necessary prior to making financial decisions in adulthood (Jump$tart Coalition for Personal Financial Literacy, 2008a; Networks Financial Institute, 2006). There is little empirical evidence that teachers are competent in financial literacy, are involved in personal finance curriculum development or professional development, or that teacher preparation programs are preparing teachers to carry out state personal finance mandates.

Policy makers on both the federal and state levels have increased their efforts to improve financial education. In 2008 and 2010, President George W. Bush and President Barack Obama formed councils to address financial literacy in the United States (The White House, 2008, 2010). On the state level, some states' policy makers passed legislation to provide for financial education in schools. The Council for Economic Education's Survey of the States 2014 reports 19 states require a single course in personal finance to be offered; however, only six of those states require student testing in personal finance.

Thornton believed there is evidence that teachers are the key to what actually happens in the classroom (as cited in Davis, 2009) regardless of set curriculum content, standards and methods. While Elmore (2004) believed that instructional practice in the classroom is a needed research area, he also believed teachers' instructional practices in their classroom have more impact on student learning than any other school-related indicator. This is a huge concern particularly in regard to personal finance. State-mandated personal finance standards must have teacher buy-in to be effectively implemented in the classroom.

This study examined how teachers are implementing personal finance instruction and the development of strategies and curriculum in answer to the state financial-literacy mandates in Central Texas. The Texas Education Agency (2012) requires the topic of personal financial literacy be included in all economics courses and in the K-8th grade mathematics curriculum ("Texas Legislature," 2011). The Texas State Board of Education voted to include personal financial literacy in the Texas Essential Knowledge and Skills (TEKS) as modifications in the revised curriculum standards for mathematics in K-8th grades (Personal Financial Literacy, 2005).

Purpose of the Study

Many states have implemented mandatory personal finance education, ranging from merely offering personal finance courses to requiring state testing on personal finance. However, have personal finance mandates been implemented to merely satisfy stakeholders, or are we interested in effectively educating students in personal finance management? If policy makers and school districts are truly interested in educating students to develop money management life skills, personal financial literacy must be relevant and applicable to individuals and families, and be more than one course in high school. In addition, teachers should be involved in the process of curriculum change in order to effectively teach personal financial literacy. Because financial illiteracy impacts every stage throughout the lifespan, instruction in personal financial literacy needs to be provided early in the school career, across disciplines lines, and continued throughout the K-12 years. This study examined how teachers are implementing personal finance instruction and the development of strategies and curriculum in answer to the state financial-literacy mandates in Central Texas.

Empirical evidence for the need of personal financial literacy is clear (Johnson & Sherraden, 2007; Lusardi & Mitchell, 2007; Lusardi, Mitchell, & Curto, 2009), but there is little evidence that teachers identified to instruct in personal finance are being trained, or included in the process of developing strategies and curriculum to implement financial mandates. According to the Rand Corporation's 2012 Report, teachers are what matters most to a student's academic performance and the report presents evidence indicating effective teachers have positive results on student achievement (Rand Corporation, 2012). If teachers are not competent in personal finance, do not have opportunities to develop instructional skills in personal finance, or do not have access to personal finance resources, then state mandates for personal finance instruction may not be enough of an impetus to provide effective instruction or implementation.

There has been much research on the impact of teacher effectiveness and student achievement (Berry, 2010; Brophy & Good, 1986; Nye, Konstantopoulos, & Hedges, 2004; Palardy & Rumberger, 2008; Rand Corporation, 2012; Sanders & Rivers, 1996; Tschannen-Moran, Hoy, & Hoy, 1998). The No Child Left Behind (2011) mandate was signed into law by President George Bush, which required the hiring of highly-qualified teachers to ensure gains in student achievement, particularly at-risk students. Research suggests that there is a strong link between teachers and student achievement (Clotfelter, Ladd & Vigdor, 2010; Lusardi & Mitchell, 2007; Murnane & Steele, 2007; Palardy & Rumberger, 2011), yet there is little empirical evidence that teachers are being provided the tools necessary to provide effective instruction on personal finance (Federal Reserve of Richmond, 2007; Mandell & Kline, 2009; Rand Corporation, 2012). Teachers strongly believe that personal finance is important, yet do not feel competent to provide instruction on the topic (Otter, 2010; Way & Holden, 2010).

There is also empirical evidence that most states have unrelated personal finance standards or concepts being included in one or more subject areas (Hill & Meszaros, 2011); however, the degree to which personal finance is being taught varies. Hill and Meszaros (2011) found that over 90% of respondents to an online survey indicated teachers were not required to complete professional development explicit to personal finance, and that those states, which required professional development in personal finance only required a minimal number of training hours. For states with academic requirements in personal finance prior to high school graduation, there is little evidence of programs available to prepare teachers to provide such instruction, nor evidence that teachers are being involved in the curriculum-development process in order to both prepare themselves and instruct effectively in personal finance.

Research Questions

This study examined how teachers are implementing personal finance instruction and the development of strategies and curriculum in answer to the state mandates in Central Texas. The specific research questions that guided this study were

1. How have teachers been involved in the curriculum change process in terms of personal finance?
2. What strategies have teachers employed to prepare themselves to instruct in personal finance?
3. What personal finance curriculum and other resources are being utilized by high school teachers?

Significance of the Study

This study contributed to the factors that supplement effective instruction in personal finance. Development of sound financial knowledge and practical application of that knowledge will have numerous impacts on an individual's development across the lifespan. If students in school are to be provided effective instruction in personal finance, teachers must be involved in the curriculum change process of incorporating personal finance, and they must be competent in providing instruction. Student success in the area of financial literacy is, in part, dependent upon consistent and competent instruction. The bulk of research on financial literacy has been on the need for financial education but not on preparing the teachers, both tenured and preservice, to instruct in personal finance—perhaps because assumptions have been made that teachers would feel competent to do so. This study, therefore, endeavored to understand how teachers have been prepared, either through professional development offerings or self-directed education, to instruct in personal finance within the classroom, and how teachers have been involved in the curriculum change process as it relates to personal finance instruction.

Possible benefits of this study included understanding the training needs of teachers to fulfill state personal finance mandates, identifying the gaps in terms of curriculum and resources, and more effective impact of personal finance instruction. If teachers are involved in the curriculum change process as it relates to personal finance, student achievement scores could also be positively impacted. Irvin Ashford, Jr., Comerica Bank's senior vice president of community development and external affairs, made a statement appropriate to the impact of the financial literacy of students, particularly in Texas:

> You want to help develop savings skills and muscles. I think you never really get enough financial education. A lot of students may hear bits and pieces from their parents, but I think the way the economy is now, the more we encourage people to budget, save and invest at an early age, the better our overall population will be. (Kezar, 2014, n. p.)

A better understanding of the needs for personal finance instruction could help districts identify and plan how to provide training and resources to impact long-term behavior changes in terms of financial literacy. Additionally, this study could be beneficial to institutions of higher education in terms of requiring personal finance coursework for students working towards a teaching degree in education.

Delimitations of the Study

The delimitations of the study are the size of the sample. Secondary teachers are charged with the bulk of personal financial-literacy education, particularly in economics according to the

TEKS; therefore, those teachers are the majority of the sample. Interviews were not held with teachers in K-8th grade because personal financial literacy is only approached in mathematics. The phenomena reported are unique to this population and it is not likely generalized to other populations.

Definition of Terms

Financial literacy: "ability to use knowledge and skills to manage one's financial resources effectively for lifetime financial security" (Jump$tart Coalition for Personal Financial Literacy, 2015, p. 1).

Personal finance: describes the principles and methods that individuals use to acquire and manage income and assets (Jump$tart Coalition for Personal Financial Literacy, 2015, p. 1).

Professional development: the process of obtaining the skills, qualifications, and experience that allows you to make progress in your career ("Professional Development")

Life skills: "self-development, communication skills, job and financial skills development, education, interpersonal and family relationships development, and stress and anger management" (U.S. Department of Education, 1998, para. 8)

State of Texas Assessments of Academic Readiness (STAAR®): a rigorous testing program which emphasizes "readiness" standards; the knowledge and skills that are considered most important for success in the grade or course subject that follows and for college and career (Texas Education Agency, n.d. a)

Texas Essential Knowledge and Skills (TEKS): "a curriculum adopted by the State Board of Education in 1998 that is used as a framework for Texas schools which identify what students should know and be able to do at every grade and in every subject area" (Texas Education

Agency, n.d. b)

Summary and Organization of the Study

This study is presented in five chapters. Chapter 1 outlines the problem being investigated, the purpose of the study, the research questions, the definitions of terms and the rationale for the study. Chapter 2 contains the review of literature which is subdivided into historical foundations of curriculum change, curriculum change from the teachers' perspective, the history of personal financial literacy, federal and state level efforts, and endeavors from the field of family and consumer sciences, the state of personal financial literacy in Texas, and the critical role teachers play in student achievement. Chapter 3 discusses the theoretical framework for a qualitative study and presents the sample description, study instruments, and the data collection and analysis procedures. Chapter 4 presents the results of the study based on the research questions investigated in this study, and applies the theoretical framework to those findings. Chapter 5 summarizes the findings of the study, presents a discussion of the results, and implications for further research. The appendices consist of the invitations sent to the participants, interview guides, and the consent forms.

CHAPTER 2

REVIEW OF LITERATURE

This study examined how secondary teachers and K-8th grade mathematic teachers were implementing personal finance instruction and the development of strategies and curriculum in answer to state mandates in Central Texas. Posner's (2004) curriculum analysis questions, specifically the curriculum proper and the curriculum "in use," were used as the framework for this study in determining what curriculum and resources are actually being implemented in the classroom.

Theoretical Framework

Posner (2004) posited that there is no simple definition of "curriculum." Educators across many disciplines have wide-ranging definitions for the term. Posner's book, Analyzing the Curriculum (2004), breaks down the definition into understandable parts. The purpose, content, implications and organization of the curriculum, according to Posner make up the "curriculum proper." The purpose of a curriculum refers to the training and educational contexts of the curriculum, and the aims, goals and objectives of the curriculum. Purpose and content are also viewed from a theoretical lens: behavioral or constructivist. The content is viewed from different views such as a behavioral psychological view, a pedagogical view, and a multicultural view, and of course takes into account standards (Posner, 2004). Organization of the curriculum illuminates the patterns of a curriculum and looks at such factors as macro- or microlevel, vertical or horizontal organization. Analyzing the curriculum organization also determines inductive or deductive views.

Examining the curriculum in use (Posner, 2004) takes into account the operational curriculum (how the curriculum is integrated into the classroom by the teacher), and evaluation based on the curriculum. Posner (2004) contends that a curriculum is useless unless “it is translated by teachers into an operational curriculum” (p. 191). However, before a teacher can make the curriculum operational, there are many frame factors to consider that can make or break a curriculum. These include physical, cultural, temporal, economic, organizational, political-legal and personal (Posner, 2004). These frame factors are imperative to analyzing a curriculum, Poster stated because they will influence the success or failure of a curriculum.

Temporal frames include time, frequency, duration, seasonal changes, and institutional priorities (Posner, 2004). Time is the amount of time a teacher has to cover the material, and the ability of the student to understand and master the content. Time factors limit a teacher on breadth and depth of content. Posner (2004) indicates frequency and duration of time impact the curriculum implementation (i.e., music, art, physical education, labs). Lack of continuity impacts the effectiveness of a curriculum. Holidays and seasonal changes impact curriculum implementation, both positively and negatively. Seasonal events can be integrated into the curriculum, but inclement weather can prevent certain curriculum activities, or provide opportunities for integration. Institutional priorities speak to the scheduling of certain subjects at certain times of the day, interruptions such as announcements, pulling children out for special instruction, and different subjects that compete for places in student schedules at the secondary level (Posner, 2004).

Physical frames involve the physical natural environment surrounding the school, the built environment of the school and classroom, and the equipment and materials provided for teaching and learning (Posner, 2004). Posner (2004) contended that only equipment and materials can be manipulated in the short term. The physical natural environment and the built environment are more difficult to change.

Political-legal frames involve higher government decisions at the state level and federal level. State-level decisions would include curricular requirements, graduation requirements, aid for buildings, limits on taxation, certification requirements for teachers, and documentation. Federal level decisions involve documentation requirements and mandates (Posner, 2004). State-mandated testing would fall into the political-legal frame (Posner, 2004). Holding schools and teachers accountable places the focus on the outcome of the state-mandated tests rather than other factors that influence effective instruction and learning.

Personal frames include the teachers, students, administrators, custodians and other support personnel of a school organization (Posner, 2004). They impact curriculum in terms of student demographics (academic skills, interpersonal skills, interest, needs, working cooperatively, etc.), and teacher adaptability (subject-matter knowledge, skills, dedication to the profession, capacity, openness to new ideas, staff development, etc.). In particular, in terms of curriculum analysis, we are interested in how teachers will take a new curriculum and try to mold it into their belief system (Posner, 2004).

Economic frames consist of the cost and benefits of integrating a new curriculum, and are not constrained in terms of monetary stipulations (Posner, 2004). Teacher buy-in to implement a new curriculum, peer support, and outside monetary support all play a role in the economic factors of the success or failure of a new curriculum.

Cultural frames are important for analyzing curriculum in that it has to fit into the culture of the school and the culture of the community where the school resides (Posner, 2004). Support for a curriculum will begin with the cultural considerations of the community (e.g., parents, stakeholders, the teachers, the administrators, etc.). Potential conflicts for curriculum change can largely depend on cultural factors.

Other frame factors would include the perspective of the curriculum developers, such as traditional, experiential, structure-of-the-disciplines, behavioral, and constructivist (Posner, 2004). Experiential, structure-of-the-disciplines, and constructivist curricula differ from behavioral and traditional because the former three place great importance on students making sense of their world and really grasping the concepts of what they are doing; Posner (2004) called this the meaning-oriented curriculum. The difficulty of the meaning-oriented curriculum is that the temporal, organizational and personal factors present certain implementation problems. It is difficult to cover much ground because these views focus on depth of the curriculum, and they do not fit well with the state-mandated tests. This creates a huge problem when it comes to personal finance education.

This study examined how teachers are implementing and/or developing personal finance instruction, strategies and curriculum in answer to state mandates in Central Texas. Posner's (2004) curriculum analysis questions, specifically the curriculum proper and the curriculum in use, were used as the framework for this study to determine what curriculum and resources are actually being implemented in the classroom.

Literature Review

The review of literature involved a brief review of the past foundations of curriculum change and a comprehension of the meaning of curriculum change from a teacher's viewpoint. A quick look at the historical view of personal finance education and understanding how teachers impact student achievement were also included.

Educational change is not an easy, one-step process. There are many chunks that make up the whole practice of educational change; including curriculum, evaluation, theories, development, and innovation, and at each segment of the change process (Doll, 1996: Marsh & Willis, 2005; Posner, 2004; Sowell, 2005). Berman (1978, 1980), in his research on curriculum change, differentiated between the broad outlook of curriculum change at the national, state and district levels and the teacher's role at the classroom level. He defined these levels, microimplementation and macroimplementation, in terms of analysis in curriculum change.

Microimplementation has a large impact on educational change. Fullan (2007) attributed the major failure to implement change in education as "the inability to get inside the classroom" (p. xxi). In a study of three major urban district reform efforts, researchers found failing to concentrate on instructional practices at the classroom level may have proved Fullan had valid insight into effective educational change (Allen, Osthoff, White, & Swanson, 2005). Fullan, Hill, and Crevola (2006) believed not only that systemic educational change was needed, but that it should focus on constant, data-driven formative assessment that would give attention to instructional practices and routines. Hargreaves and Fink (2003) made the case that all-or-nothing testing forces attention on test results and how to improve them, but that these tests do not necessarily improve learning. It was their view that examining what happens in the classroom from the perspective of the teacher in terms of curriculum change would better prime teachers to actually improve learning.

Historical Foundations of Curriculum Change

Bennett (2002), Cremin (1961), Fullan, (2007), Peltier (1967), and Posner (2004 indicate there have been four main periods of educational change in American schools. The Progressive area occurred during the early twentieth-century (as cited in Davis, 2009). The goal of this era of education was to improve society through changing the school environment. The progressives outlined policy recommendations to accomplish this change, such as was published in the *Cardinal Principles of Secondary Education* by the Commission on the Reorganization of Secondary Education in 1928 (as cited in Davis, 2009). A shift in attitude toward teaching occurred as a result and teachers began to alter curriculum in a creative way to be more in line with the Progressive way of thinking. John Dewey, who was known as the "father of progressive education," was probably the most noted individual who spearheaded this movement (Loss, n.d.). Dewey's laboratory school in Chicago was a well-known for its cutting edge curriculum change during this era, and researchers Mayhew and Edwards (1936) found in their research that the weekly teacher meetings and obvious involvement of the teacher in the curriculum-change process were pivotal to the school's success (Davis, 2009).

Davis (2009) noted a few other documents that help support the notion that teacher involvement in the curriculum change process is vital. The Denver Curriculum Revision Program, mastered by Newlon and Threlkeld was a process that impacted teacher involvement in the curriculum process. Newlon noted that it was only in "engaging in curriculum revision that a teacher could attain his greatest effectiveness" (Peltier, 1967, p. 211). Aikin's eight-year study on more effectively serving students concluded that all teachers needed to be key contributors to any curriculum-change issues, and not just in the classroom. Teacher's involvement in the curriculum-change process was foundational to effective learning by students (Davis, 2009).

Using Joseph Rice's 1961 publication, *The Public-School System of the United States*, Cremin tracked the foundation of teacher involvement in the curriculum process as far back as 1893. A cited in Davis (2009), Rice determined in his work that a common theme in the successful schools was a heavy involvement by the teachers in the curriculum process. Dewey's work helped shift the focus from theory to the needs of the students (Loss, n.d.). Cremin noted that pedagogical reform in the early 20th century became known as Progressive education and curriculum development was an integral part of that reform (as cited in Davis, 2009). Before the Progressive era, curriculum development was the sole responsibility of school administrators and curriculum specialists; however, Cremin noted Progressivists believed no changes could be made without teacher involvement (as cited in Davis, 2009)

During the Cold War, a second major shift, referred to as Research, Development and Diffusion (RD&D), evolved that focused on technology, science and mathematics (Posner, 2004). Berman, Cho, Snyder, Bolin, & Zumwalt all noted these events in world history led educational leaders to believe that schools must focus on these subject areas to compete with the Soviet Union for world power particularly since the Soviet Union launce *Sputnik* (as cited in Davis, 2009). The competition between two major countries impacted education by focusing the educational goals on technology and scientific development, specifically as it related to national security. According to Posner (2004) "teaching became technicized." The process of curriculum change, according to the RD&D model was through a series of steps. Research would focus the process of curriculum and learning. Development referred to using applicable research to create materials. Diffusion circulated new curriculum to classroom teachers to use. A fourth task was added, adoption which descried the actually implementation of the curriculum in the classroom by the teachers (Posner, 2004).

One particular model of RD&D, the Guba-Clark model was extremely influential during this period; however, several researchers noted very little focus was on the actual implementation of this explicit curriculum in the classroom (as cited in Davis, 2009). The RD&D model assumed that the teacher had the same goals as the developers of the curriculum and expected the teachers to cooperate with the curriculum based on empirical evidence (Posner, 2004). Poster (2004) stated that Clark and Guba believed research was best left to the researchers, and teachers should focus on practice, implementing curriculum created based on research. There was no direct link between researchers and teachers.

The curriculum developed during the RD&D era was misused by the teachers according to the developers (Posner, 2004). Despite in-service trainings held for the teachers on implementing the curriculum, the developers failed to take into account the teachers tendency to implement the curriculum in their own way. As a result, the curriculum developer's lack of success was blamed on "inadequate materials, poor dissemination efforts, or lack of provision for change agents" (Posner, 2004, p. 227). Berman, Fullan, and Posner (as cited by Davis, 2009) noted teachers were not passive in their role in the curriculum, as was the assumption of the developers. It was believed that teaching content was transferable to all situations. Fullan believed the teacher was in control in the classroom, and as a result deemed the RD&D educational era a failure (as cited in Davis, 2009). Thornton believed that teachers decided on their own approach to instruction, not curriculum developers, thus allowing the teachers a great deal of flexibility on interpretation and implementation of mandated curriculum (as cited in Davis, 2009). Based on this belief, the RD&D approach was impractical. Despite the criticisms, the RD&D model prevailed at the federal level throughout the 1970s (as cited in Posner, 2004). As the Cold War era decelerated, education once again looked to the Progressive way of thinking and a more shared method of curriculum change.

The theme of the third period of curriculum change was collaboration. Due to the perceived failure by developers and teachers of the RD&D era, this new era returned to many of the foundations of the Progressive era (Atkin & House, 1981, as cited in Davis, 2009). Davis (2009) noted that collaborative advances in literature were termed adaptation by Berman (1978) and Cho (1998); mutual adaptation by Berman (1980); and enactment by Clandinin & Connelly (1992) and Snyder, et al., (1992).

House (1979, as cited in Davis, 2009) noted that during this time, a prevailing thought was that excellence in teaching developed through experience and knowledge of skills. As a result, this new era focused on teachers learning through observation of other teachers and through sharing ideas (Posner, 2004). Collaborative curriculum developers believed that efforts should revolve around local issues and include students as well as teachers (Fullan et al., 2006, as noted in Davis, 2009); Posner, 2004). Snyder, Bolin, and Zumwalt (as cited in Davis, 2009) believed comprehending how curriculum is "enacted and experienced" in the environment of the classroom (p. 402). The goals of curriculum change are constantly revisited during the curriculum-change process, and in the collaborative approached, there are many people involved, not just students and teachers, but also parents, community members and curriculum specialists (Posner, 2004). Both the Eight-Year Study by Aikin and the Denver Curriculum-Revision Program by Newlon &

Threlkeld (as cited in Davis, 2009) could be viewed as examples of the collaborative approach (Cho, 1998; Snyder et al., 1992, as cited by Davis, 2009). Studying teachers from a collaborative perspective, according to Snyder et al. included comprehending and detailing the meaning teachers gave to externally-developed curriculum within the classroom (as cited by Davis, 2009).

A 1983 report published by the National Commission on Excellence in Education entitled *A Nation at Risk: The Imperative for Educational Reform* was the impetus for the current era, referred to as standards and accountability (Ginsberg, n.d.). Tied to the U.S. economy and increased concerns about America losing its supremacy, particularly in commerce and technology, economists Richard Murnane and Frank Levy defined three elements of new skills needed by high school graduates:

1. Basic mathematics, problem solving and reading abilities
2. The ability to work in groups, and effective written and oral communication skills
3. The ability to use personal computer to carry out simple tasks

Murnane and Levy concluded "To secure these skills…schools must help teachers learn to teach new material, devise better tests of student knowledge and understanding, raise expectations, and engage students' attention and energy" (Ginsberg, n.d.). This era ushered in support for increased accountability in schools and the commission recommended not only tougher high school graduation requirements, but more effective teaching and teacher preparation. (Ginsburg, n.d.) High-stakes testing became the measure to make important decisions regarding student learning, teachers, and districts by federal, state, and local government agencies (Hidden Curriculum, 2014). In 2002, President George W. Bush signed into law *No Child Left Behind* (NCLB), a federal initiative to promote school reform and standardized testing for all students (McCollough, Reyes, Vasquez, n.d.). As a result of this type of thinking, we began to see a shift from focusing on content to focusing on student outcomes. Research indicates that in the 1990s clear evidence was found that these high-stakes tests did influence instruction (David, 2011). Teachers began including writing and more complicated math problems in the classroom and on classroom tests (Koretz, Mitchell, Barron, & Keith, 1996 as cited in David, 2011).The focus in the classroom was more on test subjects, particularly in those schools not meeting academic yearly progress (David, 2011). She also reports that five years after NCLB, many schools were substantially increasing the amount of time spent on language arts and math in elementary schools. David (2011) also reports that 80 percent of the research Au (2007) reviewed "found changes in curriculum content and increases in teacher-centered instruction" (n.p.). The challenge, according to Davis (2011) is to "ensure that state tests do not continue to distort the curriculum in ways that deprive students of meaningful learning" (n.p.).

As seen in the literature, international economic competition and globalization has contributed to an upsurge of accountability in school systems (Sahlberg, 2006, as cited in Davis, 2009). Davis (2009) reported that Sahlberg (2006) and Hargreaves & Fink (2003) found test scores may be improving with high-stakes testing, but students are not learning. They have argued that this era of economic change has had negative effects on the profession of teaching and student learning. Obviously, these two contrasting viewpoints indicate further study is needed on the teachers' role in curriculum change and the resulting impact on student achievement.

Teachers, Student Achievement, and Curriculum

Given the empirical evidence of the link between teacher and student achievement, it seems imperative that teachers be included in developing strategies and curriculum across the K-

12 education period. Berry (2010) concluded in his review of studies on the topic that student achievement may be more connected to highly-qualified teachers and collaborative learning than teacher preparation programs. Tchoshanov (2011) found an association between teacher knowledge and student achievement in regards to middle grade mathematics. In his mixed-method nested study teacher content knowledge was associated with students' achievement, and correlated with teaching practice. He examined 102 middle school mathematics teachers on the relationship between cognitive type of content knowledge among teachers and student achievement; 10 middle school mathematics teachers (subset of original sample) on the relationship between cognitive type of content knowledge and the quality of the lesson; and two teachers (from the substudy) on scrutinizing mathematics teachers' knowledge and understanding of fraction division in the middle grades. Tchoshanov (2010) concluded that "teacher content knowledge of concepts and connections is significantly associated with student achievement and lesson quality in middle grades mathematics."

Chetty, Friedman, and Rockoff (in press) conducted a study examining teacher impact based on students' test scores using the value-added (VA) approach. They tracked one million urban school children from 4th grade into adulthood. In the first portion of the study, they evaluated the accuracy of standard VA measures using various methods. They found that test scores immediately increased in the grade and subject taught when a VA teacher is hired. Conversely, when a VA teacher leaves, the school test scores fall. They concluded that VA teachers do have an impact on student academic achievement. The second portion of the study analyzed whether VA teachers impacted student outcomes in the long term. They found students who were under the tutelage of higher VA teachers were more apt to attend college, earn higher wages, inhabit better neighborhoods, and more likely save for retirement. Chetty, Friedman, & Rockoff (in press) concluded that remarkable teachers create remarkable value, and test scores can be helpful in identifying those teachers.

Boyd, Grossman, Lankford, Loeb and Wyckoff (2009) conducted three investigations to assess the effectiveness of teacher preparation, and therefore, student achievement. They estimated the variations in the average value added to student learning from teachers of varying teacher preparation programs which feed into New York City schools. The second investigation examined the association between student outcomes and the characteristics of those teacher preparation programs. The third investigation examined the affiliation between student achievements and self-reports of preparation experiences. They concluded there are many variations across the teacher preparation programs they analyzed that fed into the New York City schools. Degreed teachers from some of the programs had a higher impact on student achievement. Features of teacher preparation programs can make an impact in student outcomes (Boyd, Grossman, Lankford, Loeb & Wyckoff, 2009).

The Rand Corporation published a report in 2012 emphasizing that when it comes to student achievement, the significant factor is teachers. “When it comes to student performance on reading and mathematics tests, a teacher is estimated to have two or three times the impact of any other school factor, including services, facilities, and even leadership” (Rand, 2012, n.p.) Clearly, the focus on teachers making impact should be a top priority in terms of training, providing resources, and supporting instructional practices.

As mentioned previously, Thornton believed teachers have a great deal of leeway in controlling what is taught in their classroom, regardless of mandated curriculum content, methods, and standards (as cited in Davis, 2009). Even though Elmore (2004) believed that instructional practice needs further examination, teachers' instructional practice in the classroom could be the most important key to student learning rather than any other school-related factor. Regardless of the potential in this factor of student achievement, those who have contributed to educational change, historically and at present in the United States public school systems, have not contemplated fully the pivotal role teachers have in delivering said curriculum and ultimately, student learning. If improving student learning is the goal, then further applicable research should be conducted that focuses on the teachers' perspective of curriculum-change processes and how best to support instructional practices.

History of Personal Financial Literacy

Since the 2008 Great Recession, financial illiteracy across the lifespan has experienced renewed attention in the United States and the world, particularly in light of the housing bubble collapse (Dinwoodie, 2010). Scholarly research has examined, before and after the Great Recession of 2008, the need for financial literacy among youth and college students (Bernheim, Garrett & Maki, 2001; Federal Reserve Bank of Richmond, 2007; Lusardi & Mitchell, 2007; Lusardi et al., 2010; Mandell & Klein, 2009; Sherraden, Johnson, Guo, & Elliott, 2010). The studies show a variety of results, but most notably that trained teachers and expanded financial education in school are imperative. Bernheim, Garrett and Maki, (2001) conducted a household survey in an attempt to determine if high school financial education mandates had any impact on adult financial decision making. They focused specifically on savings and wealth accumulation. They found students in states that enacted financial education mandates were gradually exposed to financial education as curriculum was developed and mandates were adopted and implemented.

They also found an increase in savings and wealth accumulation after adoption and implementation of financial education, and concluded that education could be a powerful tool to stimulate personal savings (Bernheim et al., 2001).

Peng, Bartholomae, Fox, and Cravener (2007) studied the effect of personal finance education in both high school and college. Using a web-based survey instrument measuring current and past financial experiences, income, savings, investment knowledge, and demographic characteristics, the researchers sought responses from alumni of a Midwestern university. Of the 1,039 responses, only 19.9% had taken a college-level personal finance course, and only 17.4% had participated in such a course at the high school level. Results indicated those who participated in a college-level personal finance class performed better on the investment knowledge portion. Overall, however, the researchers concluded that even though an individual may have taken both a high school and college level personal finance course, this was not a predictor of higher scores on investment knowledge (Peng, Bartholomae, Fox, & Cravener, 2007).

Rosacker, Ragothaman and Gillispie (2009) reported results from a training workshop on financial literacy presented by upper-level accounting majors to freshman business majors. The 101 freshmen students who participated in the workshop during the 2007-2008 fall/spring semesters were required to complete a pretest and attend two 90-minute trainings. Posttest scores showed significant improvement on financial literacy scores. Qualitative comments from the professors were very positive (Rosacker, Ragothaman, & Gillispie, 2009).

Shin, Xiao, Barber and Lyons (2009) conducted an online survey of 781 undergraduate and graduate students in the southwest United States to develop and test a financial well-being conceptual model, which tied potential circumstances to the resulting financial well-being among young adults. The survey collected data relating to psychological, sociological, and consumer behavior viewpoints. The researchers concluded that many factors relate to an individual’s financial well-being, including formal education and parent modeling. Without knowing the extent of positive parent modeling of financial behaviors, the researchers concluded that financial education alone in a school setting will most likely not influence whether an individual achieves financial well-being and overall life success.

Sherraden, Johnson, Guo and Elliott (2010) used a quasi-experimental design entitled I Can Save to study both qualitative and quantitative effects on financial knowledge after the four-year program was provided to elementary school children. They found that those children who participated in the study and received financial education scored significantly higher on a financial literacy test than those students who did not receive financial education. They concluded that financial capability of young children could be increased by having access to both financial education and a savings account.

Using the 2000 U.S. Census data, Cole and Shastry (2010) examined asset accumulation. Building on the precepts of Bernheim, et al. (2001), the researchers found that state prescribed financial education alone did not have any measureable effects on savings behavior. They also examined whether mathematics requirements made an impact on improved financial decision making; they discovered that women who took more mathematics courses in high school were more prone to accumulate more wealth than men, independent of higher earnings.

Carlin and Robinson (2012) conducted an experiment using parts of a Junior Achievement (JA) financial-training program on students between 13-19 years old to determine how the application of timely decision support is effected by previous involvement in financial education.

Some of the students were trained in the JA personal finance curriculum and some were not. All of the students participated in a consumer-finance simulation where they were randomly assigned a fake identity and were asked to calculate their net income. In addition, they were asked to prepare a personal budget, which included housing, health insurance, credit management, recreation, investments in education, charities, cell phone, and home improvement. Once the budget was completed, the students were asked to move from station to station to carry out the transactions budgeted. The home improvement station presented a challenge of varying choices in which the students received guidance from trained volunteers. The health insurance station also provided varying challenging choices, but the students did not receive guidance.

Carlin & Robinson (2012) concluded three central messages from their analysis. First, teaching financial literacy has its limitations; those students who had been trained had difficulty applying those principles to new circumstances. Second, some students who had been trained in the curriculum made choices that seemed at odds with the spirit of the instruction. Lastly, financial education and timely decision support interact with each other. Therefore, financial education should be paired with advice (Carlin & Robinson, 2012).

In a survey of credit card use among American college students, Ludlum et al. (2012) found most college students who utilized credit cards did not have strong financial-literacy knowledge. Utilizing several campuses, both private and public, and of varying enrollments, Ludlum et al. (2012) administered a voluntary survey to determine how college students used their credit cards. The researchers examined three aspects of practical financial literacy:

1. Were the students aware of the interest rate on their credit card?
2. Were students aware of the late payment charge on their current card?

3. Were the students aware of the penalty for being over their credit card limit?

Sadly, only 14.6% of students who participated in the study professed to know the interest rate on their credit cards. Over 75% did not know what the late payment fee was, and approximately one-third (29.2%) said they knew the penalty for being over their credit card balance (Ludlum et al., 2012).

There have been multiple studies regarding the lack of an effective evaluation to measure financial literacy. Lyons, Palmer, Jayaratne and Scherpf (2006) conducted a national survey to provide an overview of financial education and program evaluation. Using focus groups and an online survey, they found that deficiency in program evaluation revolved around the lack of evaluation competence and understanding how to perform an effective evaluation. The evaluation was not typically part of program development and standards were needed for financial-education program evaluation. The findings from the online survey were in line with what was discovered through the focus groups. Lyons et al. (2006) concluded that the barriers preventing effective evaluation could be overcome in order to provide data on the effectiveness of financial-management programs.

Huston (2010) analyzed 71 studies from 52 different data sets to determine any obstacles to a more standardized measure of financial literacy. Huston specifically searched for the terms financial literacy, financial knowledge or a closely related construct. She found that 72% of the studies lacked a definition of financial literacy, and only 13% provided any kind of definition for the construct used. She found eight definitions that were identified, but only two focused on ability and three on knowledge. She also found 47% of the studies used the terms “financial literacy” and “financial knowledge” interchangeably; and if these two definitions are conceptually different, that could conclude in misleading evaluations (Huston, 2010).

Baumann and Hall (2012) contend that we need to educate individuals for life, including financial education, in order to empower them. Only then could an individual have the opportunity to reflect, establish personal values and needs, and then consume in the context of that development. They also believe that until we all come to the same definition of financial education, effective measurement of impact will continue to be a struggle.

Federal Level Efforts

Even before the 2008 Great Recession, measures had been incorporated on many levels to improve financial literacy, particularly of young people. On the federal level, in 2003 Congress created the Financial Literacy and Education Commission (FLEC) to “improve financial education in the nation” (n.p.) This action was a part of the Fair and Accurate Credit Transaction Act of 2003 and called for a national effort on improving financial literacy by the Secretary of the Treasury. Today, the Personal Financial Literacy and Education Commission is comprised of 20 federal entities that are “coordinating and collaborating to strengthen financial capability and increase access to financial services for all Americans” (FLEC, 2006). The Commission’s website (mymoney.gov) boasts of “My Money Five,” which outlines five principles that are building blocks of managing and growing one’s money: earn, save and invest, protect, spend, and borrow.

In 2006, President George W. Bush created the President’s Advisory Council on Financial Literacy and charged the members to make recommendations on how Americans could be better educated in matters of financial literacy (The White House, 2008). In the 2008 Annual Report, the Council’s activity included endorsing a curriculum for “Money Mathematics: Lessons for Life” for middle-school students, and recommending expanding and improving “financial education for students from kindergarten through postsecondary education" (U.S. Department of the Treasury, 2008, p. 2).

In 2010, President Barack Obama created the President's Advisory Council on Financial Capability, charging the members "to assist the American people in understanding financial matters and making informed decisions and thereby contribute to financial stability" (The White House, 2010). Four recommendations came out of the Council, one of which is related to financial education in the schools. The Council recommended support for financial literacy in the home, PK-12th grade, and into adulthood (United States Department of the Treasury, 2013).

The Consumer Financial Protection Bureau (CFPB) was initiated in response to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (CFPB, 2013). The Office of Financial Education within CFPB was charged with educating Americans and helping them make better-informed financial decisions. In its policy brief, five policy recommendations for advancing financial education in K-12 schools were outlined. The first three are geared towards introducing financial concepts beginning in kindergarten, consistently reinforcing those concepts throughout a student's school career (including financial-management questions on standardized tests) and providing hands-on learning opportunities. Recommendation Number 4 specifically addresses teachers. It states "Create consistent opportunities and incentives for teachers to take financial education training with the express intention of teaching financial management to their students" (p. 8). In expanding on this recommendation, the CFPB stated "Teachers are critical to the success of any program or initiative that relies on teaching financial education in classrooms" (p. 32). In addition, they suggest that teachers face barriers to gaining continuing education on financial education topics, including time, location, incentives, and limited access (CFPB, 2013).

One result of the Great Recession was that many state legislatures implemented mandatory personal finance requirements. The Council on Economic Education’s 2014 Survey of the States found all 50 states’ K-12th grade standards include personal finance education, but only 45 of those states require that personal finance education actually be implemented (p. 6). In addition, 24 states require offering a personal finance course in high school, but only 22 of those states made the course mandatory and only 16 states require testing of personal finance concepts (Council on Economic Education, 2014, p. 6).

State Level Efforts

In 2011, the Texas Legislature supported personal financial-literacy instruction in the public and charter schools by passing two amendments. The first amendment required including in the standards on personal financial literacy “methods for paying for college and other postsecondary education and training” (Texas Legislature, 2011, n.p.). The second amendment required inclusion of personal financial-literacy instruction in mathematics in K-8th grade (Texas Legislature, 2011). The Texas State Board of Education also included revised curriculum standards for state testing in mathematics for K-8th grade (Texas Legislature, 2011).

Some states have been successful at implementing financial-education courses and showing the impact through behavior change. Heath (2011) reported on a successful financial-literacy program in K-8th grades in Tennessee. The program, Smart Tennessee, was a requirement in elementary and middle-school classrooms and was evaluated at the end of the year to determine gains in knowledge (Heath, 2011). Teachers were provided 3-4 hours of training and divided by grade level. Heath noted that half of the training time was spent helping teachers become comfortable in instructing financial education; the teachers’ own financial issues were the source for their feeling of incompetency (Heath, 2011).

The Center for Financial Literacy (2013) gave Texas a grade of “B” on financial-literacy implementation. The state requires personal financial instruction be incorporated into other subjects and for school districts to implement personal finance standards. Texas requires personal finance topics be covered in high school economics, a course required for graduation (Texas Legislature, 2011). In addition, the Texas legislature requires state collegiate institutions that offer teacher preparation programs also offer a personal finance course to its students, but students are not required to take the class (The Center for Financial Literacy, 2013).

FCS Efforts

Loibl (2007) found that instruction on personal finance topics was occurring in business education, family and consumer sciences, mathematics, social studies, technology, science, and agriculture sciences disciplines. The study indicated most of the financial education was taking place in the 12th grade and included topics such as insurance, credit, taxes, investing, budgeting, setting goals, understanding interest, and limited-resources (Loibl, 2007). Depending on the discipline, teachers reported barriers of administration, lack of curricula, time in the classroom, and a perceived tediousness of teaching personal finance (Loibl, 2007). Only FCS teachers reported spending time searching for teaching materials on personal finance topics, and only business education teachers reported having taken a college personal finance course (Loibl, 2007).

Hite, Slocombe, Railsback, and Miller (2011) found business-education courses in secondary schools were primary providers of financial education in Kansas and found very few schools offered any type of financial education in K-8th grade. However, they did find financial education taught as part of the mathematics curriculum. The topics included spending, credit, banking services, and savings. The researchers expressed concern that topics of retirement planning, consumer laws and rights, and investments were covered least often, especially considering the uncertain future of Social Security (Hite, Slocombe, Railsback, & Miller, 2011).

The Center for Financial Literacy's (2013) survey of financial education efforts across the United States found four states required a one-semester, stand-alone course in personal finance and required school districts to implement personal finance in the instructional guidelines. Three different states offered personal finance instruction embedded in other courses and required student assessments on financial-literacy topics. The Center for Financial Literacy (2003) outlined four keys to high school financial literacy—one which was aimed at teachers. They stated "we need confident, well-trained educators" (The Center for Financial Literacy, 2003, n.p.).

Other research has noted different means outside the classroom for teaching financial education. Educators at the University of Idaho Cooperative Extension System used a program from Illinois, "Welcome to the Real World" to teach youth in 8th-12th grades about careers, lifestyle and budgeting choices (Spencer, Petty, Stimpson, Dees & Riley, 2003). The simulation exposes youth to budgeting monthly expenses and balancing a checkbook. The students select their career for this activity and then try to live on the earnings from that career. Students must visit various booths, make decisions about what they want (i.e., selecting a car, a place to live, utilities, groceries, etc.). The evaluations showed this program had a positive influence on financial-management skills, knowledge, and attitudes of youth who participated (Spencer et al., 2003).

St. Pierre, Richert, Routh, Lockwood and Simpson (2012) created a "Financial Education

Tool Kit” in response to Oklahoma’s State Legislature requiring students in 7th-12th grades to fulfill financial-literacy requirements for graduation with a standard diploma. Teachers searching for tools and resources to fulfill these requirements contacted Oklahoma Cooperative Extension Service; as a result, specialists and educators created the tool kit. The kit provides several interactive, hands-on activities to set goals and learn financial concepts.

Personal Financial Instruction

While many might argue that financial literacy should begin in the home, oftentimes that is not the case. Parents or guardians may be reluctant to teach children about personal finances due to a feeling of inadequacy in handling their own finances (Fogler, 2013), even though DoughMain found 81% of parents feel it is their responsibility to teach their children about money and savings (as cited in Jump$tart, 2013). Parents and guardians have examples from life experiences and perspectives in personal finance basics and the sharing of these would be beneficial to children (Folger, 2013).

Financial management is a basic life skill many children are not acquiring. Studies show mixed results of the impact of personal finance classes in school. Jump$tart’s 2008(b) national survey results indicated that financial literacy of high school students had fallen to its lowest level ever, but results from college students had risen somewhat. The survey was given in public high schools, contained 49 questions, and was similar to previous surveys covering money management, income, spending, credit, and saving and investing. Full-time college students were given the same survey the high school students received, with the addition of questions targeting financial behavior (Jump$tart, 2008b).

Some studies show that a single semester course in personal finance may not be sufficient to impact financial knowledge. For instance, Mandell and Klein (2009) surveyed graduates from three high schools, each offering a well-regarded personal finance class, within the same school district. Out of the 79 who responded to the request to complete the online survey, 39 had taken the personal finance course in high school. Even after several years, Mandell & Klein (2009) found that increased financial literacy was not a given from participation in a personal finance course.

Robb and Woodyard (2011) conducted a study to examine the association among objective and subjective personal finance knowledge, financial satisfaction and designated demographic variables with regard to the most successful financial behavior among Americans. The researchers hypothesized that financial knowledge would have a huge impact on financial behaviors. The results indicated that income, rather than financial knowledge, was the dominant objective factor in best practice financial behaviors. They acknowledged the importance of financial knowledge, but simply having financial knowledge was not adequate to confirm better financial behavior (Robb & Woodyard, 2011).

Lusardi, Mitchell, and Curto (2010) analyzed responses to three financial literacy questions added to the NLSY97, a survey used on young adults, age 12-17, as they evolve from school to work, and to distinguish essential characteristics of that evolution. The results were troubling; a low level of financial literacy was found, and more than two-thirds of the respondents did not have knowledge of interest rates, inflation, or risk diversification (Lusardi et al, 2010). Lusardi (as quoted in Kadlec, 2013, n. p.) testified before a Senate subcommittee on Children and Families about teaching personal financial literacy in the schools:

Studies show that Americans who are not financially literate are less likely to participate in financial markets or to invest wisely. They are less likely to save and plan for the future. At the same time, they are more likely to rely on high-cost methods of borrowing. This is a serious problem. Remedying it is difficult, but adding financial literacy to the curriculum in schools would be a good start. (Lusardi as quoted in Kadlec, 2013, n.p.)

Lusardi (as quoted in Kadlec, 2013) went on to indicate four reasons why financial literacy is important to be included in school curriculum:

- Young people with low financial knowledge most likely will not learn from their parents, other adults or peers due to limited access to financially-literate adults and peers.
- Individuals who characteristically have minimal educational opportunities (i.e., women, African Americans, Hispanics) are at greater disadvantage because of lower levels of financial literacy. Effective school-based programs could change this statistic.
- Financial skills are a necessity for negotiating the current complex economy. The Organization for Economic Cooperation and Development (OECD) believes strongly in financial literacy and has added financial literacy to the subjects it evaluates for 15-year olds around the world in the Program for International Student Assessment. This means personal finance instruction is integrated in subjects such as mathematics, science, and reading and in tests administered to 15-year olds around the world.
- It is imperative that young people understand the need to make wise financial decisions before disaster strikes; an important contemplation is to invest in higher education (Lusardi as stated in Kadlec, 2013, n.p.)

These studies show that in order to impact areas across the lifespan, financial literacy must be expanded beyond a single course in school.

In the course of examining financial literacy among high school and college students, several studies found training teachers had some impact on financial knowledge and/or financial behaviors. The National Endowment for Financial Education (2009) examined the financial capabilities of United States college students from states with various financial-education policies. Fifteen geographically disparate college campuses were surveyed electronically to measure financial behaviors, financial knowledge, and financial dispositions. The responses were organized by the type of high school financial-education policies from the students' home state. The states were classified into six categories based on policies "ranging from those states without standards and states with standards that were or were not implemented to states that required a financial-education course, an assessment, or both" (National Endowment for Financial Education, 2009). Out of the 15,797 college students surveyed, those students who graduated from a state with a required financial-education course reported the highest financial knowledge and were more apt to display higher positive financial behaviors and dispositions. Unlike the other students in the sample, these students were more prone to save, pay off credit cards each month, and take financial risks; they were also not as prone to "max out" credit cards, be late on credit card payments, or make hasty purchases (National Endowment for Financial Education, 2009).

The Consumer Financial Protection Bureau (2013), in its recommendations for financial education in the K-12 school system, indicated that young people with financial illiteracy may incur unnecessary debt, lack savings, and exhibit potential for developing a poor credit history. Not having the necessary skills in financial literacy could also impact their ability to gain access to basic necessities such as checking/savings accounts, and housing and employment, all of which are essential to building financial stability (CFPB, 2013). The report also commented on the lack of inclusion of such a critical life skill in required courses of study in the public school system (CFPB, 2013).

Undoubtedly, there is evidence of the need for financial literacy in many arenas, but most notably in the K-12th grade school system. Financial literacy needs to begin in kindergarten and continue as part of a student's education. It is my belief that when financial literacy is part of a child's development throughout the K-12th grade experience (when students graduate financially literate), the impact of that financial literacy across the lifespan would not only change individuals and families' lives, but positively impact the national and global economy. One piece of that financial-literacy development is highly-qualified teachers, trained to provide competent instruction in personal finance, and involved in the curriculum change process.

Critical Role of Teachers in Financial Literacy

Actions states have taken to increase financial education are commendable, but provides a challenge to teachers who are not adequately prepared to provide effective instruction in personal finance. Research has been conducted on teachers' grasp of economic, consumer and personal finance concepts. In 1977, Garman conducted a nationwide evaluation of consumer knowledge of preservice teachers graduating in all disciplines. One of Garman's goals was to determine how literate these preservice teachers were in consumer education in fourteen areas (i.e., food, recreation, clothing, furnishings and appliances, financial responsibility and decision making, economic grasp of the marketplace, savings and investment, taxes). The mean score was slightly below 60 percent for all participants. At the time of the study, many states required consumer education to be included in the curriculum at the elementary and secondary levels, so Garman concluded that preservice teachers did not have a high level of cognitive understanding or academic preparation to teach consumer education (Garman, 1977).

Teachers may also face many barriers, including lack of training, to implementing financial-literacy education. In Loibl's (2007) study of Ohio's financial-education programs, common challenges teachers faced in teaching financial literacy were lack of instructional materials, lack of instructional time, and a lack of professional development. The report also found evidence that teachers did not rate themselves very high on financial literacy (Loibl, 2007). Godsted and McCormick (2007) reported those obstacles facing teachers who instruct in personal finance included time, grade level and subject-appropriate professional development and/or training opportunities, funding, and a lack of access to materials.

Way and Holden (2009) polled 1,200 K-12th grade teachers, prospective teachers, and teacher-education faculty on their training and education in personal finance; specifically on six financial concepts (planning and money management, income and careers, financial responsibility and decision making, credit and debt, saving and investing, and risk management). Way and Holden's (2009) findings included:

- Teachers, prospective teachers and education faculty recognize a need for financial education; most believed it should take place in high school; and the majority of education faculty believed it should be provided in elementary and middle school.
- Few teachers polled were currently teaching financial literacy in the classroom; less than 30 percent had taught financial education topics in the classroom; 37 percent of teachers had taken a college course which covered financial-education topics; and prospective teachers were more likely to have taken a high school financial course.

- Teachers and preservice teachers do not feel prepared to teach personal finance in the classroom—less than 20 percent, particularly on some of the concepts; and education faculty felt no more competent to teach on personal finance than teachers and preservice teachers.
- Teachers do not feel qualified to apply state standards regarding personal finance; state mandates did not have an influence on whether a teacher had taken a personal finance course, taught a course, or felt competent to teach such a course; and education faculty were not familiar with state financial-education standards either.
- Teachers, preservice teachers, and education faculty did not feel they were qualified in financial-education pedagogy, particularly in designing curricula, employing instructional strategies or addressing learner needs in regard to financial literacy.
- Two-thirds of preservice teachers and 75 percent of teachers indicated a willingness to engage in further education on instruction of financial literacy.
- The focus of teachers' financial concerns was on their retirement needs and having enough income at retirement, and they expressed concerns about having enough money for retirement.
- Way and Holden (2009) also found that teachers' own financial experiences shaped their idea of financial literacy, not necessarily through professional-development workshops on teaching methods in personal finance. The report concluded that teachers, preservice teachers, and education faculty need to have opportunities for professional development in financial education subject matter and pedagogy; preservice teachers need financial-education training in their preparation programs;

and teachers need assistance with integrating financial concepts in all subject matter (Way & Holden, 2009).

When policy makers and educational agencies develop or implement educational policy, the success of the curriculum ultimately rests upon the classroom teacher. McLaughlin (1987) indicates there are two factors to policy-implementation success: capacity and will. Capacity has to do with training, money, and available financial subject-matter experts and will relates to "attitudes, motivation, and beliefs" that impact how a teacher responds to policy (McLaughlin, 1987, p. 172). Will is difficult to influence and capacity could be a barrier to training teachers if school districts do not invest in training or resources. We know from research that the majority of teachers believe financial literacy is important. Handal and Herrington (2003) stated "Teachers are those who ultimately decide the fate of any educational enterprise; consequently, teachers' attitudes, feelings and perceptions must be recognized well before launching any innovation" (p. 65). Lusardi (2010) in her blog on financial literacy states: "Clearly, it is not enough to simply mandate financial education. Mandates alone do not make people smarter. Instead resources should be devoted to training teachers so they can implement the standards that are required in financial education" (http://analusardi.blogspot.com). Haynes and Chinadle (2007) suggest that curricula be written by and for educators in order to augment classroom friendliness, practicality and educator buy-in. Godsted & McCormick (2006) insist that the lack of financial education in the K-12th grade classroom is due to teacher training.

Required state testing in Texas makes it difficult to implement financial literacy into instruction. Dr. Tim Jones from Sam Houston State University observed "In Texas, teachers are very focused on teaching TEKS, now STAAR® skills….It's not a surprise to me that perhaps other things as part of the well-rounded child are getting missed….We're a state very focused on state accountability" (Arnold, 2013, n.p.). Dr. Jeanne Gerlach from the University of Texas at Arlington supports teachers making subtle changes in their instruction to incorporate financial literacy, and believes students should be required to display minimum financial-literacy skills before advancing to the next grade (Arnold, 2013).

Summary

In summary, the review of literature presents evidence that students need teachers competent in financial literacy, with resources and professional development opportunities, to successfully impact behavior change in the classroom. In addition, teachers need resources to instruct in personal finance in order to cement concepts in the classroom.

CHAPTER 3

METHODOLOGY

Research Design

In order to draw on teachers' experience, a qualitative, deductive approach was utilized to answer the research questions. A qualitative approach allowed the researcher to listen to the views of research participants as they related to the curriculum-change process, training teachers have participated in regards to personal finance instruction, and identifying the strategies teachers were employing to instruct in personal finance literacy. In-depth, semistructured interviews, focus groups and document analyses were employed. Posner's (2004) curriculum analysis questions as they pertain to the curriculum proper and the curriculum in use were utilized.

Research Questions

This study examined how secondary teachers and K-8th grade mathematic teachers were implementing personal finance instruction and the development of strategies and curriculum in answer to the state mandates in Central Texas. The research questions were:

1. How have teachers been involved in the curriculum change process in terms of personal finance?
2. What strategies have teachers employed to prepare themselves to instruct in personal finance?

3. What personal finance curriculum and other resources are being utilized by high school teachers?

Description of the Sample

Sample for One-on-One Interviews

The sample for one-on-one interviews was 17 Central Texas secondary education teachers who instruct in the disciplines of social studies, business education, mathematics, or family and consumer sciences. Six social studies (economics), four mathematics, and three FCS teachers were interviewed, with varying years of teaching experience (Table 1). In the Central Texas area, business education in secondary schools has evolved into career and technical education (CTE); therefore, four CTE teachers were also interviewed, bringing the total to 17. Ten women and seven men were interviewed. Teachers were invited to participate from varying size school district enrollment (Table 2).

Twenty-two initial invitations were sent to targeted secondary teachers utilizing the invitation and questionnaire in Appendix A. Email addresses were acquired via the school district website. Phone calls were made to the school office to verify disciplines if that information was not available on the website. A low response (three) was received from the first round of invitations so a second round (22) was sent to the same teachers. Due to the low response rate, four additional school districts were invited to participate and ten additional invitations were sent.

Table 1

Teaching Experience of One-on-One Interviewees

Number of Years of Teaching Experience	Number Interviewed
0-9 years	7
10-19 years	4
20 + years	6

Table 2

Participating School District Enrollment

School District Enrollment	Number of Teachers Interviewed from District
Below 1000 (small district)	
1001-5000 (medium district)	3
10,000-15,000 (large district)	8

Sample for Focus Groups

Two focus groups, one for administrators, and one for K-8th grade teachers, were hosted to gather information from a wider view of personal finance instruction. Eleven invitations were sent to administrators utilizing the invitation found in Appendix F. No responses were received. A second invitation was sent followed up by personal phone calls. The first focus group consisted of administrators from school districts targeted for this project, including superintendents, secondary principals, and curriculum directors. The response rate was low. Two administrators from a large school district and an administrator from a small school district participated. One male and two females made up the first focus group.

Participants invited for the second focus group consisted of K-8th grade teachers and secondary teachers from the identified disciplines who did not participate in the one-on-one interviews. Seventeen invitations were sent and again the response rate was low. Inquiries as to why teachers were not responding indicated a lack of time as the reason, particularly in one large district where academic standards had not been met in the previous year. A second invitation was sent and three teachers responded; two 5th grade teachers and one 5th grade mathematics teacher. All participants in this focus group were women.

Data Collection Method

A semistructured interview format was utilized for the one-on-one interviews. An interview guide, with interview questions, was developed for this project (Appendix C) and a matrix (Appendix D) signifying the relationship of the interview topics and questions to the research questions was provided. Interviews were scheduled for one hour, reducing or increasing the time as needed to gather information from the participants. The interview questions were piloted with three secondary teachers to check for understanding. Any suggestions for clarification were made to the questions. Focus groups were scheduled for one hour using the focus group interview guide (Appendix E). Participants were invited to the focus group utilizing the focus group invitation (Appendix F).

Document analysis consisted of reviewing district protocol in terms of integrating personal finance curricula into the classroom, approved personal finance curriculum, and any links to professional development specifically regarding personal finance training. Documents were numbered and coded based on the criteria list (Appendix G).

Research Rigor

The transcribed one-on-one interviews were sent to the interviewees to verify the transcription was an accurate interpretation of the comments made during the interview. A revised copy was resent to the interviewee if any changes were identified. The focus group conversations were transcribed and coded to determine common themes and how they illuminated data toward answering the research questions. For the document analysis, documents were secured from the districts websites and given a document number. Any identifying words in the documents to place identification of the school district were redacted. Documents were analyzed for words pertaining to personal finance literacy.

Analysis

All taped interviews and focus groups were transcribed. The researcher created a Microsoft Excel file for the interviews and focus groups to organize the coding of emerging themes and demographic information. Transcription of the interviews and focus groups were numbered by line, coded for interesting phrases and potential patterns marked for recovery at a later date. Conceptual labels were placed upon incidents in the gathered data, and these labels were assembled together to form emerging categories. Codes were refined as analysis occurred. Data collection and analysis occurred concurrently to identify concepts and themes. After each interview, transcription, and member checking, the data was coded. Focus-group data was coded after each occurrence and included in the data set. Data was analyzed according to themes and patterns that emerged from data collection.

Analysis of district documents explored the content for terms such as “personal finance,” professional development” relating to personal finance, “personal finance curriculum,” and other personal finance resources in order to understand district protocol regarding training, resources, and curriculum to instruct in personal finance.

Assumptions

Attempts were made to minimize assumptions with the research questions for both the one-on-one interviews and the focus groups; however, the following additional assumptions need to be stated for the benefit of the reader:

1. Participants responded truthfully and to the best of their ability.
2. Interviews were held at the convenience of the teacher; therefore, there may have been distractions outside of the control of the interviewer.
3. Participants were familiar with the TEKS pertaining to personal financial literacy as it related to discipline taught.

Ethical Considerations

Prior to data collection, a signed consent form was obtained from each participant for the one-on-one interviews (Appendix C) and for the focus group participants (Appendix H). Data was collected and stored on a secure laptop and in a safe-deposit box and will be deleted after three years per institutional review board protocol. Each participant was given a pseudonym to ensure confidentiality. Only the dissertation committee and I have access to identifiable data.

The risks to the participants in this study were minimal and not expected to occur. The benefits were the results from the study enabling the curriculum-change process to begin, resources to be secured, and training to be offered on personal financial literacy. Both my faculty advisor from Indiana State University and myself completed the ethical research training course required by Institutional Review Board (IRB) from which the data was collected.

CHAPTER 4

RESULTS

Data Collection Review

The data analysis is reported in three sections based on the research questions for this study and related to Posner's (2004) curriculum analysis for the curriculum proper and the curriculum in use.

1. How have teachers been involved in the curriculum change process in terms of personal finance?
2. What strategies have teachers employed to prepare themselves to instruct in personal finance in today's classrooms?
3. What personal finance curriculum and other resources are being utilized by high school teachers to improve knowledge in financial issues?

Participants

One-on-One Interviews

Five mathematics, three career and technical education, three family and consumer sciences, and six social studies teachers participated in the one-on-one interviews, totaling 17 respondents for this study. (Note: In Texas economics is part of the social studies curriculum; therefore, from this point forward the term economics will be used.) The grade span taught by the mathematic teachers was from 8th grade to 12th grade, with only one teacher from a charter school focusing solely on freshmen. One mathematics teacher taught 8th through 12th grade mathematics in a small school district. The years of teaching experience for the mathematics teachers ranged from 5 to 23 years.

Three career and technical education (CTE) teachers participated, two from a large school district, and one from a medium school district. While they were all secondary teachers, they did not teach all grade levels in high school. One taught 9th-12th grades; one taught 11th-12th grades only; and one taught 9th, 11th, and 12th grades. As mentioned previously, business education in the Central Texas area evolved into career and technical education (CTE) as some point in the past. One CTE teacher was alternatively certified.

Family and consumer science teachers came from two medium school districts with teaching experience spanning six to 22 years. One FCS teacher was alternatively certified, which will be important as results are discussed. This same teacher also taught 9th-12th grades while the two other teachers from a different district taught 10th–12th grades only.

Six economics teachers were interviewed with a range of teaching experience from three to over 20 years. One teacher taught in a small school district, three taught in medium school districts, and two were from large school districts but different high schools. Five of the economics teachers taught only 12th grade; one taught 11th grade as well. One economics teacher was alternatively certified.

Focus Groups

For the administrator focus group, three administrators participated. Two were from the large school district; one was a male principal with 27 years of education experience and the other administrator was a female dean of academies and had been in administration for 17 years. The other female participant was an assistant principal from a small school district and was in her third year as an administrator

The second focus group consisted of three teachers; one was a fifth grade mathematics teacher and two were fifth grade teachers from contained classrooms. All were women. One fifth grade teacher was in her first year of teaching, and the other two teachers had a range of 6-15 years of teaching experience.

Results

Curriculum Change Process

No data was found indicating the curriculum-change process was evident in any of the participating districts. A common theme emerging from the data showed teachers were instructing personal financial literacy in a variety of ways, but there were few curriculum choices available to them. Andy (CTE) stated: "…the one thing the other teacher and I have discovered [is] there's really not a solid, start-to-finish book or any type of resource on personal finance." Diane (CTE) made the following comment when asked if personal finance was part of the textbook: "No, maybe some of it is in [the] textbooks but a lot of it is [not] …mainly the main thing is just personal knowledge of it." In addition, no data was provided which indicated involvement by teachers in the creation of new curriculum on personal finance; however, there was evidence from two participating school districts that teachers have been involved in either the selection process or contributing information in anticipation of selecting a curriculum for personal finance education. Matt (economics) was a participant in adopting Dave Ramsey's Foundations in Personal Finance for his school district: "In our district five years ago we adopted [the curriculum]…so I don't know that I was instrumental in getting it here, but I was a big proponent of it." Russell (economics) indicated he had been consulted on the criteria for selecting a personal finance curriculum: "They have talked to some different teachers and what are we covering here and what are we covering there." Myra (FCS), who teaches in the same district, was aware of research being conducted on financial planning classes: "I know they have been doing some research in some financial planning classes that they would like to implement, but at this point in time they are not currently implemented."

It should be noted that in all of the economics classes in each district participating in this study, personal financial literacy units or chapters were already included in the textbook and as part of the course objectives; according to Posner, part of the curriculum proper (2004). The material presented in the textbook was on the micro level which Posner states is a level of curriculum organization referring to "relations between particular concepts, facts, or skills within lessons" (Posner, 2004, p. 128). Gregg (economics) stated "Well, what I do is I've taken…the back of the economics textbook has a whole personal finance section. So as far as curriculum…what I do is take that personal finance section and teach it." However, some economics teachers made the choice not to use those units or chapters within the textbook:

> Matt: If they can't balance a checkbook it doesn't matter what they know about the economic system that we have in Texas or the United States or the global economy….Today we went over some of that stuff and two-thirds of my class said it was the first time they had seen a check book registry…So that is not covered in my textbook.
>
> Russell: [when asked if personal finance was in the textbook] it's a little bit in the

textbook. I don't really go by the textbook much.

Anthony: As far as the textbook resources [on personal finance]; I don't use them.

The two economic teachers from the large school district indicated they supplement their economics textbook section on personal finance with other resources. For example, Felicia (economics) indicated she uses a stock market game: "I do personal finance, more about the investing part. And we talk about it throughout the semester. We play the nationally known stock market game; I think I'm the only teacher in the district that does that." Kathy utilized community resources to supplement what was in her textbook:

> …having someone come in and do budgeting. I have a person that comes in and helps them with financial aid in regards to college tuition, loans, etc. I have a rep from a bank that comes out to talk to them about car loans. I'm working on getting a real estate agent this year to have them do a differential between buying a home and the process of that, and then giving them a real world opportunity with renting.

Two of the family and consumer science teachers and three career and technology education teachers indicated there were units in their textbooks on personal finance topics. In FCS the inclusion of personal finance topics is incorporated dependent upon the course topic. For example, Catherine (FCS) indicated that she brings up personal finance in her human development class:

> Catherine (FCS): We've taken a few lessons…particularly in the child development or personal development courses. We have, you know if you make $10/hour. Of course they light up, $10 an hour! That's a lot of money you know versus what they are making. So we pretend we are living on our own so we talk about rent and how

> inexpensively you can rent. And we go through everything and they can see on the board as we are doing this together that they are left with $40 a month. And we talk about, well; you know what if you blow a tire? A tire is...$80. What have you saved, how are you ever going to get out of renting an apartment and put money toward a house?

Myra (FCS) indicated she supplemented her textbook with resources she brought in, but there was nothing in the textbook:

> In my classroom I do it [teach personal financial literacy] in different classes that I teach, either my parenting class—we do some financial planning when they are looking at having a child, what that's going to cost, and how to get a job, that we are going to have to pay for this baby, and look at all the expenses involved in that, how are we going to afford an apartment; all those kinds of things.

When asked for clarification that personal financial literacy was not included in her textbook, Myra replied "That is correct." Susan (FCS) uses her textbooks solely to teach personal finance concepts in her classes. When asked if personal finance was part of her textbook, she replied:

> It is part of my textbook (*shows textbook).* This is the book I'm using right now….under Consumer Decisions: learning to manage, managing to today's world, and consumer decisions. So there are two chapters that I would hit on as I would be covering that particular subject.

In FCS classes teachers reported covering personal finance concepts in culinary arts, human services, child development, family life skills, and interpersonal studies. In CTE personal finance was part of several courses. Andy (CTE) reports "I teach in the Academy of Finance. So we do everything from, well I teach banking and finance and principals of marketing and finance, income tax accounting.…" As mentioned, there typically was a unit on personal finance in the economics textbook, but that unit was not always utilized by the participants in this study.

The participants of the administrator focus group were advocates for personal financial literacy instruction, but indicated there wasn't really a curriculum available to the teachers. Amanda, an administrator for a high school in a large district, indicated she supported personal finance instruction: "I think it needs to be taught. I think kids need to understand the intricacies of whether it [is] insurance, whether it be savings, checking, whatever part of financial literacy you're talking…." Maria, an administrator from a small school district concurred:

> I'm very much in agreement about what was just said about how…the school system right now does need to provide, maybe a larger scope to our student body so that they have a better understanding of all the various aspects that exist with…being smart financially. You know when you talk about investments, and things of that nature. I think we need to work more towards that because it is a little weak.

Regarding the lack of curriculum, Amanda stated:

> I think what the thing is they don't have…unless they have a curriculum to follow and the resources, and the, you know, the power points whatever you want to use, they will do it….What we are waiting for is for [names a local bank] to train the teachers in [local bank's curriculum] so they have the curriculum to be able to use. That's the hardest part is finding curriculum, and cheap curriculum.

Bart, an administrator at the same high school agreed: "…they just don't have the information."

A common theme revealed teachers advocating for curriculum change. The teacher focus group revealed that some personal financial literacy pieces in the grade school mathematics classes were more abstract concepts than applicable activities their students could apply, particularly relating to property taxes and income taxes. Kandy (5th grade) and Jane (5th grade) teach in contained classrooms, and Linda (5th grade mathematics) voiced concerns about the financial literacy included in their mathematics curriculum. Kandy commented: “I think it’s over their head. I really do, for 5th grade at least. It’s concepts that they aren’t readily able to put to use.”

> Jane: …I think it’s a little out there for them. They are 10 years old; they are nowhere close to getting a job so they don’t understand income and the tax. They are nowhere near purchasing a home. So the fact that I have to teach them property taxes for something they may not do for another 8-10 years is difficult for them; it’s a very abstract concept for them.
>
> Linda: …I think some of the things they are going to have to learn are above them, like knowing the difference between income tax and payroll tax and sales tax. It’s a little hard for them to understand…

Other teachers during the interviews indicated that, particularly in the mathematics classes, it is only functions of mathematics that are explored, using examples of financial concepts, such as interest, compound interest, credit card interest rates, etc. James (mathematics) teaches 8th through 12th grades and stated: “Basically we teach different aspects from, depending upon the grade level and the difficulty level with interest, compounded interest, putting money into investments; just small things like that.” Jody (mathematics) also covered some personal finance concepts that utilized math functions: “We have a unit on credit, and cars, and houses and how does that apply when you go to get the interest rates, especially with purchasing insurance for the car and house.” Rhonda (mathematics): “Well if we are talking about functions, students learn about compound interest and I think that’s pretty much it.” James (mathematics) reported that the state of Texas was working on providing them with mathematics curriculum that impacted the real world, such as using mathematics in agriculture or construction. He also believed the state was working on a finance curriculum and concluded by saying:

> I think…that the state of Texas is starting to get stuff together and saying ‘let’s teach our kids how to be good citizens and responsible citizens and teach them things that they are going to see in the real world.’

However, teachers interviewed in these particular disciplines did not indicate they were not part of the curriculum-change process at any level.

In this study, aspects of Posner’s (2004) curriculum proper were evident in the data; specifically goals and organization of personal finance instruction. However, there was no coverage of personal finance on the state tests, at least to the knowledge of the participants in this study. Kathy (economics) was asked if economics was covered on the states tests; she replied “No.” The K-8th grade focus group reported personal finance TEKS were made available to teachers; the students would be tested over personal finance on the state tests. In elementary school in Texas, mathematic TEKS include personal financial literacy concepts (Texas Education Agency, n.d.).

In terms of goals, Posner (2004) stated the examples of societal goals are “improving equality of opportunity, increasing America’s competitive edge, fostering world peace, decreasing unemployment, reducing crime, and protecting the environment” (p. 71). While a societal goal is not primarily an educational goal, societal goals do have some educational component (Posner, 2004). In this study, there was clear evidence from the data that teachers were striving to prepare students to be productive members of society through personal finance education. One common theme that exemplified this societal goal was the teachers’ belief in the importance of educating students in managing their personal finances. Jody (mathematics) expressed her opinion on the importance of personal finance education:

> The kids really reach out for it….I think the kids, not having had it at all; I think they need it and are ready for it. And I think the credit is just out of hand. I mean they are sending credit card notices to these kids.

Russell (economics) offered his belief on the importance of personal finance education:

> The kids usually, and I always stress to them that this is some of the most important information. I don’t care that it’s not calculus or whatever; it’s the most important thing they are going to get because it’s everyday life. And by the time we cover it and we open their eyes to what a budget does, what the extra money does, investing that money…it’s really, when I show them the budget thing they go, “man!” And I share with them [that if they] bring a USB I’ll email you the budget, you can use it, and it’s yours for the rest of your life if you want it. And that really opens their eyes to just some benefits of that. Arguing between mom and dad, or husband and wife, or you and your future husband/wife – it eliminates that stuff. You’ve got to get on top of that, be on the same page. Kids usually seem

> very receptive. I still have kids that will email me that have graduated and still ask me for my budget….They do remember it, they talk about it, so yeah; I think it's been important.

In the FCS and CTE disciplines particularly there was a clear goal of providing students with necessary life skills in personal financial management. In these disciplines, the activities took on a more unique approach. For example, one school opened a credit union in their school, training the students to be tellers and beginning a campaign to encourage all students to open checking and savings accounts. Angela (administrator) indicated:

> It was part of a grant I wrote last year and was able to get that…but what the kids have gone through, part of that grant was not only opening the credit union it was also a financial literacy piece. So 9th through 11th grades went through a [local program] …and she came and worked with the kids on various aspects of financial literacy. So we've been promoting the credit union, trying to get kids to open accounts; the teachers as well. Those kids [who work in the credit union] had to interview with [the credit union]; they are credit union employees without being paid.

The reported use of supplemental educational materials, hands-on activities, and problem-solving scenarios exposed in this study were geared with the goal of providing students with the life skill of basic financial management. For instance, Myra (FCS) reported utilizing a variety of resources to present in her classes:

> I have gone to banks in the area and asked what they have for doing checkbooks, those kinds of things. I've gone online and gotten a lot of information off line, just

> my personal stuff that I already know [and] that I do with my own personal finances. There are different financial planners that sell different things online that I have been able to use some of those things, that I've purchased for myself personally and then been able to use with the kids.

Sharon, a CTE teacher in a medium sized school district, uses an activity she called "the game of life."

> And with the game of life, it's the last 6 weeks of school and students are given identities. And their identities are college goers or students who graduated from high school. And every week of the game of life is a year after high school. So they have to learn how to keep an expense account of what they are purchasing and buying. They get life chips that can alter their life. So a life chip could be: you have now been expelled from college. You can no longer stay in the dormitory. You have this amount of money, what are you going to do to find housing, food…provide for yourself? Or they could be good life chips. You scratched the lottery and today you won $1,000. What are you going to do first and what is financially the best decision to make? And so the game of life; they do that for four weeks. The first week of the game we go over bank accounts, we go over savings accounts, we talk about monthly expense reports. And I even show students, not my real monthly expense report, but an example of actually how I do budget every month and I do keep track of all my bills in Excel spreadsheets to show them that I'm not just teaching you something but I use it.

The experiential perspective on content, according to Posner (2004), has its primary purpose in development of an individual. According to Hamilton (as quoted in Posner, 2004), experiential education's intent is to

> "increase the competence of youth in such areas as planning, finding and making use of appropriate resources; persistence at a task; coping with new ideas, conflicting opinions, and people who are different; taking responsibility for others' welfare; and carrying out commitment to others" (p. 191)

The data presented in this study falls into experiential education as teachers indicated they endeavored to provide applicable and relevant resources for students in terms of solidifying personal financial management concepts. As an example, in addition to the credit union mentioned earlier, a volunteer income tax preparation program was begun, with the students becoming trained as tax preparers by the Internal Revenue Service in one of the large school district high schools. Diane (CTE) commented:

> Well, one of the main objectives is teaching our kids about personal finance. And also a big function that we have here is our credit union branch and our income tax, which is the largest student-run income tax site in the nation, actually; and so teaching them those kinds of skills that they can take out into the workforce.

Additional examples of experiential education were described in one of the elementary school classrooms where students earned "cash" by completing their jobs assigned each week. They were then able to spend that "cash" in the school store for items such as pencils, erasers, etc. In this same classroom, the teacher divided them into roommates, groups made up of two, three or five students. Students had jobs and the teacher would present varying circumstances which reflected real-life events, such as job loss, and determining how to pay their bills as a result of that loss or how they would pay their bills over the summer.

> Kandy (5th grade): And then I would throw something else in there. Well, what are you going to reduce in order to make ends meet this summer? So some of them were… 'I guess I don't need that cell phone with data'; 'I guess I don't need cable.' So they started on their own picking in their group what they needed to reduce their bills. They loved it. They loved it.

Linda (5th grade mathematics) has stations in her classroom, one of which is called "Money Matters." Each week the topic is on something different. Linda stated

> Last week I had three different items and then a sales price and they had to determine what the cost would be. And like this week we are doing a Thanksgiving thing; they have a menu and prices and they have to determine how much everything costs and cost per person and then they are getting coupons and so they have to go in and do that.

In terms of evaluation of the curriculum, the data revealed secondary students were tested for knowledge on personal finance concepts, but not on statewide tests. Kathy (economics) indicated students were not tested in economics on state tests: "No tests. Only U.S. History is tested in social studies for Texas." There was no reported awareness of personal finance questions on the state tests. Andy (CTE), when asked if the students were tested on personal finance in his classroom, replied "I just test for knowledge." In elementary school, students are tested on mathematic TEKS, which happen to include personal financial literacy concepts. Linda (5th grade mathematics) indicated: "I think this year is harder because of the

TEKS changing and you know last year we were tested over the old TEKS and this year we are being tested over the new TEKS; there's no phasing period like they planned."

In the document analysis the Texas State Education (TEA) website, pertaining to personal finance, provided a list of approved curricula (Table 3) as well as list of areas of instruction related to personal finance (Table 4). Much of the approved curricula were from sources outside of formal education, such as banks, the federal government, and personal financial-literacy foundations/organizations. In interviews with the teachers, some of the approved curricula were in use in the school. Felicia (economics) stated, "We play the nationally known stock market game." Matt (economics) used Dave Ramsey's curriculum: "It's just Foundations in Personal Finance; it's a high school curriculum that they [Dave Ramsey] have created."

The TEA website stated:

> The Texas Education Code (TEC) requires instruction in personal financial literacy. The student expectations of Economics with Emphasis on the Free Enterprise System and Its Benefits incorporate the concepts of personal financial literacy. Districts may use the list of Personal Financial Literacy materials approved by the State Board of Education to teach the 14 areas of instruction (Texas Education Agency, 2012).

In summary, based on data from this study, there is no one particular textbook that strictly covered personal finance and none of the teachers interviewed reported being involved in the development of personal financial literacy curriculum. There was clear evidence of societal goals and experiential learning in the curriculum proper:

Andy (CTE): …you know the thing the other teacher and I have discovered is there's really not a solid, start-to-finish book or any type of resource on personal finance. I mean if I had time I'd love to do it. There would be so much stuff you can include; I mean it could be volumes of great stuff. Even the IRS stuff it's real vague and you kind of have to teach on experience, like the kids will need to know this, they'll need to know this, and they will need to know this and you have to figure out a way to make it relatable to them.

Myra: (FCS): I would love if there was something for the high school level to teach financial literacy that I could take, that I could get, that I could use. I've been bugging their ears in administration here, too, that we really need that with the kids…

Table 3
List of Approved Curricula for Texas Personal Finance Education

Program	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Branded
American Bankers Assn. Education Foundation *Teach Children to Save*															
Better Business Bureau Education Foundation *Life After School*	X									X					No
Council for Economic Education Financial *Fitness for Life, Learning, Earning, and Investing*	X		X	X	X	X	X	X							Yes
Dave Ramsey's Office Financial Peace for the Next Generation	X	X	X	X	X	X	X	X	X	X	X	X			Yes
Internal Revenue Service *Understanding Taxes*				X	X	X	X								Yes
The Lampo Group Inc./Dave Ramsey's Office *Foundations in Personal*	X	X	X		X	X	X	X	X	X	X	X			Yes

Note. Copyright 2015 by the Texas Education Agency (TEA)

Program	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Branded
National Endowment for Financial Education (NEFE) Texas AgriLife Extension Service Texas Credit Union Foundation (TCUF) NEFE High School Financial Planning Program 2007 Edition	X			X	X	X	X	X	X	X	X				Yes

Table 4

Texas Personal Finance Areas of Instruction

	Texas Personal Finance Areas of Instruction
A	Understanding interest, avoiding and eliminating credit card debt
B	Understanding the rights and responsibilities of renting or buying a home
C	Managing money to make the transition from renting a home to home ownerships
D	Starting a small business
E	Being a prudent investor in the stock market and using other investment options
F	Beginning a savings program and planning for retirement
G	Bankruptcy
H	The types of bank accounts available to consumers and the benefits of maintaining a bank account

	Texas Personal Finance Areas of Instruction
I	Balancing a check book
J	The types of loans available to consumers and becoming a low-risk borrower
K	Understanding insurance
L	Charitable giving
M	Completing the application for federal student aid provided by the United States Department of Education
N	Methods of paying for college

Note. Copyright 2015 by the Texas Education Agency (TEA)

Teacher Strategies

It was interesting to note during the interview process that teachers had not been idle in educating themselves about personal finance. The teachers who participated in the interviews rated themselves fairly high in their competence to teach personal finance, contrary to one study mentioned in the literature review (Way & Holden, 2009) A common theme which emerged from the data collection was self-education through the use of professional learning communities, informal education taken for personal benefit, and the Internet.

Professional learning communities (PLC) emerged as one strategy employed by teachers to prepare to instruct in personal finance. Anthony (economics) indicated that in a district where he had been previously employed, an informal PLC had developed a personal financial literacy curriculum that was then employed district wide. Anthony brought the resource with him when he changed districts. Their group

> …used TEKS to establish a framework, a scope and sequence of everything we would study in economics. And we actually met for three straight days before the school year started … to hash out our content...And so we built our own framework, our own lesson plans and resources and materials, again, structured around the TEKS and that is what I use [in this district].

Diane (CTE) and Andy (CTE) indicated they were part of a PLC which met each summer to share ideas and successes, and learn. Diane admitted these summer sessions were very helpful to her in implementing not only personal financial literacy, but other concepts into her classroom:

> …it's usually a teacher from another academy that's been successful and they've brought it to you [during the PLC]. And so I would say yes, and those are very, to me, those are …probably the most beneficial to me …

A theme that emerged regarding a personal finance course during teacher preparation was that very few teachers outside of the FCS and CTE discipline had taken such a course. Of the 17 interviews conducted, only three teachers (one FCS, two CTE) indicated they had taken a personal finance course in their preparation program. Four of the teachers (one each: CTE, FCS, economics, mathematics) interviewed were alternatively certified teachers and indicated the alternative certification was mainly pedagogy with little or no subject-specific content. Anthony (economics) stated:

> First off I was not an education major; I was a political science major. And so I got my teacher certification through what's called alternative certification program and all that was pedagogy. I don't think anything outside of pedagogy

was covered during that training.

Susan (FCS) was alternatively certified and indicated that she had to learn the FCS content strictly online in order to pass the content portion of her state certification test.

> I just would search the Internet for different types of tests or something that would go along with the different subject areas that I knew I would be teaching and that would be on the test. It was pretty much 'I hope this is the right stuff.' Passing the test the first time round didn't happen; it took me several years. And so then as I would continue to take it I would know more about how to prepare for it but since I didn't have the college courses; those were questions I was missing.

Only one FCS teacher who was traditionally certified had taken a course on personal finance or consumer economics. Catherine (FCS) indicated in her teacher preparation program: "…I had a consumer sciences course." Myra (FCS) did not have any personal finance classes in her preparation program: "I did not have any prep in my teacher classes on anything about financial literacy." Two CTE teachers reported taking a personal financial literacy class in their teacher preparation program. However, for some of these teachers it was so long ago, they conveyed it was not useful, and one teacher indicated her class was very ineffective. Angel (CTE) stated "…it was not a great class for me personally. Part of the reasoning was that I felt what the college professor was teaching the kids were not real world." Diane (CTE) was a business education major and stated "I mean I had the accounting classes and I had those kinds of classes but as far as you know 'this is your personal finance", no." Andy (CTE) became alternatively certified but no personal financial literacy courses were offered in that certification: “Well, I was in banking for five years before teaching so that helped a lot.” Several teachers reported taking informal personal financial seminars or workshops for their own benefit which spilled over into their classroom. One theme prevalent in the interviews was the use of teachers’ own personal experiences in instructing in personal financial literacy. Without exception, all teachers interviewed individually reported utilizing their own successes/mistakes in personal finances experienced in adulthood to help provide examples of personal finance concepts to their students. Catherine (FCS) when discussing the consumer science class she took in college stated: “So that prepared me some but I just really think my real life.” Anthony (economics) indicated he and his wife had participated in a course personally and that spilled over into the classroom:

> And so, I did Financial Peace University with my wife, I’d say two and a half years ago. And then about a year and a half ago we also read through Total Money Makeover. And I use a lot of those concepts and ideas and principles in our discussions and the lessons. And so that’s what I would say….no official professional development, but that is kind of part of my lifestyle.

Angel (CTE) indicated she brought in real life examples into her classroom as well:

> I think everything that we do that we tie to personal, real life, real examples…having worked in the work force and returned to education I do think I have a lot of things to offer the kids that they don’t get from somebody else that’s say, been in education and hasn’t been out in the real world to actually know what’s actually out there.

The questions regarding professional-development or in-service opportunities for expanding teachers' knowledge for instruction in personal finance produced mixed results. Three themes emerged: to their knowledge, no personal finance in-service or professional-development opportunities were available; personal finance in-service or professional development opportunities were available but teachers chose not to participate; and those opportunities were available but were included in other trainings that included the personal finance component. Anthony (economics), when asked if he had taken professional development courses on personal finance: "I would not say professional development-wise; I have not counted them as professional development." Matt (economics) stated:

> And I don't want to spend a day over there [educational service center] going through the textbook stuff we have or the TEKS that Texas wants us to go through without spending time on teaching these kids on how to balance a checkbook.

Susan (FCS), when asked if there were professional development offerings specific to personal finance through the local educational service center, replied

> Yes, so if I wanted to zone in on that area and that area only, I could look at that. But otherwise the curriculum that I get for my FCS through whatever book I may choose to go through…which ever one I choose, they touch on it so I'm able to fulfill the need that I have, that I need to offer.

Two frame factors which can impact the curriculum before it is operational are personal and economic factors (Posner, 2004). Operational curriculum is defined by how it is integrated into the classroom by the teacher. These two frame factors emerged from teacher strategies in implementing personal finance in their classrooms. Personal factors included the teachers' willingness and ability to expand their subject-matter knowledge, both formally and informally, and their dedication to the profession. For example, Angel (CTE) mentioned a training she had attended recently: "I had a training a few weeks ago and it was … for the career development program. And we talked about finance and things…." When asked if she felt like the training was effective, Angel commented: "Oh, yes." Matt (economics), in regard to formal training in personal finance, mentioned

> With the social studies department it seems like they typically do a lot of stuff geared towards the STAAR® test. And this is not a STAAR® test class. And so as a result I don't see a lot of this…I went …about 12 years ago and spent a day over there taking an economics lesson deal…it was pretty broad and talked about the stock market game and a number of other things we could implement…I thought that was really good and I used some of that stuff when I got back.

Myra (FCS) indicated most of her training came from informal sources:

> I wouldn't say I've had training officially. But my husband was in the ministry for over 20 years and I, of course, was in that with him and we did a lot of financial counseling with couples and families and those kinds of things. So we went through a lot of courses with them on finances; Dave Ramsey and some others that are out there.

Economic factors identified were the personal resources teachers used to educate themselves about personal finance literacy. Even if the training was for personal benefit, it spilled over into the classroom. Sharon (CTE) indicated life had been her greatest teacher:

> I went to school as a math education major and so for me a lot of the finance aspect

> of it was just simply living throughout college….My mom is an accountant so I had a fake checkbook since I was like 5. So we had fake checkbooks where we would write my mom checks like if we wanted her to buy something or get us something…"

Russell (economics) indicated he liked Dave Ramsey's program on money management: "I've read this book (pointing to Total Money Makeover) and that's kind of where a lot of my knowledge came from." Felicia (economics) mentioned she had attended workshops several years ago: "Well, they used to have an economic symposium thing at [a local private university] and I went to a couple of those which I've actually brought back into my classroom."

The document analysis of school district professional-development policies revealed no specific training required for personal finance instruction. Several mandatory trainings were listed, such as training on child abuse and maltreatment and students with disabilities. Teachers could attend professional development opportunities, on a topic of their choice, with approval from administration.

It should be noted that all the participating districts utilized the same software program to display their board policies online; an Internet-based tool to publish district policy. As a result, the wording for each district is the same; however, the software program clearly delineates that the document belongs to each particular school district as each school district has exclusive editing rights (Texas Association of School Boards, n.d.).

In summary, much of the preparation to instruct in personal finance education came through teachers' own time and effort. Some of the teachers interviewed believed there were professional development opportunities for personal finance training; others did not believe they existed, and still others opted not to attend such trainings if they were offered. Overall, most teachers utilized their personal financial experiences to reinforce personal finance concepts in the classroom.

Resources Being Utilized

As resources employed to teach personal financial literacy began to emerge from the data, so did several of Posner's frame factors. As mentioned earlier, most economics teachers and some FCS/CTE teachers have units in their textbooks on personal finance. The decision not to use the textbook as a primary resource is an example of Posner's (2004) position regarding the curriculum in use frame factors, particularly personal. This frame factor exemplifies in particular how teachers take a new curriculum and mold it into their belief system. The data revealed teachers are bringing into the classroom personal finance curriculum which supports their personal beliefs. For example, a resource being used in several schools was Dave Ramsey's materials, such as Foundations of Personal Finance and Total Money Makeover. Teachers utilizing these resources do so because they have implemented it in their personal lives and believe it to be a good foundation for teaching students the elements of persona;-financial literacy. The economic teachers supported this finding:

> Matt (economics): The superintendent sought me out to bring me over and asked if I'd teach economics, and ask if I had a preference [on personal finance curricula]. I said 'I'm a Dave Ramsey guy' so anything that we can do Dave Ramsey…I'd love that.
>
> Anthony (economics): So for us Dave Ramsey is the guy that we fall back on. And so, I did Financial Peace University with my wife…I use a lot of those

> concepts and ideas and principles in our discussion and the lessons.
>
> Russell (economics): I do a lot of the Dave Ramsey personal finance; kind of teach from his perspective in a sense because I do Dave Ramsey at home, in my personal life so I try to incorporate a lot of his ideas, teaching, and mentalities.

Over half (nine) of the teachers interviewed indicated the Internet was one resource used to supplement or procure lessons on personal finance. However, they reported it was time consuming to search out reliable sites and relevant information. Diane (CTE) states: “It takes a lot of my time looking for those resources that I can tweak for my kids.” Andy (CTE) also felt it was time consuming searching the internet for resources: “So it’s a lot of Internet pulling, a lot of educational YouTube™ videos or anything that would… [reinforce personal finance literacy concepts].” Matt (economics) stated “A lot of the stuff that is in here (pointing to Dave Ramsey’s Foundations in Personal Finance) I could supplement with videos, with online articles. Almost every day there is a good article that pops up….”

Another personal frame factor revealed in this study, mentioned by Posner (2004), was teacher adaptability. Teachers figured out ways to deliver personal finance concepts they were required to teach per TEKS, even without a curriculum. Creativity was a common resource that emerged to reinforce personal finance concepts. A common theme was the use of the Internet as a resource to find relevant and applicable teaching materials. Andy (CTE) utilized YouTube™ videos to supplement: “So it’s a lot of Internet pulling, and a lot of educational YouTube™ videos…” Teachers created activities that reinforced real-life experiences. For example, Angel (CTE) indicated some of her work-study students started a conversation on contributing to a 401k:

> …I had kids talking the other day some of my work-study kids were talking about [how] they were contributing already to a 401k. And so I had talked about that if they have a company that is matching, they should max out what they are giving, especially at their young age. And they were talking about, well; it's kind of hard to think about $5 more when I could actually have that in my pocket. But it was a really good opener to have with the kids at the age of…17, 18 years old, realizing what they could contribute and the retirement they could make their selves starting early. So it did kind of open up the door and give me a little bit of an opportunity to talk to them about that.

Catherine (FCS) also uses real-life experiences to reinforce personal finance concepts. She provides her students with:

> an assignment where they are taking their paycheck and if they were having to pay child support with the state, say percentages, so we look at that and we talk about it. If you are working at [a local grocery store] and carrying out groceries or working the cash register and you get $70 a week, how much of that goes toward child support? So very specific examples that really they can apply to themselves, is what I try to do.

The elementary school teachers who participated in the second focus group also provided examples of supplemental materials to reinforce personal finance concepts. For example, Kandy (5th grade) utilized play money in her classroom. The students earned and spent the money in her classroom:

> I can implement…where they have a job, they get paid for different things, and they can spend out of the store or the store in the class... [They earn money by] doing their jobs. So every week I'll give them a job. They have to be here, present, they have to do their job without issues; it has to be completed, turning in work, that kind of stuff.

When asked what the students could spend their money on, Kandy replied, "There are little things like pencils and stuff like that."

Community resources were a common resource for teachers to utilize which exemplifies teacher adaptability. Diane (CTE) and Andy (CTE) worked with a community organization to apply for a grant in order to open a credit union in their school. Another resource being utilized in the school is volunteer income tax preparation. Students learn about completing various tax forms, and become IRS certified to conduct income tax preparation. Through this activity, the CTE teachers are able to instruct the students about payroll taxes, income, and deductions. Kathy (economics) invited various community agencies in to share pieces of personal financial literacy she felt the students would need, such as financial aid, budgeting, grocery shopping/meal planning, buying furniture, car loans, and real estate. Felicia (economics) utilized the stock market game in order to teach her students about investing. Sharon (CTE) reported several local financial institutions offered personal finance programs or were willing to provide speakers on various topics. Sharon indicated "a local bank contacted me. And they provide the teacher all the materials; so they provide the CDs, power points, the presentations. They'll send a guest speaker to come and talk to the students about banking and personal finance." The elementary teachers also made use of community resources to reinforce personal finance concepts. Jane (5th grade), when asked what community resources she utilized to reinforce personal finance concepts indicated:

> [A community organization] comes in and they've had a couple of stories that they've read and the kids read through it. They talk about the vocabulary and things like that, so they ask some comprehension questions and the kids interact that way. They've had some games that they've played and some work sheets that go with that and so they are starting to really understand what that is."

Other resources which emerged in the data varied, some of which feature the cultural frame factor from the curriculum in use (Posner, 2004). For example, a common denominator among the teachers interviewed was the use of the students' own job as a point of reference for personal finance concepts, a rich teachable moment according to some teachers as several of their students provide economic support to their families and/or live with parents who are experiencing debt. As concepts of taxes, budgeting, income, and staying out of debt were covered, these students took notice by paying attention in class and learning how to understand their paycheck stub.

> Andy (CTE): [I tell the students] the stuff that you learn in here today you are going to use for the rest of your life. It makes it really easy when we start doing payroll taxes and things like that because I'll usually have four or five kids in a classroom that work, who have never really known what those [deductions] are that are coming out of their checks and how to calculate it based on their pay and it starts making sense. And I'll see them pulling out paystubs and looking and it

kind of validates what I'm doing.

Catherine (FCS): They pay attention and listen because they know this is coming their way. And some of them have already been working and already have to budget and some of them actually contribute to the family income.

Anthony (economics): … I mean just about every one of my students, when we start talking about personal finance….that's when engagement tips through the roof and I do have a lot more students ask questions. …And so when the personal stuff comes around it's the students who have kind of been disengaged through the school year up to that point, also kind of wake up and they have a lot more input because they have had a lot more experience in this. Because they have had a job, they've been working, they've been earning wages you know, some of them maybe 30-to-40 hours per week already.

Myra (FCS): …because most of them will say things like my parents are so in debt or I have no idea this is how this happens or how do you do this or how debt accumulates and compounds, and all that.

Teachers reported using activities they perceived relevant to the age of the students, such as discussing the cost of hosting a party, purchasing a car, having a child, or living on their own. These activities all came from resources other than their textbooks. For example, Catherine (FCS) utilized an idea she saw on an old television show: "And I have even given money to them before; not real cash but play money. And here's your paycheck. Ok, now give me this, give me that, give me this like Bill Cosby did on his show…He did it with Theo; that's where I got the idea." When asked what other resources she used, Angel (CTE) indicated:

> Real life examples: through my career prep program the kids bring in their actual pay stubs so we actually look at what their pay stubs and [learn] how they are actually being paid and things like that. Through the business information class we talk about from the business standpoint, budgeting and things like that. So we might give an example of …planning a party and they have to budget for each student who is going to attend. So they have to account for the money and be able to show where the money actually went. They are given a dollar amount for the party and so [for] each person, it can only cost so much, so they have to actually work on budgeting in a sense like that.

A theme common from the mathematics teachers in terms of personal finance were mathematics functions such as calculating interest, credit card interest, or financing a car. Jody (mathematics) said the previous mathematics curriculum was much more personal finance oriented and covered topics such as budgeting, balancing a checkbook, etc. Still she indicated the current curriculum is beneficial:

> …I had a kid two years ago when we did buy the car; rent the car type of comparisons and everything. He checked out a calculator and comes back, after a weekend, and says my dad bought me a car. Because he could go in and say, 'Ok dad if we can pay this much and we change this number' and they played with it and figured out what he could afford and how much of a car he could buy with…a 5-year payout.

There was some concern from teachers about procuring resources, if available, so economic frames (Posner, 2004) may be an issue. Kathy (economics) indicated there were resources on entrepreneurism she would like to be trained on in order to implement in her classroom; however the budget was not in place for such an expense:

> But the money wasn't there. We needed to pay for field trips because part of that [program] is going to actual mom and pops, and the transportation is costly so there are four trips a year and we aren't going to fund it this year.

Conversely, the administrator focus group unanimously said they would find money in their budget if there were resources available for the teachers to utilize to instruct in personal finance. Also, teachers reported believing funds would be available to them should they choose to attend a training focusing on personal finance education. Anthony (economics), when asked if there was a budget for professional development in his school district, replied: "Yes, if I wanted to; absolutely." The administrator focus group supported this belief. When asked if funds were available for teachers to attend personal finance training, Stephanie (assistant principal) stated, "Yes, we would find a way to make that happen." Amanda (dean of academies) concurred: "I'm sure we would have financing somewhere."

Posner (2004) noted that the meaning-oriented curriculum is made up of experiential, structure-of-the-disciplines, and constructivist curricula and while there are differences, all of these perspectives have a common belief that "providing students with meaningful education is the primary goal, and that the struggle for meaning and real understanding constitutes good teaching" (p. 205). This focus on meaning leads to certain implementation challenges for the curriculum in use, particularly with the temporal (time), organizational (curriculum change process) and personal (teachers and students) frame factors (Posner, 2004). Personal financial literacy does not fit into state-mandated tests at the secondary level, even though it is in the

TEKS for economic students (Texas Education Agency, n.d.). As mentioned earlier, K-8th grades are tested by STAAR®® for readiness in mathematics (Texas Education Agency, n.d.). As a result, Posner (2004) notes that accountability pressure, a political-legal factor, becomes somewhat of an issue in the meaning-oriented curriculum.

A common theme in the data that emerged was the inability to focus in-depth on personal finance education due to time constraints and the pressure to pass state-mandated testing. Jody (mathematics) noted there wasn't enough time to cover personal finance concepts in-depth:

> [Discussing an earlier curriculum that focused on personal finance] I think it would be something that when…when I went to school we were taught money you know at a young age…I don't see as much of that anymore. We used to teach them to read a ruler and we can't read rulers either. So it's one of those things that because of testing, and if it's not on the test, then we've said, ok that's a nice idea, but we've left it behind.

> Kandy (5th grade): The unit in our mathematics curriculum is probably 7 or 8modules; however the pacing guide only gave us a few days to teach the concepts because I guess for 5th grade we have more concepts and a shorter amount of time because we test first.

Angel (CTE) made mention of the professional learning community they used to enjoy in their high school was a casualty of state-mandated testing. She notes:

> I would like to do more cross curriculum training. I think there are more opportunities out there to do it than we actually get an opportunity to do. At one time we had professional learning communities on campus and that really

> helped share curriculum across the board but it’s kind of limited because that was taken away. [Due to state tests?] (nods) Exactly. But professional learning communities were definitely a very positive thing that I saw. It gave us more of an opportunity to go across the curriculum and teach more across the curriculum. Like we could work on projects that carried over from the math class to the computer class and then back out to social studies, and it was a great opportunity to do that…..And you are very correct on it being because of the state mandated tests.

Document analysis of board policies indicated one section about providing personal finance resources in the K-8th classroom in each of the districts participating in this study. Specifically, the policies stated:

> The Commissioner, with input from the SBOE, shall adopt a list of: 1) electronic instructional material; and 2) material that conveys information to the student or otherwise contributes to the learning process, including tools, models, and investigative materials designed for use as part of the foundation curriculum for science in kindergarten through grade 5 and personal financial literacy in kindergarten through grade 8 (district policy website).

Summary

In summary, teachers are very creatively utilizing various resources to teach and reinforce personal financial literacy concepts. Utilizing the Internet as a resource was very time consuming. In the elementary classroom, it is time consuming to be creative in seeking out resources and implementing experiential learning to satisfy TEKS referring to personal financial literacy. Administrators were open to providing resources, if they were available. Due to state- mandated testing, time is still a factor in teaching in-depth on personal finance concepts.

CHAPTER 5

SUMMARY, DISCUSSION, IMPLICATIONS, AND CONCLUSIONS

The purpose of this study was to examine any personal finance training, personal finance curriculum, and personal finance resources teachers have received or are utilizing to instruct personal finance in the classroom. To accomplish that goal, this qualitative study examined, in the context of Posner's (2004) curriculum proper and the curriculum in use, teacher involvement in the curriculum-change process, strategies teachers employed to educate themselves in personal financial literacy, and resources being used in the classroom related to personal financial literacy. The literature review outlined the history of personal financial literacy education and the curriculum-change process as well as efforts being made on multiple levels to address personal financial literacy. This chapter reports the conclusions and recommendations that resulted from this study.

One-on-one interviews of secondary teachers in the disciplines of career and technical education, family and consumer sciences, mathematics and social studies were conducted to draw out information pertaining to personal finance resources being utilized in the classroom, trainings teachers had participated in regarding personal finance, and any part teachers had in the curriculum-change process as it pertained to personal finance curriculum. Two focus groups, one made up of administrators and one of K-8th grade teachers, were hosted to gather data regarding the process of implementing personal finance education. Document analyses of state and district policies pertaining to personal financial literacy were conducted. All data was collected from Central Texas school districts of varying size, with teachers of varying years of teaching experience.

Summary and Discussion of Findings

Curriculum Change Process

Empirical evidence in the literature review found evidence of the need for personal finance curricula (Haynes & Chinadle, 2007; Loibl, 2007; Way & Holden, 2009). In addition, historical data tracks teacher involvement in curriculum creation through the Progressive Era; John Dewey's laboratory school was a well-known example (Mayhew & Edwards, 1936).

However, in this current era of standards and accountability, teacher involvement in curriculum change did not appear to be a high priority in this study. The current educational era has shifted the focus from improving society through teacher involvement in creation of curricula, as the Progressives believed (Mayhew & Edwards, 1936), to student outcomes, which does not necessarily result in *learning* (Sahlberg, 2006). There are several factors which emerged in this study that may explain the lack of teacher involvement in the curriculum-change process. In addition, evidence was found of both the curriculum proper and the curriculum in use, as described by Posner (2004).

Teachers in family and consumer sciences, career and technology education, and economics reported that students were not involved in high-stakes testing in these subjects during high school, but they are required to teach the personal finance concepts because they are required by TEKS. Mathematic teachers are required to prepare students to take state tests, but personal finance math functions are not necessarily covered on state tests. Due to the lack of testing in these disciplines, curriculum creation with a focus on personal finance is not a high priority. As a result, teachers, in order to satisfy the TEKS, are required to use the unit/chapter within the textbook and/or seek outside resources. A positive aspect of no high-stakes testing in these disciplines is that teachers have more flexibility with coverage of personal finance topics, and teachers report the ability to spend time exploring the concepts.

Teachers who participated in the second focus group, those who instructed in K-8th grade mathematics, are required to instruct on personal finance concepts because those concepts are part of TEKS. Teachers in this focus group reported that state tests for 2015-2016 would cover personal finance concepts as presented in elementary mathematics, so they will need to prepare students for high-stakes testing. However, the teachers in this focus group reported they do not have time to go in-depth on personal finance concepts, and some of the concepts covered in elementary mathematics curricula are too abstract for students to understand. The time factor and pacing guides for K-8th grade mathematics may be a barrier to teacher involvement in the curriculum-change process. At this point in time in Central Texas, the personal finance concepts are a unit/chapter in K-8th grade mathematics and not a full textbook. Still, evidence was found of teachers being creative in using experiential learning processes to help students solidify those personal finance concepts.

In this study, the elementary teachers and a few secondary level teachers (Susan, Gregg) used a formal textbook which included a unit/chapter on personal financial literacy. Susan (FCS) and Gregg (economics) both used the unit/chapter in their textbook on personal finance as a topic to be covered. Posner (2004) states that educational goals prescribed to “result in learning over the years and across the subject matters of schooling” (p. 76). Susan and Gregg viewed their unit/chapter on personal finance as part of an educational goal. Susan stated: “I think mine is more, for what I do is more of an addition [to what other teachers are instructing] to so I can’t spend so much time just on that subject….” Gregg, an economics teacher, did not spend much time on personal finance as he believed other topics in economics were more important: “Foundations, economic systems, capitalism, how it works, free enterprise systems – all those things I think are essential…I think kids need to know those things.” Other economic teachers (Matt, Russell, Anthony) did not feel the textbooks were adequate in the coverage of personal finance and utilized other resources.

In terms of the curriculum in use, several frame factors identified by Posner (2004) were found in this study. One particular frame factor was time; data was found in this study of both a negative and positive aspect of this frame factor. Teachers in the K-8th grade focus group reported not enough time to adequately cover personal finance concepts in the mathematics curriculum. However, teachers at the secondary level, due to the lack of high-stakes testing, were able to spend more time on the topic of personal financial literacy.

Data utilizing personal frame factors emerged from all the teachers and administrators.

Several secondary teachers (Matt, Russell, Anthony, Myra, Diane, Andy, Sharon, Kathy) molded the curriculum around their personal beliefs. Matt, Russell, Myra, and Anthony brought personal resources that reflected their own beliefs about personal finance. Sharon, Kathy, Diane, Jane, Linda, and Andy implemented experiential learning techniques in their classrooms in order to cover personal finance topics, which included the use of community resources. Posner (2004) states that experiential learning is not easy to implement due to several demands placed on teachers. Those demands include: 1) crossing of subject matter boundaries; 2) reliance on communities as a resource rather than textbooks and other prepared instructional materials; 3) the requirement of student-centered classrooms which focus on small group work; 4) the organization of ongoing projects that require longer time; 5) the dependence on a teacher who is more of a facilitator than an instructor; and 6) evaluation methods that are more of a demonstration of ability rather than knowledge recall. Implementation of an experiential classroom was time consuming, as teachers researched community and Internet resources to provide valuable and authentic learning experiences of personal finance to their students. Diana and Andy both reported the amount of time required to find resources for instruction in personal finance. However, for some teachers, the belief in the importance of personal finance education was worth the work it required to create such an environment.

Another frame factor found in the curriculum in use (Posner, 2004) was cultural, particularly the culture of the community. Many of the participating school districts served students from low socio-economic communities. Teachers reported many students, more specifically at the secondary level, who help support their families. As a result, teachers such as Myra, Felicia, Kathy, and Catherine made it a point to create lessons on personal finance that directly related to these students such as learning how to read a check stub, the importance of saving, and how to support a child as a teenage parent.

Economic frame factors did not appear to be an issue in terms of curriculum; it was the lack of available curriculum that appeared to be a problem. Posner (2004) stated that curriculum change can be expressed in terms of benefits and costs, usually expressed in dollars.

Administrators in their focus group expressed that funds would be found to purchase resources related to personal finance if they were available. Resources teachers found on the Internet were free; community resources were typically provided at no cost; and only one teacher (Myra) reported using her personal resources to purchase curriculum solely for implementation in her classroom.

In summary, while there was no evidence found of a formal curriculum change process, several factors may explain this lack: the absence of high-stake testing demands, frame factors such as time, and teachers who believe the educational goal was broader than their classroom. In the classrooms that lacked high-stakes testing demands, learning was occurring, mainly through experiential learning environments.

Teacher Strategies

Berry (2010), Lusardi (2010), Godsted & McCormick (2006), and Way & Holden (2009) suggested in their studies that teacher training is foundational for success in personal finance education. Boyd et al. (2009) reported the results from their study indicated that features of teacher preparation program can make an impact on student outcomes. The data in this study found mixed results on supporting those findings. Three themes emerged in terms of professional-development or in-service opportunities on personal finance in response to research question two. Teachers reported not being aware of such opportunities, were aware of them but opted not to participate, or participated in a training which included personal finance components.

Economic factors (Posner, 2004) did not appear to be an issue with professional development opportunities revolving around the subject of personal finance. Several of the teachers (Anthony, Susan, Matt, Catherine, and Justin) specifically stated monies would be available for them if they opted to pursue professional development for personal finance. The data found that teachers primarily relied on their own personal experiences to provide background for instruction in personal finance.

Personal and cultural frame factors emerged in the data regarding professional development on the topic of personal finance. Posner (2004) stated, “Staff development can increase teachers’ skills and knowledge but is less likely to alter fundamentally their basic attitudes” (p. 198). Russell, Anthony, Myra, and Matt all reported having taken personal finance classes for their personal use and subsequently bringing that informal education into the classroom, specifically due to their beliefs about the importance of personal finance education. Russell stated, in response to seeking other resources on personal finance:

> You know, I really haven’t…[This resource I use] is totally against what society teaches us, what the big banks want us to know and I really, I like to focus on that because I feel like we, you now, are kind of controlled by these big wigs and big business. They [the students] need to understand that you can take control of your situation and do what you can do and stay away from debt, stay away from the interest rates…

It is this belief that guided the aforementioned teachers to look for resources they believed in to bring into the classroom. Again as a result of that belief and their personal experiences, professional development pertaining to personal finance did not appear to be a top priority, even though funds were available. Another piece of the personal frame factor (Posner, 2004) is rejection of a curriculum. Matt, Russell, and Andy all rejected the units/chapters in their textbooks because it did not fit in with their beliefs and, as Posner (2004) defined, they rejected it because it was ‘impractical’ (p. 198).

Even though it was not apparent from the data collected, one reason teachers who instruct in personal financial literacy may not be participating in professional development as it relates to personal finance may be the lack of high-stakes testing in certain disciplines and grades. If teachers are not required to prepare students for testing, they may not consider increasing subject matter knowledge important. In addition, TEKS requires the inclusion of personal financial literacy in certain disciplines and grades, and teachers may believe they are adequately covering the topic by utilizing the unit/chapter in their textbook, if available. As an example, Susan (FCS) indicated that if she wanted to focus on that (personal finance) she could, she just chose not to do so. Gregg (economics) adamantly stated, when asked if he sought out resources or professional development to supplement in his economics class: “I do not.” Again neither of these disciplines is included in state testing, but the subject matter of personal finance is included in TEKS for economics, and FCS has always taught on the subject of consumer decision-making; as a result it is covered in economics and FCS classes. This study revealed that the teachers’ beliefs played a large role in whether to seek outside resources, including professional or personal development, on the topic of personal finance which supports Posner’s (2004) personal frame factor.

The literature review indicated that few teachers not only did not feel competent to teach personal finance, but did not receive training in their teacher preparation program (Way & Holden, 2009). In addition, Way and Holden (2009) found that education faculty themselves did not feel competent to teach personal finance. Few of the teachers interviewed in this study indicated having taken a personal finance course in their teacher-preparation program; particularly those economic teachers who are charged with covering TEKS in economics related to personal finance. This is troublesome on many levels. First, if state mandates require personal finance topics be presented in economics, then teachers who present such instruction need to have solid training to present mandated TEKS in a uniform manner. Second, several teachers (CTE, FCS, and economics) were alternatively certified and indicated that their certification training only covered pedagogy and very little subject matter. It would seem prudent that teacher preparation programs, both traditional and alternative, incorporate personal finance training if those disciplines require implementing state-mandated TEKS. The state of Texas does require collegiate institutions that offer teacher preparation programs also offer a personal finance course to its students, but students are not required to take the class (The Center for Financial Literacy, 2013). Third, those teachers who indicated taking a personal finance course in their teacher preparation program were less than complimentary on its impact on their professional practice. One course is inefficient for effective subject-matter instruction. Data from this study revealed teachers reporting that they learned personal finance literacy through trial and error in their adult financial experiences and/or training for their own personal benefit. In any event, that experience/training spilled over into the classroom. While personal experiences in personal finance should not be discounted, it is the kind of experiences and the lessons gained from such experiences that could be troublesome when brought into the classroom. Amanda (administrator) made an interesting note in the administrator focus group when asked about resistance to implementing financial literacy:

> I don’t know if they understand from their own personal standpoint if…when you’re teaching financial literacy it’s hard to stand…unless you say, you know

> guys, I made this mistake. I wish I had known…I went and got a credit card when I was in college and I spent thousands of dollars when I shouldn't have…they need to be able to express their own financial, express their own doubts of what financial literacy things they needed to know when they were growing up and what they can help with kids.

Bart (administrator), in response to the reason some teachers may be resistant to teach personal finance because of bad experiences, replied: "I think so." Amanda (administrator) concurred: "They don't understand it." Bart expounded on his reply:

> Yeah, they don't understand it. I think there are some of them that have had credit loans, those kinds of issues. They would be the ones going wait, they wouldn't probably verbalize it, wait why should I be teaching it when I couldn't even handle my own?

Subject-matter knowledge is a personal frame factor in the curriculum in use (Posner, 2004). Posner states, "Teachers' subject matter knowledge….can play [a] significant role in the success of a new curriculum" (p.198). A required course or courses in the teacher preparation programs would only positively impact a teachers' capability to effectively instruct in personal finance across the curriculum.

In summary, teachers are not necessarily utilizing professional development opportunities as it pertains to personal financial literacy either because they are seeking those resources for their personal belief/use and integrating those into the classroom, relying on their own personal experiences as background, or they believe the textbook is adequate. In addition, personal finance training in teacher preparation programs may be inadequate or not offered.

Resources Being Utilized

The literature review found empirical evidence that teachers might face barriers in implementing personal financial literacy in the classroom such as the lack of resources (Godsted & McCormick, 2007; Loibl, 2007; and Lusardi, 2010). Some teachers (Susan, Gregg) adhered strictly to the textbook to fulfill TEKS requirements; others ignored the unit/chapter in their textbook in favor of other resources (Matt, Anthony, Russell). Other teachers, however, due to the lack of a formal personal finance curriculum and the mandate to fulfill the TEKS in terms of personal financial literacy, were very creative in how they approached instruction on this topic, and many of them chose to instruct by creating an experiential learning environment (Kathy, Sharon, Diana, Andy, and Kandy). The literature review reported several methods of experiential learning that were successful in instructing in personal finance concepts (Carlin & Robinson, 2012; Spencer et al., 2003; St. Pierre et al., 2012). As mentioned previously, Posner (2004) noted demands on schools and teachers in implementing experiential curricula can be daunting.

The data from this study found evidence of execution of experiential environment with a heavy reliance on community resources, cross-curriculum implementation, student small group work, and creative evaluation strategies. Posner (2004) goes on to explain that the implementation of experiential curricula requires more teaching and planning time, more effort, the involvement of students in curricula and instructional decision making, and drumming up community resources to bring into the classroom in the form of materials or subject-matter experts. This was reinforced by the teachers reporting the amount of time it required to secure resources (Kathy, Diane, Andy).

Economic frames (Posner, 2004), as mentioned earlier, were not a factor in securing resources; however, finding reliable resources that could be purchased were almost non-existent. It was evident teachers were looking somewhere other than their school district or educational agency for personal finance materials, particularly those that were applicable and relevant to students. Some teachers also created their own activities to reinforce personal finance concepts. Besides community resources, personal experience was a large component of the resources utilized in the classroom to instruct in personal finance. The TEA website was helpful in providing a list of approved resources teachers could implement in the classroom to instruct in personal financial literacy (Table 3). While some of the approved resources were being put into practice, the small sample size of this study did not reveal a wide use of those resources.

It was of some concern to discover the amount of information being sought from the Internet in terms of validity and integrity of those resources. It was troubling in the sense that there was no rubric for determining the credibility of such resources and how they fit into the courses and related to the TEKS. When questioned about the quality of these resources found on the Internet, teachers defended their use by indicating they wouldn’t use them if they did not feel they were quality (Diane, Andy). The problem may be in teachers, if they have experienced a poor financial occurrence, finding resources that do not adequately present sound personal finance concepts. A rubric for establishing credible Internet resources would be beneficial.

As mentioned earlier, community resources were widely reported as being utilized to provide experiential learning experiences for the students in both secondary and elementary personal finance instruction. While some schools may be hesitant to utilize community resources due to safety concerns, the use of these resources appeared to be credible and valuable in reinforcing concepts taught in the classroom regarding personal finance. The teachers who utilized such resources reported they brought a unique approach in instruction of personal finance and provided students with education that may not typically be covered in a textbook. Also mentioned previously, one school district adopted a personal finance curriculum based on recommendations from the economic teacher.

In summary, in order to fulfill TEKS requirements, teachers utilized textbooks, Internet resources, and/or community resources to instruct in personal finance. This study found a large number of the participants utilizing their own personal experiences as a resource.

Implications for Practice

Two areas of concern emerged from the data gathered in this study with direct implications for professional practice and which, when incorporated simultaneously, possibly provide an extraordinary learning experience for students in terms of personal finance education.

First, due to the lack of high-stakes testing required in economics, family and consumer sciences, career and technical education, and pieces of mathematics, personal financial literacy remains a topic to be “covered” rather than “mastered.” TEKS in the state of Texas require the coverage of personal financial literacy concepts in a number of disciplines, but it is not a required “testing” subject on state tests. Thus it is possible that this omission is the underlying foundation for the lack of a uniform curriculum on personal financial literacy.

In the current educational era of standards and accountability, personal financial literacy has not been a high priority despite evidence in our society that financial illiteracy rates among Americans has direct implications on our economy, particularly in terms of retirement, health care costs, and housing (Centers for Disease Control and Prevention, 2013; Gibbs, 2009; Lusardi, 2011; Lusardi & Mitchell 2007; Report by the U.S. Congress, 2012). While the TEKS in the state of Texas ensure personal financial literacy coverage in certain disciplines, a more uniform curriculum and required state testing on personal financial literacy should be demanded by every parent, teacher, administrator, and policy maker to ensure students who graduate from high school leave with solid financial decision-making abilities. While personal experiences should not be generally discounted, they should not be the sole source of background for teachers instructing in personal financial literacy. The combination of sporadic textbook use, personal experience and Internet resources could create a perilous environment of misinformation on personal financial literacy dependent on circumstances related to schools, teachers, and teachers' own personal finance experience. A more sound approach would be a researched-based course required in the teacher- preparation program.

These findings offer a clear example of Posner's (2004) personal frame factor which states that teachers take a curriculum and mold it to their beliefs; in essence adapting rather than adopting a curriculum. It could also be an example of the economic frame factor (Posner, 2004); items on the Internet typically come at no cost although some teachers (Myra) used their own personal resources to purchase materials for implementation in the classroom. A uniform personal finance curriculum could reduce the risk of ineffective instruction in the classroom. Until a uniform personal finance course for K-12th grades is created, the use of a rubric for Internet credibility would be beneficial. There are plenty of effective resources on instructing in personal finance on the Internet; a way to determine that effectiveness is a must. In terms of the curriculum proper (Posner, 2004), which includes aims, goals, objectives, and content, little evidence was found of a formal, in-depth personal financial literacy curriculum with outlined aims, goals, objectives and defined content. As noted in the literature review (Haynes & Chinadle, 2007; Davis, 2009), there is a need for an across the board curriculum on personal finance, and teachers need to be involved in the creation of such a curriculum. As one teacher mentioned (Andy) they would love a curriculum on personal finance they could implement in their classrooms.

The second area of concern could address the issue of teachers' own personal finance experiences, lack of personal finance coverage in teacher preparation programs and professional development as it pertains to personal finance. The need for personal finance to be required in teacher preparation seems imperative based on empirical evidence in terms of competence and impact on student achievement (Baumann & Hall, 2012; Berry, 2010; Boyd, et al., 2009; Rand, 2012; Way & Holden, 2009). Baumann & Hall (2012) contended in their study that we need to educate individuals for life, including financial education, in order to empower them. Teachers educated in personal finance, with sound pedagogy methods, could make a significant impact not only on individuals and families, but on the economic status of the United States. Relying on professional development alone may not be the impetus for change that is needed. Professional development alone will not necessarily change attitude, according to Posner (2004). While professional development is important for sustaining and maintaining professional practice, the core of competence and mastery of personal finance literacy lies in the inclusion of this subject matter in K-12th grade curriculum, teacher preparation programs and personal experience. The reliance solely on a teachers personal experience as a means for instructing in personal finance may not be a bad thing, but there are many teachers whose experiences as an adult making financial decisions have not been beneficial and that is an area of concern that dovetails with the lack of a uniform curriculum to effectively instruct in personal financial literacy. A more uniform approach to inclusion of personal finance in the areas mentioned earlier, and inclusion of required personal finance course in teacher preparation programs would ensure a more consistent approach to personal financial literacy across the board.

As reported, the data revealed the use of experiential learning environments in terms of education on personal financial literacy. As an implication for practice, the experiential learning environment is an ideal environment in which students can safely apply financial management concepts and experience a “real-life” consequence of various financial decisions. Even though Posner (2004) noted several barriers that might need to be overcome for both schools and teachers in establishing the experiential learning environment, those barriers might be worth overcoming if it cements the personal finance concepts taught in the classroom. An implementation guide or in-service on creating an experiential learning environment might be of value for teachers in implementing personal financial literacy.

Other summaries that emerged from the data that did not directly relate to the research questions involved the timing of personal finance instruction. One mathematics teacher instructed eighth graders and incorporated simple functions that had personal finance implications, like interest. Many of the secondary teachers in this study taught upper classmen, where it may be too late for these students to fully benefit from more than a semester-long course in personal finance. In the districts participating in this study, economics was taken in the senior year of school. Felicia (economics) reported only teaching economics to seniors this year but “next year it will be moving down to sophomores.” As mentioned, FCS/CTE teachers do not see each student because in many districts these are elective courses. Beginning the personal finance concepts in a dedicated manner prior to the senior year in high school and across the curriculum, would be beneficial in terms of cementing concepts. The administrators in the first focus group believed personal finance education should begin earlier than the senior year in high school. Amanda (administrator) stated: “It needs to begin in middle school.” Bart (administrator) chimed in: “I think so, too. I think just that part of savings, accounting for your money; not taking all your money and spending it all at once, there needs something even down in elementary school.”

Another interesting note was the strong focus on state tests, which prevented teachers from instructing the personal finance topics in-depth. The elementary mathematics curriculum pacing guides allowed anywhere from a two-to-six week window for personal finance topics. As noted earlier, some of the concepts taught in elementary mathematics are abstract and the students do not have an immediate, practical application in order to reinforce those concepts. A revamping of the mathematics curriculum in K-8th grade should include age appropriate, relevant, and applicable concepts for each age group, not abstract concepts they cannot immediately apply.

Implications for Further Research

A larger sample size, such as a state-wide or nationwide study for a similar study would be beneficial in terms of solidifying training and resources available to teachers. There may be teachers outside of the Central Texas area who are involved in the curriculum-change process as it relates to personal financial literacy curriculum.

Other research tracks may lead to a study of why a required personal finance course and pedagogy is not included in teacher preparation programs, particularly in the alternative education route when subject-matter knowledge in social studies, business education, mathematics, or family and consumer sciences disciplines may not be as strong. The incorporation of personal finance literacy in other disciplines would be another research interest that would help solidify personal finance concepts across the curriculum.

Finally, the use of professional learning communities would be a topic for further research in terms of whether the presence of such collaborative efforts impacted personal finance education, particularly across the curriculum. Given the extensive use of technology, a study focusing on the effectiveness of an online professional learning community or the effectiveness of online personal finance training for teachers could provide some clear outcomes for impacting personal finance education.

Conclusions

This study provided insight into the lack of curriculum change occurring in a Central Texas area, strategies being utilized to educate teachers or the lack thereof, and resources teachers are using such as professional-learning communities, community resources and the Internet. Data revealed the lack of curriculum-change process occurring, possibly related to the lack of state-mandated tests in the personal finance area. Data also revealed teachers electing to not participate in formal professional development solely on the topic of personal finance, or seeking informal education on personal finance for their own personal reasons. In addition, evidence was found of teachers using their own personal experience, community resources, and the Internet as sources for personal finance materials.

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APPENDIX A: EMAIL TO TEACHERS/FOCUS GROUP PARTICIPANTS TO SOLICIT PARTICIPATION

Dear

I am writing to ask that you consider participating in a research study which will begin this year. This study is entitled Teacher involvement in implementing state personal finance mandates; below is a brief outline of the proposal.

Research has indicated that the recession of 2008 had a large impact on heightened awareness of the need for financial literacy across all ages. Many states implemented financial literacy guidelines or mandates, particularly for high school students, and certain elementary subjects. The research does not, however, completely address how school districts, or teachers themselves, are training or preparing to instruct in personal finance. Preparation to instruct in personal finance may include professional development, curriculum development, or any resources.

The proposed research project is intended to examine experiences secondary teachers who instruct in business, social studies, mathematics or family and consumer sciences, and other interested school district individuals, have been trained to instruct in personal finance, and what resources are being made available to them.

This research project is an effort to complete requirements for Ph.D. at Indiana State University and is undertaken with the knowledge and support of my dissertation committee chaired by Dr. Noble Corey. I am a County Agent in Family and Consumer Sciences for Texas

A&M AgriLife Extension Service. My interest in preparing students and teachers in personal finance has been a long standing one and continues through my dissertation.

Please return the enclosed questionnaire to indicate your interest in participation in this research study. Depending on your response, I will contact you to confirm your participation. I hope that you will consider my request to focus on teacher's preparation to instruct in personal finance in my proposed dissertation this year.

Sincerely,

Deanna Franklin

Letter to Superintendents for Permission to contact Staff in District

Dear

I am writing to ask that you consider allowing me to contact teachers in your district inviting them to participate in a research study which will begin this year. This study is entitled Teacher involvement in implementing state personal finance mandates; below is a brief outline of the proposal.

Research has indicated that the recession of 2008 had a large impact on heightened awareness of the need for financial literacy across all ages. Many states implemented financial literacy guidelines or mandates, particularly for high school students, and certain elementary subjects. The research does not, however, completely address how school districts, or teachers themselves, are training or preparing to instruct in personal finance. Preparation to instruct in personal finance may include professional development, curriculum development, or any resources.

The proposed research project is intended to examine experiences secondary teachers, who instruct in business, social studies, mathematics or family and consumer sciences, and other interested school district individuals, have been trained to instruct in personal finance, and what resources are being made available to them.

This research project is an effort to complete requirements for Ph.D. at Indiana State University and is undertaken with the knowledge and support of my dissertation committee chaired by Dr. Noble Corey. I am a County Agent in Family and Consumer Sciences for Texas A&M AgriLife Extension Service. My interest in preparing students and teachers in personal finance has been a long standing one and continues through my dissertation.

Questionnaire (sent via email)

Date: ___________________

I have been a secondary teacher for_______years.

I instruct in the___________discipline (social studies, mathematics, business, FCS)

My district serves____________students.

I have received your letter regarding the proposed research on teachers' preparation to instruct in personal finance:

______ I am interested in hearing about this study in more detail. Please contact me to schedule a time for me to learn more about the study. My phone number is

__________________________.

______ I would like to talk with you before making any indication of interest. Please call me at__________________________.

______ I am not interested at this time in taking part of this research but contact me at a later date and I may be interested.

______ I am not interested in taking part in this research project.

The responses of any teacher to this request and subsequent involvement of any kind will be held in the strictest confidence.

PLEASE RETURN THIS QUESTIONNAIRE TO THE RESEARCHER IN THE ENVELOPE PROVIDED.

APPENDIX B: CONSENT TO PARTIPATE IN RESEARCH

Teacher Involvement in Implementing State Personal Mandates

You are invited to participate in a research study conducted by Deanna Franklin, who is a doctoral student from the Curriculum, Instruction & Media Technology Department at Indiana State University. Ms. Franklin is conducting this study for her doctoral dissertation. Dr. Noble Corey is her faculty sponsor for this project.

Your participation in this study is entirely voluntary. You should read the information below and ask questions about anything you do not understand, before deciding whether or not to participate. You are being asked to participate in this study because you are a teacher or school administrator.

- **PURPOSE OF THE STUDY**

The purpose of this study is to determine any personal finance training, personal finance curriculum, or personal finance resources teachers have received to instruct in personal finance in their classrooms. We hope to use what we learn from the study to understand how teachers have been prepared, either through district professional development offerings or self-directed education, to instruct in personal finance within the classroom; understanding the personal finance training needs of teachers; and, advocate for implementation of required personal finance coursework in teacher preparation programs.

- **PROCEDURES**

If you volunteer to participate in this study, we will ask you to do the following:

1. We will ask you to take part in either a one-on-one interview or focus group, which will last 1.5 hours.
2. These tasks will include answering questions about what you know and your professional practices.
3. All interviews and focus groups will be videotaped. The video recorder will be set up at the interview or focus group and operated by an assistant.

- **POTENTIAL RISKS AND DISCOMFORTS**

We expect that any risks, discomforts, or inconveniences will be minor and we believe that they are not likely to happen. If discomforts become a problem, you may discontinue your participation.

- **POTENTIAL BENEFITS TO SUBJECTS AND/OR SOCIETY**

It is not likely that you will benefit directly from participation in this study, but the research should help us learn how to improve the personal finance knowledge of teachers and prepare students to make adult financial decisions.

- **PAYMENT FOR PARTICIPATION**

You will not receive any payment or any other compensation for participation in this study. There is also no cost to you for participation.

- **CONFIDENTIALITY**

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by a means of a code number to let Ms. Franklin and Dr. Corey know who you are. We will not use your name in any of the information we get from this study or in any of the research reports. When the study is finished, we will destroy the list that shows which code number goes with your name.

Information that can identify you individually will not be released to anyone outside the study. Ms. Franklin will, however, use the information collected in her dissertation and other publications. We also may use any information that we get from this study in any way we think is best for publication or education. Any information we sue for publication will not identify you individually.

The videotapes that we make will not be viewed by anyone outside the study unless we have you sign a separate permission document allowing us to use them. The tapes will be destroyed three years after the end of the study.

- **PARTICIPATION AND WITHDRAWAL**

You can choose whether or not to be in this study. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you do not want to answer. There is no penalty if you withdraw from the study.

- **IDENTIFICATION OF INVESTIGATORS**

If you have any questions or concerns about the research, please feel free to contact

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812-237-2945

RIGHTS OF RESEARCH SUBJECTS

If you have any questions about your rights as a research subject, you may contact the Indiana State University Institutional Review Board (IRB) by mail at Indian State University, Office of Sponsored Programs, Terre Haute, IN 47809, by phone at (812) 237-8217, or e-mail the IRB at irb@indstate.edu. You will be given the opportunity to discuss any questions about your rights as a research subject with a member of the IRB. The IRB is an independent committee composed of members of the University community, as well as lay members of the community not connected with ISU. The IRB has reviewed and approved this study.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

____
Printed Name of Subject

____________________________________ __________________________
Signature of Subject Date

Indiana State University
Institutional Review Board
APPROVED

IRB Number ________________

Approval: ___________________

Expiration Date: _____________

APPENDIX C: INTERVIEW GUIDE

I want to thank you for taking time to meet with me today. My name is Deanna Franklin and I am conducting research for my dissertation. I want to chat with you today about financial literacy and the steps the school district has taken to implement personal finance instruction.

Please review this consent to participate in my research project. If you will agree to participate, please sign the document. I have a copy for your records.

The interview should take no longer than 1.5 hours. I will be videotaping the session because I don't want to miss out on any of your comments. Although I will be taking some notes during the session, I can't possibly write fast enough to get it all down. Because we are on tape, please be sure to speak up so that we don't miss what you are saying. I have an assistant with me manning the camera.

Our interview will be confidential as outlined in the consent form. Your responses will only be shared with Dr. Corey and me.

Once the interview is complete, I will be transcribing it. I will submit a copy to you to ensure that I have accurately captured your interpretation of these questions. You can make any changes and send it back to me.

Questions	1. What discipline do you teach within? 2. What is the primary grade you teach? 3. How many years have you been teaching? 4. What efforts to implement financial literacy have taken place in your district? Please list. 5. Which of these efforts were you involved in? Please explain. 6. Explain how you have implemented personal finance in your classroom. 7. What resources were provided by your school to instruct in personal finance? Please provide the name of the curriculum and the objectives, and how you have utilized them. 8. How do you feel about the quality of the resources you have been provided? Please explain. 9. What efforts have you employed to seek out other personal finance resources or to educate yourself on personal finance? Please explain. 10. Tell me what other personal finance resources are you utilizing in your classroom? Please provide the name and scope of the curriculum. 11. What is your opinion on the effectiveness of the curriculum you brought into the classroom? Please explain. 12. Describe the preparation you had in your teacher preparation program to prepare you to instruct in personal finance. 13. Even if you had a personal finance course in college, what other steps have you taken to prepare yourself to instruct in personal finance? 14. Provide a list of personal finance trainings in which you have participated. 15. Explain how you did or did not believe these trainings were effective. 16. What other trainings do you believe you need or want in order to more effectively teach personal finance? 17. Describe how you are involved in helping other teachers effectively teach in personal finance.

Closing	Please share other insights you believe are important to my understanding of personal finance strategies or resources employed in your classroom or district. On a scale of 1-10, with one being not competent and 10 being very competent, rate yourself on your competence to teach financial literacy. I'll be transcribing this interview and submitting a copy to you to ensure I've correctly interpreted your answers. I will have that to you within two weeks from today. Thank you for your time.

Possible probing questions:

Say what you mean by…

When you say, [term or phrase], what are you actually saying?

It sounds like you are saying, "…", is this a fair summary?

So are you saying…?

APPENDIX D: MATRIX OF THE INTERVIEW PROTOCOL AND THE RESEARCH QUESTIONS

Research Questions:

1. How have teachers been involved in the curriculum change process in terms of personal finance?
2. What strategies have teachers employed to prepare themselves to instruct in personal finance?
3. What personal finance curriculum and other resources are being utilized by high school teachers?

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	X				X				X	X	X	X	X	X	X	X
2	X	X	X			X				X				X	X	
3	X		X	X	X	X	X	X							X	

APPENDIX E: FOCUS GROUP INTERVIEW GUIDE

I want to thank you for taking time to meet with me today. My name is Deanna Franklin and I am conducting research for my dissertation. Please review this consent to participate in my research project. If you will agree to participate, please sign the document. I have a copy for your records.

The focus group should last no longer than 1.5 hours. I will be videotaping the session because I don't want to miss out on any of your comments. Although I will be taking some notes during the session, I can't possibly write fast enough to get it all down. Because we are on tape, please be sure to speak up so that we don't miss what you are saying. I have an assistant with me manning the camera, and I have an assistant moderator (introduce).

Opening Questions	Please tell us your name, what your current position is and how long you have been in your current position. What is your enrollment in your school/district? How many teachers are in your school/district?
Introductory Questions	Would you tell us how you learned financial literacy skills? What is your perception of personal finance taught in the schools?
Transition Questions	Think back to when you first learned of the state mandate to implement financial literacy education. What were your first thoughts?

Key Questions	Would you describe how financial education has been implemented in your school/district since state mandate was passed? What resistance has there been to implementation of this mandate? Please explain. How easy has it been to implement the financial literacy mandate? How have your teachers that this mandate impacts been trained to instruct in

	personal finance? Please explain. Are funds available for teachers to be trained in personal finance instruction? What do you perceive the barriers are to implementing financial literacy in the schools? What do you perceive the barriers are for teachers to be trained in personal finance?
Closing	Are there any other thoughts any of you would like to share about personal finance implementation in your district/school? Thank you so much for your time here today.

Describe personal finance implementation protocol in your school or district.

What is the provision for training teachers in personal finance?

Describe the resources that have been provided to teacher instructed to teach personal finance?

Do you believe these resources are adequate, and explain why you believe that?

What types of financial resources are provided for professional development in your school or district?

APPENDIX F: FOCUS GROUP INVITATION

Should teachers receive training for instruction in personal finance?

We would like to invite you to participate in our research on Personal Finance Training for Teachers. The study looks at what type of training in personal finance teachers are receiving, and if they have resources to instruct in personal finance.

If you decide to take part we will arrange for you to join a focus group discussion with 7-10 other people. The focus group will last for about 1.5 hours and will take place at a convenient location. For more details or to participate in the study, please contact Deanna Franklin, 217/549- 8725 or deanna.franklin@ag.tamu.edu

APPENDIX G: DOCUMENT ANALYSIS

The following criteria will be used to analyze district documents. The primary purpose will be to examine instructional guidelines and other pertinent documents on the topic of financial literacy.

What type of document is it?	
Date of document	
Name of the document	
Who wrote the document?	
When was it written?	
What information is in the document that pertains to financial literacy?	
For what audience was the document written?	
Where does the document mention personal finance, financial literacy or financial education?	
In what capacity are these terms mentioned?	
What provisions are in the document for training of teachers in personal finance?	

What provisions are in the document for procurement of personal finance resources?	

APPENDIX H: CONSENT TO PARTIPATE IN RESEARCH FOCUS GROUP

Teacher Involvement in Implementing State Personal Mandates

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Your participation in this study is entirely voluntary. You should read the information below and ask questions about anything you do not understand, before deciding whether or not to participate. You are being asked to participate in this study because you are a teacher or school administrator.

- **PURPOSE OF THE STUDY**

The purpose of this study is to determine any personal finance training, personal finance curriculum, or personal finance resources teachers have received to instruct in personal finance in their classrooms. We hope to use what we learn from the study to understand how teachers have been prepared, either through district professional development offerings or self-directed education, to instruct in personal finance within the classroom; understanding the personal finance training needs of teachers; and, advocate for implementation of required personal finance coursework in teacher preparation programs.

- **PROCEDURES**

If you volunteer to participate in this study, we will ask you to do the following:

4. We will ask you to take part in either a one-on-one interview or focus group, which will last 1.5 hours.
5. These tasks will include answering questions about what you know and your professional practices.
6. All interviews and focus groups will be videotaped. The video recorder will be set up at the interview or focus group and operated by an assistant.

- **POTENTIAL RISKS AND DISCOMFORTS**

We expect that any risks, discomforts, or inconveniences will be minor and we believe that they are not likely to happen. If discomforts become a problem, you may discontinue your participation.

Also, because the focus groups include discussion of personal opinions, extra measures will be taken to protect each participant's privacy. The researcher will begin the focus group by asking the participants to agree to the importance of keeping information discussed in the focus group confidential. He/She will then ask each participant to verbally agree to keep everything discussed in the room confidential, and will remind them at the end of the research period not to discuss the material outside.

Only the researcher will have access to the data collected. Any videotapes and transcripts of the focus group will be destroyed after one year or at the end of the study.

- **POTENTIAL BENEFITS TO SUBJECTS AND/OR SOCIETY**

It is not likely that you will benefit directly from participation in this study, but the research should help us learn how to improve the personal finance knowledge of teachers and prepare students to make adult financial decisions.

- **PAYMENT FOR PARTICIPATION**

You will not receive any payment or any other compensation for participation in this study. There is also no cost to you for participation.

- **CONFIDENTIALITY**

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by a means of a code number to let Ms. Franklin and Dr. Corey know who you are. We will not use your name in any of the information we get from this study or in any of the research reports. When the study is finished, we will destroy the list that shows which code number goes with your name.

Information that can identify you individually will not be released to anyone outside the study. Ms. Franklin will, however, use the information collected in her dissertation and other publications. We also may use any information that we get from this study in any way we think is best for publication or education. Any information we sue for publication will not identify you individually.

The videotapes that we make will not be viewed by anyone outside the study unless we have you sign a separate permission document allowing us to use them. The tapes will be destroyed three years after the end of the study.

- **PARTICIPATION AND WITHDRAWAL**

You can choose whether or not to be in this study. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you do not want to answer. There is no penalty if you withdraw from the study.

- **IDENTIFICATION OF INVESTIGATORS**

If you have any questions or concerns about the research, please feel free to contact

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I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

____
Printed Name of Subject

______________________________ ______________________
Signature of Subject Date

Indiana State University
Institutional Review Board
APPROVED

IRB Number ________________

Approval: __________________

Expiration Date: _____________