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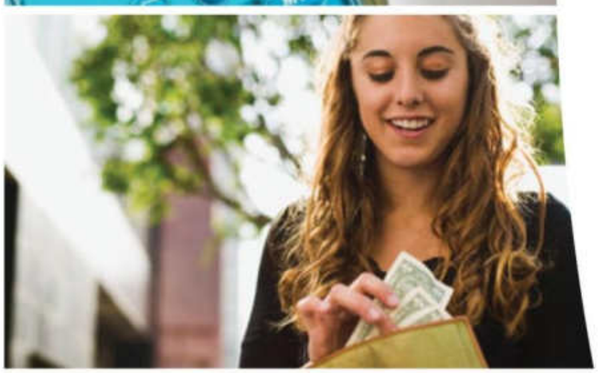

Financial Readiness for Youth:

A Review of the Literature and Programs in the United States

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Research

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College of Agriculture & Life Sciences
Norton School of Family and Consumer Sciences
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USDA

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EXECUTIVE SUMMARY

In response to a request from The Office of Family Policy, Children and Youth, within Military Community and Family Policy, the Arizona Center for Research and Outreach (AZ REACH) team conducted a review on financial readiness for youth ages 3-21 years. This review involved two components: (1) a review of the current research with a focus on key components and effective delivery methods, and (2) an inventory of programs currently in use across the U.S. In the following executive summary, we briefly describe the methods and results from the comprehensive literature review of youth financial readiness programs. We then describe the methods used to identify, review, and create an inventory of financial literacy programs that are in use across the U.S.

Review of the Literature

To chronicle the current state of the research literature and to identify best practices (e.g., key components, evidence, effective delivery methods) a comprehensive review of documents was conducted. Initially, approximately 300 documents were identified. Among these documents, 96 were critically reviewed having satisfied the following criteria:

- The document focused on some aspect of financial literacy (e.g., general money knowledge, financial planning, etc.)
- The document focused on youth (ages 3-21 years)
- The document was specific to programs and youth in the U.S.
- The document contained information that was evidence-based (e.g., presentation of empirical data, citation of relevant studies, reliance on established standards, etc.)
- The document was published within the past 10 years (i.e., since 2002)

For a complete list of all relevant articles that were reviewed and used to surface up key themes, please see Appendices A and B. Results from the literature review are divided into two sections: Key components and effective delivery methods.

Key Components of Financial Literacy Programs

Key components of financial literacy programs were defined as overall best practices in youth financial education. This broad definition was adopted to surface characteristics of effective financial education for youth ages 3-21 including general recommendations (e.g., establishment and alignment with standards and benchmarks) as well as program-specific recommendations (e.g., parent involvement).

Establishment and Alignment with Standards and Benchmarks

The lack of accepted standards for the field of financial education presents a challenge when educating youth audiences about financial literacy. Some efforts have been made toward establishing standards and benchmarks for financial education. An important consideration to include when developing and implementing standards for financial readiness education will be the age of students who are being taught the information, particularly when developing best practices for educating children prior to their entry into the K-12 school system.

Parent Involvement

Educational approaches that are implemented in the most immediate contexts in which youth live and learn—families—may be particularly effective. Several methods of parent involvement were identified in the literature and through existing programs and curricula. Parent involvement varies depending on the age of the child. For very young children, programs may need to be designed for use *by* parents to facilitate with their own children; however, as children enter school-age, parent involvement may be important as an *accompaniment* to curricula.

Evaluation

The importance of conducting evaluations of financial education programs and curricula was a prominent theme in the literature and considered to be a key component of developing and providing effective financial education. Despite the importance placed on the need for evaluation, a lack of rigorous evaluation implementation has resulted in a wide variety of findings related to quality and efficacy in many existing programs. Evaluations varied extensively in terms of definition of success, study design, and quality of measures. Consistent with the literature reviewed, we recommend that standards be developed regarding desired program outcomes and use of reviewed and vetted measures to assess program success.

Instructor Knowledge and Training

One of the major challenges identified by teachers and other instructors currently providing financial education was a lack of time to stay current with ongoing changes in personal finance education, even though young people tend to learn more about economics when they have instructors who are more knowledgeable about the topic. Although the reviewed literature did not make specific recommendations with regard to differential training for instructors based on age of the young person targeted, it was generally recommended that any instructor who is responsible for teaching finance topics be appropriately trained.

Starting Early and Continuing Education for Youth

Evidence from the Jump$tart surveys indicate high school courses on financial education have not been shown to be effective and that education may need to occur earlier. Indeed, postponing financial education until a young person's later years (e.g., high school courses) is not ideal considering that children and youth may learn financial lessons outside of school. Elementary-age children are capable of learning financial concepts, provided the material offered is developmentally appropriate. By waiting to introduce formal financial education until high school, youth have more opportunities to learn inaccurate information and establish poor financial habits that will need to be corrected at a future point.

Addressing Diverse Backgrounds and Needs

The U.S. Department of the Treasury indicates that effective financial education programs tailor their material to the learning needs of their audiences, specifically by incorporating their language, culture, age, and experience. Financial education must be relevant to the immediate contexts in which children and youth live and must be attentive to the messages young people receive about money as well as access to money and financial institutions. For example, focusing educational efforts on savings and investing assumes that youth come from families which have disposable income for such activities.

Alignment with Young People's Motivation and Interest

A recurring theme in the literature on youth financial education was the importance of developing materials that are in alignment with young people's interests in an effort to maximize their motivation to learn and internalize the information. Among the seven universal concepts in effecting changes in behavior (i.e., readiness, resources, relevance, respect, responsibility, reward, and replication) described by the National Endowment for Financial Education is the idea that active learning will most likely occur when programs engage students with *relevant* material and innovative approaches; empirical evidence supports these claims.

Essential Knowledge

Based on the comprehensive review of the literature related to youth financial literacy (2002 to present), several themes emerged as either topics currently covered in evidence-based programs and curricula, or topics that have been recommended as a result of previous reviews of the literature. Thus, programs and curricula need to address one or more of the following topics: (a) budgeting and saving, (b) investing, (c) credit, (d) financing, (e) taxes, (f) insurance, (g) banking and financial services, (h) goal setting, (i) fraud and identity theft, and (j) special topics for young children.

Budgeting and saving. Budgeting and saving surfaced as topics that were important across all ages from the youngest preschool-aged youth to college-aged young adults. Youth themselves identify budgeting and saving as a topic of interest and adult educators, administrators, and community members believe the topics should be covered in financial education. The specific content and modes of delivery, however, will vary at different grade levels.

Investing. Investing emerged as a topic relevant across all age groups as well. In a sample of teachers, administrators, and community members, the majority (51%) identified stocks and bonds and 53% identified general stock market information as important topics to include in financial education. Unfortunately, very few programs and curricula actually reported outcomes specific to investment knowledge; however, a small number of program evaluations have demonstrated significant improvement in investment knowledge and investment growth.

Credit knowledge. In addition to the Jump$tart Coalition's inclusion of credit in the National Financial Literacy Standards, students themselves identified the subject of credit as an important topic and one about which they were interested in learning. Teachers also reported credit as an important aspect of financial literacy. Although the specific aspects of credit included in curricula and programs differ across age groups, there is evidence that credit was included in curricula, in some manner, at all grade levels. Results of the effectiveness of various programs in increasing credit knowledge or changing attitudes toward the use of credit have been mixed.

Financing and debt. Borrowing money and managing debt were topics that adult educators as well as youth identified as important to cover in financial education curricula. Although multiple programs and curricula cover the topic of managing debt, only one evaluation reported outcomes specific to improvements in knowledge about financing and debt.

Taxes. Taxes emerged as a topic that was addressed in program and curricula for older youth only. When asked, 92% of a sample of teachers, administrators, and community members reported that taxes was an important topic to cover in financial education. The topic of taxes was also identified as a topic of interest to teens themselves. Although knowledge related to taxes was found to be a topic of interest for teens and believed to be an important topic to cover, more research is needed to determine if, and how, learning about taxes impacts youth financial literacy.

Insurance. Similar to taxes, insurance and insurance related issues that focused primarily on high school and college age students surfaced in the literature. When asked what they want to learn about, there was a significant increase from 1998 to 2008 in middle and high school students' interest in learning about insurance. Similarly, the majority (84%) of teachers, administrators, and community members in one study reported that they thought insurance was an important topic to include in a high school financial education curriculum. It should be noted that insurance was identified by teachers as well as students as a topic that should be covered in financial education. Multiple programs and curricula address the topic; however, we surfaced no evidence of specific outcomes related to learning about insurance.

Banking and financial services. Access to financial institutions as well as basic banking and financial services emerged as a consistent theme throughout the literature. There was a resounding concern that certain segments of the population do not have access to financial institutions. Interestingly, teachers, administrators, and community members, identified checkbook balancing as an important topic to cover in financial education; however, youth themselves reported a decline in their desire to learn about aspects of banking such as opening and using checking accounts. There is some evidence suggesting that knowledge of or engaging in certain banking-related behaviors contributes to financial knowledge. However, results are mixed in regard to the impact of having taken a course in personal financial management on specific banking behaviors.

Goal setting and decision-making. Goal setting and decision-making were two very broad themes that appeared throughout the literature and program reviews across all age groupings. The majority (86%) of an adult sample identified financial goals as a topic that was important to include in a high school curriculum. Likewise, students reported that setting financial goals was a topic about which they wanted to know. There is some evidence linking classroom and hands-on learning experiences to delayed gratification in an effort to increase overall wealth (in simulations) as well as a higher appreciation for the importance of saving money for the future.

Fraud and identity theft. Issues related to protecting one's finances appeared as an important topic to cover in K-12 financial education programs. Eighty five percent (85%) of a diverse sample of teachers, administrators, parents, community members, and business owners, reported that they thought identity theft was important to include in a high school curriculum. A key goal of the NEFE *High School Financial Planning Program* is to generate in students the ability to protect themselves against financial pitfalls. There is some evidence suggesting that youth of all ages show improvement in understanding the best ways to keep their money safe as a result of participating in certain financial education programs.

Special topics for young children. Young children require special consideration in regard to content, timing, and delivery methods of financial education. When developing or selecting financial education curricula, the cognitive development of young children must also be taken into account. Furthermore, because young children are not required to be in school, the family must be included as a necessary component in their financial education. The following basic concepts have been highlighted as appropriate to the introduction of financial literacy for young children: (a) a basic understanding of numbers; (b) an understanding of time in relation to past, present, and future; (c) understanding the function of money; (d) understanding the exchange of goods and services; (e) an introduction to financial institutions; (f) understanding choice and decision-making; (g) a basic understanding of the concept of social values such as the fair exchange of money and labor; and (h) instilling the notion of forming good habits and sound reasoning.

Effective Delivery Methods

There is a growing consensus that young children should have access to financial education as part of their educational experience; however, there is no empirical evidence favoring a particular teaching method or technology at the precollege level. Several effective (e.g., youth-friendly) delivery methods emerged as commonly used. The delivery methods that surfaced as a result of the present review included: (a) interactive learning experiences, (b) use of real money, (c) integration of curriculum, (d) involving the community, and (e) a combination of other unique delivery methods.

Interactive Learning Experiences
A recurrent theme across the literature is the need for 21st century experiential learning that is contextually meaningful. There were examples of programs incorporating hands-on interactive experiences across all age groups. For younger children, creating events out of daily routines (e.g., a trip to the bank or credit union) followed by opportunities to translate the real-life experience into play help young children begin to develop an understanding of concepts related to finances. For older youth, simulation experiences allow learning to translate into action (e.g., financial decision-making). There is evidence suggesting that hands-on, interactive experiences have a positive impact on financial knowledge, beliefs, and decision-making.

Use of Real Money
Financial education that demonstrates relevance to students is believed to motivate learning and improve retention. A number of researchers and educators have advocated for the use of real money in an effort to help youth better understand the relationship between work, decision-making, and money. There is evidence suggesting that the use of real money (e.g., programs that provide piggy banks, matched saving opportunities, etc.) along with classroom learning may have a positive impact on financial attitudes as well as gains in knowledge as demonstrated through higher financial literacy test scores.

Integration of Curriculum
Some experts have recommend that financial education concepts should be integrated into existing K-8 courses (e.g., math, social studies), but for high school students there should be stand-alone courses. Results are mixed however, as to whether infusing financial education into existing courses or delivering financial education as stand-alone curricula is the more effective approach; there is evidence to support both approaches. Results are also mixed in terms of the performance of students in states where there is a mandate on personal finance compared to those with no mandate. Clearly, more research is needed to determine best practices with regard to effective (e.g., youth-friendly) delivery methods for different age groups and to develop effective strategies for implementing financial education in the K-12 curriculum.

Involving the Community
There are programs that exist which involve community members in a variety of ways in financial education across all age groups. Some programs involve business community members in the delivery of classroom curricula; whereas, others train volunteers to guide hands-on simulation activities. Overall, results have been favorable, with students, teachers, and volunteers indicating satisfaction with such delivery methods.

Other Unique Delivery Methods

The findings in this area relate primarily to the financial education delivery methods utilized with young children. As previously stated, a scarcity of empirical evidence exists on the effectiveness of financial literacy program delivery methods for very young children. Recommended strategies for working with this age population include hands-on, experiential opportunities as well as methods involving multiple modes of communication (e.g., music movement, reading aloud, call and response, and paper and pencil activities). Special attention must be given to children's cognitive development and ways to actively involve the family in the educational process for young children to promote increased knowledge and awareness regarding financial education.

Financial Readiness Program Inventory

In addition to the literature review, AZ REACH also conducted a comprehensive search for an inventory of financial readiness programs that are currently in use across the U.S Multiple search strategies were used, and in total, approximately 225 programs were initially identified. Among these programs, only 22 programs were retained for further examination of their evidence-based quality (see Appendix C) having satisfied the following criteria:

- The program had empirical research evidence
- The program focused on some aspect of financial literacy (general money knowledge, financial planning, etc.)
- The program included a curriculum (e.g., lessons, teacher guides, etc.)
- The program focused on youth (ages 3-21 years)
- The program was conducted in the U.S.

In addition to these 22 programs, an additional four cases were retained for further examination even though they did not fit one of the above criteria (i.e., no empirical evidence found or was a game rather than a curriculum). These programs were reviewed given their widespread use across the U.S. The detailed list of all programs in the inventory can be found in Appendix C. These programs were then sent on to the Clearinghouse for Military Family Readiness at Pennsylvania State University for an evidence review.

Summary and Conclusions

Overall, policy makers and researchers agreed that financial education for youth is of vital importance for long-term fiscal well-being of individuals, families, and our nation as a whole. Although several steps have been made toward providing quality financial education for youth, such as the establishment of national standards in financial education, important challenges and considerations still exist. For example, there is a great deal of variability in the extent to which states are required to implement financial education standards. Further, there needs to be a greater emphasis on developing and implementing rigorous evaluations of financial education programming. Of approximately 225 programs initially identified for the inventory of programs in use across the U.S., we found evaluation data for only 22. To ensure educators are utilizing the most effective financial education practices, programs must be more systematically evaluated. Although there is an increased emphasis on educating youth regarding financial literacy, educational efforts for middle- and high-school students appear to be emphasized more than those for younger children (e.g., preschool and early elementary). Programming for younger children is less common and even less likely to be evaluated for effectiveness despite the fact that several articles emphasized the importance of early childhood educational efforts to promote positive financial habits. For financial education across all ages, contextually appropriate topics and delivery methods, including those that attend to low-income and culturally diverse youth, will continue to be an important consideration when designing educational efforts that align with student interests, motivation, and interactive learning preferences.

Financial Readiness for Youth: A Review of the Literature and Programs in the United States

In response to a request from The Office of Family Policy, Children and Youth, within Military Community and Family Policy, the Arizona Center for Research and Outreach (AZ REACH) team conducted a review on financial readiness for youth ages 3-21 years. This review involved two components: (1) a review of the current research with a focus on key components and effective delivery methods, and (2) an inventory of programs currently in use across the U.S. In the following report, we describe the methods and results from the comprehensive literature review of youth financial readiness programs. We then describe the methods used to identify, review, and create an inventory of financial literacy programs that are in use across the U.S.

REVIEW OF THE LITERATURE: KEY COMPONENTS AND EFFECTIVE DELIVERY METHODS

This report provides a review of the current research regarding financial literacy education with a focus on key components and effective delivery methods. Jump$tart Coalition, one of the largest nonprofit organizations focused on financial literacy for young people, has collected survey data from high school students since 1997 and has tracked trends in youth financial literacy. The results of these surveys have reflected a lack of financial literacy among youth. High school seniors consistently receive failing scores on the literacy test—even those who have taken semester-long courses in money management or personal finance (Mandell, 2008c). Moreover, students who have taken financial literacy courses do not perform better than students who have not taken a course (Mandell, 2008c). Follow-ups at one and four year intervals reflect the same trend among youth (Mandell & Klein, 2007). While these studies examine and provide data regarding the impact of having taken *any* high school course, they do not offer data on the efficacy of specific programs. Specific programs have been rigorously evaluated (e.g., *High School Financial Planning Program, The Stock Market Game*, etc.) and have shown beneficial effects. Thus, it is imperative to identify the key components and effective (e.g., youth-friendly) delivery methods which may lead to positive changes in financial literacy and/or behavior among youth. AZ REACH conducted a comprehensive review of the current literature to identify such key components and delivery methods. Methodology and results are described below.

Methodology

A comprehensive search was conducted to identify relevant literature on financial readiness for youth, with a focus on programs that take place in a formal setting (e.g., school, structured youth programs). Search terms included, among others, *financial education, youth, money curriculum, financial literacy,* and *money education*. Searches were conducted using traditional academic databases (e.g., PsycInfo, EBSCO) as well as Google Scholar to surface a breadth of literature, including peer-reviewed journal articles, reports, evaluation studies, government documents, etc. In addition, "backward searching" was used to identify additional literature by reviewing relevant resources cited by the reviewed articles and reports. All documents that examined and/or discussed financial education for youth ages 3-21 years were considered for further examination.

Initially, approximately 300 documents were identified. Among these documents, 96 were critically reviewed having satisfied the following criteria:

- The document focused on some aspect of financial literacy (e.g., general money knowledge, financial planning, etc.)
- The document focused on youth (ages 3-21 years)
- The document was specific to programs and youth in the U.S.

- The document contained information that was evidence-based (e.g., presentation of empirical data, citation of relevant studies, reliance on established standards, etc.)
- The document was published within the past 10 years (i.e., since 2002)

Given the extensive amount of literature initially identified and the focus of the present report on the *current* state of the literature, only documents published within the past 10 years were included.

Results

In total, 96 relevant documents were reviewed. Given the large amount of literature, the following narrative provides summaries of the key themes that surfaced with respect to important components and effective delivery methods, rather than providing an exhaustive summary of every study. To exemplify key themes, the most relevant and representative studies are cited in the text. For a complete list of all articles that were reviewed and used to develop key themes described in the current report, please refer to Appendices A and B. (Note: Appendix A indicates which articles contain information relevant to each key component and effective delivery method. Appendix B describes the subcategories of Essential Knowledge). Results from the literature review are divided into two sections: Key components and effective delivery methods.

Key Components

Key components of financial literacy programs were defined as overall best practices in youth financial education. This broad definition was adopted to surface characteristics of effective financial education for youth ages 3-21 including general recommendations (e.g., establishment and alignment with standards and benchmarks) as well as program-specific recommendations (e.g., parent involvement). With respect to key components, eight themes surfaced from the literature in terms of best practices: (a) establishment and alignment with standards and benchmarks; (b)parent involvement; (c) evaluation; (d) instructor knowledge and training; (e)starting early and continuing; (f) addressing diverse backgrounds and needs; (g) alignment with young people’s motivation and interest; and (h) essential knowledge.

Establishment and Alignment with Standards and Benchmarks

A lack of accepted standards for financial education provides a challenge in fostering financial literacy among youth (McCormick, 2009; Wolfe-Hayes, 2010). Still, efforts have been made toward establishing standards and benchmarks for financial education. For example, the U.S. Department of the Treasury has identified eight elements of successful financial education programs as they relate to content, delivery, impact, or sustainability (U.S. Department of the Treasury, 2004). They suggest that a successful program:

- Focuses on basic savings, credit management, home ownership, and/or retirement planning
- Is tailored to its target audience, taking into account language, culture, age and experience
- Is offered through a local distribution channel that makes effective use of community resources and contacts
- Follows up with participants to reinforce the message and ensure that participants are able to apply the skills taught
- Establishes specific program goals and uses performance measures to track progress toward meeting these goals
- Demonstrates a positive impact on participants’ attitudes, knowledge, or behavior through testing, surveys, or other objective evaluation

- Can be easily replicated on a local, regional, or national basis so as to have broad impact and sustainability
- Is built to last as evidenced by factors such as continuing financial support, legislative backing, or integration into an established course of instruction

More recently, the President's Advisory Council on Financial Literacy (U.S. Department of Treasury, 2009) recommended standardizing skills to be gained from financial literacy programs and mandating financial education in all K-12 schools. The idea that financial education should be a basic and required feature of K-12 education that is reflected in state standards was echoed by several others (National Association for State Boards of Education, 2006; National Endowment for Financial Education, 2002). Programs aligned with developed standards can also be tailored to meet the needs of special populations (Todd, 2006, May). Although many states have developed curricular standards for economics and personal finance, as summarized by Suiter and Meszaros (2005), many do not require implementation of these standards. Adults living in states that had more stringent personal finance requirements for high school scored better on financial knowledge than those in states with no requirements (Grossi, 2012).

Age. When considering implementation of standards for education, it may be important to consider age of students. The Jump$tart Coalition has developed a set of 26 national standards for financial literacy with respect to income, money management, spending and credit, and saving and investing skills at different ages. Breitbard and Reynolds (2003) provide as examples with respect to income, in 4th grade youth might learn how people can get income through basic sources such as wages and gifts, in 8th grade youth should learn that income can also come from interest and rent, and by 12th grade youth should be able to link choices about education, jobs, and careers with income levels.

Whereas attempts at developing and implementing standards have been made at the K-12 level, there is a greater lack of standards and benchmarks in existence for preschool-aged children. There is very little consensus about effective financial education approaches for younger children, which is likely due in part to the lack of priority paid to this age-group (Holden, Kalish, Scheinholtz, Dietrich, & Novak, 2009)by those developing standards (e.g., Jump$tart Coalition, state financial education offices, etc.). Promoting early financial learning and readiness prior to entering the K-12 school system will likely require more discussion among educators and policymakers on how to best educate young children using strategies that are appropriate for their cognitive stages.

Parent Involvement

Another theme that emerged from the literature on financial education for youth had to do with the importance of the familial context and involving parents in financial education. According to a recent review, youth are likely to identify their parents and families as the primary source of their financial learning (Lucey & Giannangelo, 2006), and many teens would prefer to learn about money from their parents (Capital One, 2007). Thus, educational approaches that involve the most immediate contexts in which youth live and learn—families—may be particularly effective (Kelly, 2005; Lucey & Giannangelo, 2006). Although one study suggested that there was no evidence to indicate parents' involvement in youths' finances (e.g., time discussing finances, providing an allowance, etc.) is beneficial for financial literacy among high school seniors (Mandell, 2008b), it may be the case that parents themselves are lacking in knowledge. Thereby, involving parents in educational efforts may be beneficial for both youth *and* their parents (Johnson & Sherraden, 2007; National Endowment for Financial Education, 2002). Both youth and parents can receive financial training that potentially corrects inaccurate information and develops opportunities for open and honest communication about finances among parents and their children.

Several methods of parent involvement were identified in the literature and through existing programs and curricula. For example, some programs included parents by providing students with school-to-home activities (e.g., *It's a Habit*; O'Neil-Haight, 2010), encouraging discussion with parents (e.g., family press conference in Money Savvy Kids; Hagedorn, 2004a; Hagedorn, 2004b; Hagedorn, 2005a; Hagedorn, 2005b; Hagedorn, 2005c, 2005d; Hagedorn, 2007; Schug & Hagedorn, 2005), and offering workshops to parents as well as matched savings programs for their children *(I can Save*; Sherraden, Johnson, Elliott, Porterfield, & Rainford, 2007; Sherraden, Johnson, Guo, & Elliott, 2011).

Age. For preschool children it may be particularly vital that programs include and even target parents given that these children are not required to be in school (Holden et al., 2009). For the youngest children, programs may need to be designed for use *by* parents to utilize with their own children. As children enter school age, parent involvement may become an *accompaniment* to curricula. Most of the programs with a parent component identified were targeted to children and youth at the pre-K through elementary school levels, such as *It's a Habit*, *Money Savvy Kids*, and *I can Save* (e.g., O'Neil-Haight, 2010; Schug & Hagedorn, 2005; Sherraden et al., 2007). However, middle and high school students also indicate that they want to know how to talk with their families about money (Varcoe, Peterson, Wooten Swanson, & Johns, 2010). Thus, parent involvement may need to be integrated more systematically through older childhood to foster open communication between youth and their parents, rather than relying solely on economics and personal finance courses taught at school.

Evaluation

The importance of conducting evaluations on financial education programs and curricula was a prominent theme in the literature and considered to be a key component of developing and providing effective financial education (e.g., Fox, Bartholomae, & Lee, 2005; McCormick, 2009; U.S. Department of the Treasury, 2004; U.S. Department of the Treasury Financial Literacy and Education Commission, 2006). For example, the U.S. Department of the Treasury notes that successful financial literacy programs should incorporate evaluation methods to track progress toward specific goals and demonstrate impacts (U.S. Department of the Treasury, 2004; U.S. Department of the Treasury Financial Literacy and Education Commission, 2006), and the National Association for State Boards of Education has recommended that states develop assessments aligned with their standards in improving capacity to evaluate K-12 financial literacy programs (National Association for State Boards of Education, 2006).

Despite the importance placed on evaluation, fidelity of implementation and quality in many of the existing programs has been questionable (Fox et al., 2005). Fox and colleagues identified several specific challenges to current evaluation efforts. For example:

- Many programs do not conduct any evaluations at all, or simply track number of youth served as an indicator of success
- Many evaluations do not distinguish among delivery modes, limiting the ability to isolate methods that are effective from those that are not
- Evidence of long-term benefits are lacking because few programs track participants' results over time and instead focus on simple pre- and post-test designs

These authors suggest that the absence of national standards for education and evaluation contribute to these evaluation issues. Other challenges identified in current evaluation methods included differences among programs in terms of defining success and utilizing assessments that are not contextually relevant to students from diverse backgrounds (Lucey & Giannangelo, 2006; Schuchardt et al., 2009).

For the current report, in identifying programs for inclusion in the inventory of programs, over 200 programs and curricula were surfaced up; however, only 22 of these programs possessed evaluation-related findings which was a required criteria for inclusion in the program inventory (see Appendix C). As suggested by Box (2006) and supported by our own review of programs and evaluations, the Junior Achievement (JA) series of programs were among the most rigorously evaluated programs, with multiple evaluations available as well as long-term follow-ups for some programs (e.g., Caliber Associates, 2007; Diem, n.d.; Evaluation and Training Institute, 2010; Harder+Company Community Research, 2009; The Education Group, 2004). Other programs that have been extensively evaluated included NEFE's *High School Financial Planning Program* (e.g., Fox et al., 2005) and the *Money Savvy Kids* program (e.g., Hagedorn, 2004b; Hagedorn, 2005a; Schug & Hagedorn, 2005). As noted above, evaluations varied extensively in terms of definition of success, study design, and quality of measures. Consistent with the literature reviewed above, we recommend that standards be developed regarding desired program outcomes and use of reviewed and vetted measures to assess program success.

Age. Across all age groups, evaluation is a vital component. Several programs are noted above (and found in Appendix C) which have conducted evaluations to varying degrees of rigor, but these programs are all at the elementary, middle, and high school levels; they have not addressed children of preschool-age prior to entry into the K-12 levels of education. Special challenges exist for conducting evaluations with very young children. For example, Holden and colleagues (2009) note that for young children (e.g., preschool), one challenge includes finding appropriate methods of evaluation for young children who cannot yet read or write. Even in studying elementary-aged youth, Schug and Hagedorn (2005) noted that it was apparent that some children did not understand the concept of a Likert scale and were prone to filling out measures as artwork. In addition, it can be difficult (particularly without a control group) to parse out gains in learning which may be due to the program versus those which are due to normal cognitive growth and development (Holden et al., 2009). Thus, care must be taken to make methodological and evaluation choices that are appropriate to the age of the children being studied.

Instructor Knowledge and Training

In a symposium from the National Endowment for Financial Education, participants indicated that financial education should be incorporated into programs that serve K-12 audiences, yet concerns were also expressed about instructors' confidence in teaching such topics (National Endowment for Financial Education, 2002). Even among high school teachers currently teaching finance topics, one of the major challenges they identified was a lack of time to stay current with the field and ongoing changes in personal finance education (Loibl, 2008). Instructors who are not trained in economics may provide inaccurate information to students (see Morton, 2005). Studies have documented the effectiveness of providing training to instructors who are teaching personal finance courses (for a review, see Lucey, 2007). Students tend to learn more about economics when they have instructors who are more knowledgeable about the topic and use effective teaching methods, but typically most instructors have very little training in economics (Watts & Walstad, 2006).

Thus, boosting instructor knowledge and preparedness to teach topics on financial readiness is a key component of successful programming. Including financial education as a part of standard coursework for those who are training to be educators may be one path to increasing instructor knowledge (National Endowment for Financial Education, 2002). Instructors can be informed of appropriate topics for college, middle, and high school students as well as teacher resources available online (Klemme, 2002). In addition, ongoing professional development (National Association for State Boards of Education, 2006) and utilizing trained volunteers from local businesses to work with educators and classrooms (U.S. Department of the Treasury Financial Literacy and Education Commission, 2006) surfaced as potential recommendations.

Many of the programs which have been evaluated have incorporated a training aspect for instructors. For example, the *Money Savvy Kids* program (e.g., Hagedorn, 2004a; Hagedorn, 2004b, 2007; Schug & Hagedorn, 2005) and *I Can Save* program (Sherraden et al., 2011) each conducted one-day workshops for educators. The *Parents and Teachers as Wealth Coaches* project (O'Neil-Haight, 2010) provided three teacher trainings during faculty meetings. Educators in the Milwaukee Education Partnership receive a comprehensive training consisting of a course on integrating a stock market simulation in classes, direct assistance for classroom teaching, and instruction on the basics of personal finance (Posnanski, Schug, & Wynn, 2002). Other programs offer a less formal instructor training such as an online support center (Harter & Harter, 2010) or self-directed training (Niederjohn, 2006).

Age. Whereas some suggested that most educators at the K-12 level have little to no training in economics (Watts & Walstad, 2006), one article focusing explicitly on teachers of high school financial courses indicated that nearly half had undergraduate degrees and two-thirds had graduate degrees in a related field (Mandell, 2008b). It may be the case that at the secondary levels of education where instructors are more specialized in content, economics and personal finance teachers have more specific training in that area than instructors at the younger levels who teach a variety of topics. Although the reviewed literature did not make specific recommendations with regard to differential training for teachers based on age of youth targeted, it was generally recommended that any instructors who are responsible for teaching finance topics be appropriately trained.

Starting Early and Continuing Education for Youth
Some individuals (Kiviat, 2010; McCormick, 2009) suggest that financial education may need to occur before high school, citing evidence from the Jump$tart surveys that indicate high school courses on financial education have not been shown to be effective. Similarly, the timing of financial education may not adequately meet the needs of students because it is introduced too late in children's development (Lucey, 2007). More specifically, postponing financial education until later (e.g., high school courses) is not ideal considering that children may learn financial lessons outside of school. By waiting to introduce financial education, children have more opportunities to learn inaccurate information and establish poor habits that will need to be corrected at a future point (Suiter & Meszaros, 2005). Further, youth who drop out of school, and are perhaps in most need of financial education, may not receive financial education if classes are not offered or required until later high school years (Suiter & Meszaros, 2005).

Consequently, there have been recommendations that financial education classes for youth begin as young as kindergarten (McCormick, 2009; U.S. Department of Treasury, 2009a) or even earlier (Holden et al., 2009). Indeed, young children are capable of learning financial concepts provided the material is offered using developmentally appropriate strategies (Watts & Walstad, 2006). For example, very young children may need to learn more basic concepts such as trade and exchange before being able to grasp more financially-oriented information (Holden et al., 2009). Providing financial education in the early grades can promote life-long positive habits in children such as saving and responsible spending (Suiter & Meszaros, 2005). Several programs were identified in the program inventory which targets elementary-aged children, such as *Money Savvy Kids* (e.g., Schug & Hagedorn, 2005) and *I Can Save* (e.g., Sherraden et al., 2007), although at the preschool-level there are very few educational programs available and almost none have evaluation findings to support their effectiveness (Holden et al., 2009).

Addressing Diverse Backgrounds and Needs
The U.S. Department of the Treasury recommends that effective financial education programs tailor their material to the learning needs of their audiences, particularly by offering special consideration to issues of language, culture, age, and experience (U.S. Department of the Treasury, 2004; U.S. Department of the Treasury Financial Literacy and Education Commission, 2006). Others agree that uniform approaches that are not tailored to the needs of specific learning groups are likely to be ineffective (Fox, Hoffmann, & Welch, 2004). Moreover, articles discussed the importance of designing and implementing educational efforts that address low income populations, urban populations, and various cultural contexts.

With respect to income, criticisms of some financial education efforts included concern that they are designed to target the needs and resources of children and youth from middle- to upper-income families. For example, educating young people on the concepts of saving and investing assumes that they have (or will have) steady jobs with discretionary income left for such activities (Dalto, 2011; Lucey, 2007). Instead, young people from low-income families might benefit from education on public benefits and work incentives (Dalto, 2011). In addition, these young people and their families may not have access to checking or savings accounts (Johnson & Sherraden, 2007) and may first need more basic education on financial institutions and banking options. The Saving for Education, Entrepreneurship, and Downpayment Policy and Practice Initiative (SEED) was developed to help meet this need (Scanlon, Buford, & Dawn, 2009; Shobe & Sturm, 2007). SEED is a matched-savings program that focuses on low-income youth from preschool-age up. SEED is delivered as part of programs which provide financial education for these youth while also introducing them to financial institutions, savings accounts, and incentives to save. For example, one of the programs implementing SEED, Juma Ventures, provides $300 to youth upon high school graduation as well as 36 online educational modules, for which students can receive a $200 incentive (Scanlon et al., 2009). As part of the program, students are also required to attend two on-site financial literacy workshops.

Beyond income levels, several scholars discussed the importance of broader considerations of cultural context (e.g., Devane, 2009; Lucey, 2003; Lucey & Giannangelo, 2006; Todd, 2006, May). Financial education must be relevant to the immediate contexts in which young people live and be attentive to the messages they receive about money, access to money and financial institutions, etc. Several recommendations were posed. Lucey (2003) argued that financial education should include simulations and open-ended learning processes to introduce *all* students to resources and challenges that a variety of different contexts may provide. In addition, Lucey also suggests that standardized approaches lacking in multicultural awareness should be abandoned in favor of more individually and contextually appropriate materials. Still, standardized materials can provide consistency in education and evaluation. One specific approach used at a charter school for Native American Students was to begin with a reputable standard curriculum and revise it over time to meet the needs of the population (Todd, 2006, May). Thus, while guidelines and standards are needed to ensure quality financial education as a priority for all youth, these educational efforts should be balanced with the needs of diverse groups of young people in mind.

Age. Contextually relevant materials are vital across all age groups of children and youth. Just as materials should be developed and utilized which are developmentally appropriate (e.g., Holden et al., 2009), diversity in culture and economic background should be a considered when developing educational materials for children at all stages. Lucey (2003) warned that providing economic curricula that are not contextually relevant may result in alienation of young people—particularly those most in need of financial education (e.g., urban, low-income youth). As described above, it is important to provide children with accurate information and skills early on before inaccurate information or poor attitudes with respect to finances become habit (Suiter & Meszaros, 2005). Contextually relevant educational opportunities from early ages are likely to provide the best opportunity to establish positive habits and attitudes about money.

Alignment with Young People's Motivation and Interest

Another recurring theme in the literature on youth financial education was the importance of developing materials that are in alignment with interests of young people to maximize their motivation to learn and to internalize the material. Some scholars suggest that a greater integration between what is being taught and what motivates youth to learn needs to exist (Watts & Walstad, 2006). Indeed, one of NEFE's seven universal concepts in effecting changes in behavior is the idea that active learning will be most likely to occur when programs engage students with relevant material and innovative approaches (see Parrish & Servon, 2006). Empirical evidence supports these claims. For example, results from the Jump$tart surveys indicate that motivation is an important factor. These surveys have not supported the effectiveness of high school economics and personal finance courses and may be reflective of the need for education to be more clearly linked with *why* financial literacy is important to students' own futures (Mandell, 2008b; McCormick, 2009). For example, although high school students may not relate to the importance of retirement planning, more immediate goals such as saving for cars and college may be more salient (National Endowment for Financial Education, 2002). In addition, middle school students were found to underestimate the amount of money required to purchase and maintain the lifestyles they expected to live (Beutler, Beutler, & McCoy, 2008), and these authors suggested that education should include helping young people to understand the amount of resources (e.g., education, work hours, etc.) that will be required to meet their goals.

Age. Several examples of educational efforts aligning with young people's interests and motivation were identified, but these efforts focused largely on middle school-aged youth and older. For example, Varcoe and colleagues (2010) gathered information on the learning preferences of youth at middle and high school age in terms of topics and delivery methods. Based on the stated preferences of this diverse group of youth (e.g., pregnant and parenting teens, juvenile offenders, public school students), these researchers developed and updated materials for the *Money Talks for Teens* curriculum. These youth wanted to know about topics such as what credit is and how to get it, making money go farther, how to buy a car, and how to open and use savings accounts. They also reported wanting to learn via school lessons and newsletters as well as online resources. This program provides a good model of how to assess the learning preferences, both in terms of topic and format, for youth when developing materials. In another study of youth (middle school-aged through young adult), online hip hop discussion communities were used as a tool to understand the learning preferences of this group of youth (Devane, 2009). Similar methods of identifying learning preferences of younger children and developing materials around these preferences were not identified. Younger children may need more guidance and structure in learning the basic concepts of finances, but programs may consider identifying saving and spending goals of these younger children as well so that they are able to apply what they are learning to their own situations.

Essential Knowledge

An important consideration in identifying key components of effective financial education programming must include a discussion of which topics educational efforts should encompass. The Jump$tart Coalition for Personal Financial Literacy, a coalition uniting 140 constituent groups, has identified national standards in K-12 personal finance education which serve as a model framework for personal finance curriculum. The 26 standards are encompassed within six overarching themes including: (a) financial responsibility and decision-making, (b) income and careers, (c) planning and money management, (d) credit and debt, (e) risk management and insurance, and (f) saving and investing.

Based on the comprehensive search of the literature related to youth financial literacy from 2002 to present, several themes emerged as either topics currently covered in evidence-based program and curricula, or topics that have been recommended as a result of previous reviews of the literature. The topics that emerged largely overlap with the national standards put forth by the Jump$tart Coalition and include: (a) budgeting and saving, (b) investing, (c) credit, (d) financing, (e) taxes, (f) insurance, (g) banking and financial services, (h) goal setting, (i) fraud and identity theft, (j) and special topics for young children. Some of the topics were applicable across ages and when empirical evidence was found across age groups, a sample of these results is provided. Several of the topics, however, only applied to older youth and for some topics no evidence of outcomes were reported with regard to a specific topic.

Budgeting and Saving. Budgeting and saving surfaced as topics that were important across all ages from the youngest preschool-aged youth (O'Neil-Haight, 2010) to college-aged young adults (Maurer & Lee, 2011). When asked what they want to learn about, a sample of middle and high school students reported that they were very much interested in learning how to track their spending and how to save for a variety of future goals (Varcoe et al., 2010). Similarly, in a diverse sample of teachers, administrators, and community members, respondents reported that they thought savings options (96%), personal budgeting (98%), money management (94%), and spending plans (85%) were important content to include in a high school financial education curriculum (Tschache, 2009).

Although budgeting and saving emerged as an important theme across age groups and programs, the specific content and mode of delivery varied at different age/grade levels. For example, in one study, preschool-aged children engaged in lessons on responsible money management, saving, and planning. These lessons were offered via different modes of delivery (e.g., music, movement, call and response, etc.; O'Neil-Haight, 2010). The *Money Savvy Kids* program for elementary-aged youth provides hands-on learning through saving opportunities and incorporates classroom lessons on savings and budgeting, among other topics. Significant increases regarding knowledge of budgeting and saving have been reported with this program (see Hagedorn, 2004a, 2004b, 2005a, 2005b, 2005c, 2007). Although significant increases have been reported, the effect sizes have been small. Budgeting and saving was a key theme that emerged for both middle and high school aged youth as well. The JA *Finance Park* program introduced budgeting and savings through a combination of classroom lessons on a wide variety of topics followed by a full-day, hands-on simulation. As a part of the simulation experience, youth were assigned family and income scenarios and had to make budgeting decisions based on the family and income information they received (Carlin & Robinson, 2010; Evaluation and Training Institute, 2008, 2010). Youth who went through the simulation twice demonstrated a greater understanding of financial issues, saved more, and spent less on immediate gratification items (Carlin & Robinson, 2010). Finally, young adults actually created a budget and tracked expenses as part of the *Credit Wise Cats* program which is a series of college-level financial education seminars led by peer educators (Borden, Lee, Serido, & Collins, 2008). Overall financial knowledge improved; however, outcomes related specifically to budgeting and saving were not reported (Borden et al., 2008). Although the specific aspects of budgeting and saving and the specific modes of delivery vary, budgeting and saving surfaced as a relevant topic across age groups (see Appendix B for a comprehensive list of budgeting and saving literature). The favorable results must be viewed with caution, however, given the small sample of programs and curricula that have reported outcomes specific to budgeting and saving.

Investing. Investing emerged as a topic relevant across all age groups as well. In a survey of 710 teachers across the state of Ohio, Lobil (2008) asked teachers to identify specific finance topics that were being covered in high school financial literacy courses across the state. Eight themes emerged as a result of a factor analysis, investing being one of those factors. In another sample of teachers, administrators, and community members, when asked what they thought should be included in a high school financial education curriculum, 51% of respondents reported stocks and bonds and 53% reported stock market information (Tschache, 2009).

When looking at the actual content of programs and curricula, investing was identified as a topic for students in elementary (Hagedorn, 2004a; Hagedorn, 2005a; Hagedorn, 2005b; Hagedorn, 2005c; Hagedorn, 2007; Niederjohn, 2006; Posnanski, Schug, & Schmitt, 2007), middle school (Niederjohn, 2006), and high school, (Posnanski et al., 2002; Walstad, Rebeck, & MacDonald, 2010), as well as young adults (Borden et al., 2008). The *Money Savvy Kids* program for elementary-aged youth, for example, covers the topic of investing and measures gains in investing knowledge by asking youth to what extent they agree with the statement: “When I invest in stocks, I will always make money.” Results across multiple evaluations have demonstrated significant improvement in investment knowledge from pre- to post-assessments (Hagedorn, 2004a, 2005a, 2005b, 2005c, 2007). High school students have demonstrated improvements in knowledge about investment growth as a result of participating in JA’s *High School Financial Planning* program (Harder+Company Community Research, 2009). The favorable results must be viewed with caution, however, given the small sample of programs and curricula that have reported outcomes specific to investment knowledge.

Credit. Credit emerged as a topic relevant to the financial education of youth at the K-12 levels (McCormick, 2009). In addition to the Jump$tart Coalition’s inclusion of credit in the National Financial Literacy Standards, young people themselves identified the subject of credit as an important topic (Diem, n.d.) and an area in which they were interested in acquiring more knowledge (Varcoe et al., 2010). Teachers also identified credit as an important aspect of financial literacy (Loibl, 2008).

Although the specific aspects of credit included in curricula and programs differs across age groups (e.g., understanding credit cards, how to use credit wisely, etc.), there is evidence that credit was included in curricula, in some manner, at all grade levels. The reported efficacy of various programs has been mixed with elementary through high school students demonstrating improvements on credit-related topics such as understanding credit rating structure (Operation Hope, 2012) as well as the advantages and methods of paying off credit (Harder+Company Community Research, 2009). Finally, in a sample of college students, Borden and colleagues (2008) reported a significant increase in young adults’ self-reported responsible attitudes toward credit cards, with 81% of the participants specifically reporting that they would read the fine print on credit cards before applying.

Financing/Debt. Borrowing money and managing debt were topics that adults (Tschache, 2009) as well as youth (Varcoe et al., 2010) identified as important to cover in financial education curricula. Only one evaluation reported outcomes specific to financing and debt. High school students who participated in JA’s *High School Financial Planning* program demonstrated improvements in knowledge about borrowing money as a result of participating in the program (Harder+Company Community Research, 2009).

Taxes. Taxes emerged as a topic that was addressed in programs and curricula for older youth only. When asked, 92% of a sample of teachers, administrators, and community members reported that taxes was an important topic to cover in financial education (Tschache, 2009) and taxes was identified as a topic of interest to teens themselves (Varcoe et al., 2010). In an evaluation study, middle and high school students reported gaining a new awareness of the expensive realities of life and the necessities of budgeting. They also reported learning specific skills and concepts including interest, budgeting, and paying taxes as a result of participating in JA's *Finance Park* program (Evaluation and Training Institute, 2008). In a sample of college students, regardless of the type of personal finance education received (e.g., a personal finance course versus a money management workshop/investment seminar), having filed an online tax return contributed to increased financial knowledge (Lindsey-Taliefero, Kelly, Brent, & Price, 2011). Although knowledge related to taxes was found to be a topic of interest for teens and believed to be an important topic to cover, more research is needed to determine if and how learning about taxes impacts youth financial literacy.

Insurance. Similar to taxes, insurance and insurance related issues surfaced in the literature that focuses primarily on high school and college-age students. When asked what they want to learn about, there was a significant increase from 1998 to 2008 in middle and high school aged youths' interest in learning about insurance (Varcoe et al., 2010). Similarly, the majority (84%) of teachers, administrators, and community members sampled, reported that they thought insurance was an important topic to include in a high school financial education curriculum (Tschache, 2009). Youth in high school have demonstrated improvements in knowledge about different types of insurance as a result of participating in JA's *High School Financial Planning* program (Harder+Company Community Research, 2009). *Credit Wise Cats* addresses insurance coverage for young adults as part of their peer-educator led financial education seminars (Borden et al., 2008). Although results specific to insurance coverage were not reported, Borden and colleagues did report a significant increase in overall financial knowledge for those who participated in the seminars. It should be noted that insurance was identified by teachers and students as a topic that should be covered in financial education. However, the reviewed literature did not provide evidence of specific outcomes related to learning about insurance.

Banking and Financial Services. Access to financial institutions as well as basic banking and financial services emerged as a consistent theme throughout the literature. More specifically, a concern that certain segments of the population do not have access to financial institutions was a recurring theme (see Johnson & Sherraden, 2007; Lucey & Giannangelo, 2006). According to the adults surveyed by Tschache (2009), actual checkbook balancing was a topic that the majority (96%) thought was important to include in a high school financial education curriculum. When asked about practical aspects of banking, however, youth themselves reported a decline from 1998 to 2008 in their desire to learn about specific aspects of banking such as opening and using checking accounts (Varcoe et al., 2010). There is some evidence suggesting that knowledge of or engaging in certain banking-related behaviors contributes to financial knowledge. In a sample of college students, regardless of the type of personal finance education received (e.g., a personal finance course versus a money management workshop/investment seminar), having a bank account and frequently balancing a checkbook contributed to increased financial knowledge (Lindsey-Taliefero et al., 2011). On the other hand, Mandel and Klein (2007) reported mixed findings in regard to the impact of having taken a course in personal financial management on specific banking behaviors. For example, a greater proportion of those who took a course, balanced their checkbook; however, they were also more likely to have bounced a check.

Goal Setting and Decision-Making. Goal Setting and/or decision-making were two very broad themes that appeared throughout the literature and program reviews across all age groupings (Maurer & Lee, 2011; Niederjohn, 2006; Sherraden et al., 2007). The ultimate goal of many financial education programs is for the material presented to translate into better decision-making in the real world. The middle and high school students sampled by Varcoe and colleagues reported in 1998 and again in 2008 that setting financial goals was a topic about which they still wanted to know. The majority (86%) of Tschache's (2009) adult sample identified financial goals as a topic that was important to include in a high school curriculum. There were a few examples of programs that incorporate classroom learning with hands-on experiences in an effort to illustrate how immediate decisions impact future goals. For example, the *I Can Save* program, which was implemented with young children in Kindergarten and 1st grade, reported actual behaviors related to goal setting. Children participated in a matched saving program as well as participated in classroom lessons and saved an average of $8 per month (not including incentives and program matching). In another example, JA's *Finance Park* program uses a combination of didactic instruction with active participation in a simulated finance setting (i.e., park). In a sample of over 1,300 high school students, those who received the classroom training made a range of choices in the simulation that were consistent with delaying immediate gratification to increase overall wealth (Carlin & Robinson, 2010). In a subsample of students who went through the park twice, they spent less money on immediate gratification items such as clothes (Carlin & Robinson, 2010). Finally, a sample of high school students who participated in the NEFE *High School Financial Planning* program reported a significantly higher level of appreciation for the importance of saving money for the future (Harder+Company Community Research, 2009).

Fraud and Identity Theft. Issues related to protecting one's finances appeared as an important topic to cover in financial education programs across ages. Indeed, in a study designed to assess the importance placed on specific financial education content, 85% of the diverse sample of teachers, administrators, parents, community members, and business owners, reported that they thought identity theft was important to include in a high school curriculum. A key outcome that JA's NEFE *High School Financial Planning* program seeks to generate in students is the ability to protect themselves against financial pitfalls, including identity theft and fraud. Harder+Company Community Research (2009) found that students who participated in the JA program were more likely to indicate that they engaged in positive personal finance behaviors (e.g., protecting yourself from identity theft) compared to nonparticipating students. Finally, In a large sample of elementary through high school-aged youth, significant improvement in understanding the best ways to keep money safe were reported as a result of participating in the *Banking on our Future* financial readiness program (Operation Hope, 2012).

Special Topics for Young Children. Young children require special consideration in regard to financial education. First, young children lack the autonomy to make finance-related choices; therefore, those who advocate for them must carefully consider what is appropriate in terms of content, timing, and delivery methods. Special topics for young children are drawn out here in an effort to highlight a few of the unique issues that require special consideration when addressing financial literacy for young children. Financial education primarily takes place in the school setting and because young children are not required to be in school, the family must be included as a necessary component in their financial education (Holden et al., 2009). When developing and/or selecting financial education curricula, the cognitive development of young children must also be taken into account (Holden et al., 2009). Specific consideration must be given to the general developmental processes and constraints that characterize young children's thinking at different stages of development as well as the influences of experience and maturation. Holden and colleagues (2009) highlighted the following basic concepts as appropriate to the introduction of financial literacy for young children: (a) a basic understanding of numbers; (b) an understanding of time in relation to past, present, and future; (c) understanding the function of money; (d) understanding the exchange of goods and services; (e) an introduction to financial institutions; (f) understanding choice and decision-making; (g) a basic understanding of the concept of social values such as the fair exchange of money and labor; and (h) instilling the notion of forming good habits and sound reasoning.

A final consideration must be given to age-appropriate delivery methods. Hands-on, experiential learning, such as programs that incorporate some form of real saving opportunities, have demonstrated some level of effectiveness (e.g., Hagedorn, 2004a; Hagedorn, 2004b; Hagedorn, 2005a; Hagedorn, 2005b; Hagedorn, 2005c, 2005d; Hagedorn, 2007; Schug & Hagedorn, 2005). Incorporating financial education into story time, music and movement, as well as more didactic call-and-answer type methods might also be effective (O'Neil-Haight, 2010). Although the recommendations put forth for consideration regarding the financial education of young children are grounded in sound developmental theory, very little research has been done to systematically evaluate the appropriateness of specific content or the effectiveness of different delivery methods for very young children; and thus, this is an area that would benefit from more research.

Effective Delivery Methods

There is evidence suggesting that young children can learn economic and financial concepts as early as primary school and possibly before (Sherraden et al., 2011) and a growing consensus believe that young children should have access to financial education as part of their K-12 education (Parrish & Servon, 2006). Watts and Walstad (2006), in their review of literature related to program delivery methods in precollege economic education since 1990, concluded that there is no empirical evidence favoring a particular teaching method or technology at the precollege level. Others have warned against a one size fits all approach to the delivery of financial knowledge (Fox et al., 2004). As a result of the systematic review of the literature, several effective delivery methods emerged. These delivery methods include: (a) interactive learning experiences, (b) use of real money, (c) integration of curriculum, (d) involving the community, and (e) a combination of other unique delivery methods.

Interactive Learning Experiences

In a sample of middle and high school-aged youth, respondents reported that they were very much interested in learning about money, they wanted to learn about finances in the school setting, and they wanted more web-based interactive and fun materials (Varcoe et al., 2010). A recurrent theme across the literature is the need for 21st century experiential learning that is contextually meaningful (Lucey, 2007). Education should be active not passive; it makes little sense to teach children and youth about savings if they live in households that have no real opportunities to save. Integrating financial education programs with savings and investing accounts is one example of active, hands-on learning (Parrish & Servon, 2006). Other hands-on experiences include simulations of different economic contexts, opportunities to participate in service-learning, and child-centered environments that allow for exploration of risks to economic-based decisions (Lucey, 2003). Unique examples of experiential learning can be found in the Cooperative Extension and credit union partnerships such as California's Cooperative Extension and the California Credit Union League (Tobe, 2005). Although examples of innovative approaches are available, the challenge is finding evidence to support their effectiveness (Watts & Walstad, 2006). In spite of the call to begin financial education at an early age, very few examples of effective (e.g., youth-friendly) delivery methods for very young children were surfaced after extensive searches.

Age. Young children better understand the concepts related to finances if the abstract concepts are applied to real-life events. Creating experiences out of daily routines (e.g., a trip to the bank or credit union) might help young children begin to develop an understanding of concepts related to finances. Providing opportunities to translate real-life experiences into play (e.g., allowing them to pretend to be a bank teller) might help expose youth to aspects of the financial world that they might not otherwise have. The significant lack of empirical evaluation evidence regarding hands-on experiential modes of teaching very young children again emphasizes the need for research involving young children.

Among elementary, middle, and high school-aged youth, hands-on, interactive delivery methods are quite common and there is some evidence supporting the effectiveness of such methods. Perhaps the most prolific evaluation of programs involving hands-on, interactive delivery methods has come from Hagedorn (2004a, 2004b, 2005a, 2005b, 2005c, 2005d, 2007). *The Money Savvy Kids: Basic Personal Finance Curriculum* is an elementary-level financial literacy program that incorporates books and workbooks with hands-on activities and an actual Money Savvy Piggy Bank. Teachers are provided with guides that offer instructions and scripts. The activities and lessons can be integrated into the curriculum differently for different grade levels, but each level includes the Money Savvy Piggy Bank which provides youth with the opportunity for a real-life, saving experience. The program has been evaluated across multiple states and among diverse samples within urban (Hagedorn, 2004a, 2005a; Schug & Hagedorn, 2005) and suburban settings (Hagedorn, 2004b, 2005c). Evaluation findings have demonstrated a positive increase in knowledge, attitudes, and beliefs (e.g., beliefs about saving habits, handling money, role of business) among participants. For the most part, the effect sizes of these improvements have been small, with the exception of Hagedorn (2004b), for which medium effect sizes were reported on two of the ten items. A pilot study (N= 31 3rd graders) of the program *Where the Money Grows* which incorporates an age-appropriate book reading, a visit to a bank, and the use of a piggy bank which students are given to begin their savings, found the program to effectively address the national standards for economic and financial literacy. That is, the test group had a significant increase in their pre- and post-assessment scores compared to the control group.

An example of a widely used interactive program for middle and high school students is the *Stock Market Game,* a program designed to teach students the importance of saving and investing by building their financial literacy skills. Students manage imaginary investments online, competing against other individuals and teams both in their classroom and around the world. In a sample of 509 students in grades 4-10, there were significant differences in math and investor knowledge with those who played outperforming those who did not (Hinojosa et al., 2009). The majority of students grades 4-6 (90%), and 78% of students in grades 7-10 reported enjoying the game. The majority also reported that the *Stock Market Game* influenced them to think more about budgeting and financial planning.

Use of Real Money

Financial education that demonstrates relevance to young people is believed to motivate learning and improve retention (Mandell & Klein, 2007). Participation in meaningful financial services may be a particularly effective form of experiential education (Johnson & Sherraden, 2007). A number of researchers and educators have advocated for the use of real money in an effort to help youth better understand the relationship between work, decision-making, and money (Kiviat, 2010; McCormick, 2009). In three separate policy documents, the New American Foundation suggested establishing savings and investment accounts at birth (McCormick, 2009). In spite of reports of failing scores on high school literacy tests over the past decade and a half, when considering the efficacy of specific programs and curricula, there have been some encouraging results.

Age. The *Money Savvy Kids: Basic Personal Finance Curriculum*, a program incorporating classroom lessons with real opportunities for elementary youth to save money, using their own personal Money Savvy Piggy-Bank, has been evaluated extensively (Hagedorn, 2004a, 2004b, 2005a, 2005b, 2005c, 2007). In a number of program evaluations with diverse samples across several states, the *Money Savvy Kids* program has demonstrated significant changes in assessing attitudes and knowledge. The *I Can*

Save (ICS) program, an innovative college savings program for elementary-aged youth that involves classroom lessons, afterschool club activities, matched savings, and a parent component has reported some positive effects. Youth participating in the ICS program scored significantly higher than the comparison group on the Financial Fitness for Life (FFFL) test and those with higher savings accumulation in their ICS accounts had higher FFFL test scores (Sherraden et al., 2011). Finally, an innovative program for high school-aged youth reported some promising results by combining an economics curriculum with stock market simulations, investment clubs in which students managed real assets, and providing professional development for teachers. Students' performance on a basic economics test increased between pre- and post-test assessments in both years of implementation (Posnanski et al., 2002). These evaluations are not without limitations, however. In the Hagedorn evaluations, in the absence of matched comparison groups, it is unclear whether outcomes are truly related to the program; and, without follow-up, there is no evidence of long-term effects. The Posnanski and colleagues (2002) results are based on a very small sample and the authors did not provide a full description of their research methodologies.

Integration of Curriculum

Although some have recommended that financial education concepts be integrated into existing curricula rather than standalone courses, these recommendations may depend on age of the children and youth (see following paragraph) and empirical evidence suggesting a particular instructional method or technology at the precollege level is mixed. For example, the Treasury Department's Office of Financial Education along with a number of federal agencies were charged with improving financial literacy and education. The Commission identified two programs: *Money Math: Lessons for Life* and an International Nonprofit Organizing that uses volunteer executives and specialized materials to integrate free enterprise into courses, both of which were recommended for integration into existing courses (U.S. Department of the Treasury Financial Literacy and Education Commission, 2006). Although infusing curricula into existing courses has been shown to be effective in some cases, earlier reviews indicate larger gains may exist when youth participate in a formal financial education course (Watts & Walstad, 2006). The results are also mixed in terms of the performance of young people in states where there is a mandate on personal finance compared to those with no mandate. In states with a specific mandate on personal finance, students did not score higher on a test of personal finance compared to those who lived in states without the specific mandate (Watts & Walstad, 2006).

Age. Some experts recommend that financial education concepts should be integrated into existing K-8 courses (e.g., math, social studies), but for high school students there should be standalone courses (Parrish & Servon, 2006). In addition, some individuals suggest that a personal finance course should be a requirement for high school graduation. Clearly, more research is needed to determine best practices with regard to effective (e.g., youth-friendly) delivery methods for different age groups. For younger children the *Money Savvy Kids* program incorporates classroom instruction with hands-on activities and integrates the components into the curriculum differently at different grades. The JA program *Economics for Success* for middle and high school students is designed with an emphasis on social studies content, but has a secondary emphasis on math, reading, and writing (Diem, n.d.). Using pre-and post-test scores, the program has demonstrated moderate overall effects on attitudes toward and confidence about personal finance.

Involving the Community

Box (2006) argues for a model of 21st century learning that incorporates innovative tools to provide students with hands-on experiential learning which is provided by trained volunteers from the local community. The National Association for State Boards of Education (NASBE) and its Commission on

Financial and Investor Literacy, convened in 2006, put forth the following recommendations aimed at strengthening students' financial literacy: (a) states should fully utilize public/private partnerships, and (b) States should include financial and investor education in their academic standards and ensure that assessments are aligned with the standards. One example for involving community members was put forth by Breitbard (2003), the chair of the California Jump$tart Coalition. Breitbard and Reynolds (2003) (2003) suggested involving Certified Public Accountants (CPAs) in the effort to provide financial education in schools arguing that CPAs have a long tradition of service to nonprofit organizations and that Jump$tart provides them the opportunity to be involved with something that relates directly to their professional expertise. One way to involve CPAs would be to have them get involved with the National Council on Economic Education to train teachers on how to include personal finance skills into their classroom lessons. Various programs involve community volunteers in different ways. Some involve business community members in the delivery of classroom curricula and to guide hands-on activities (Evaluation and Training Institute, 2008).

Age. There are examples of programs that involve community members in financial education across all age groups. The *I Can Save* program for elementary students utilized community volunteers to deliver the curriculum and to coordinate the afterschool clubs (Sherraden et al., 2007). Youth participating in the ICS program scored significantly higher than the comparison group on the *Financial Fitness for Life* (FFFL) test and those with higher savings accumulation in the ICS accounts had higher FFFL test scores. The JA programs provide financial education to all age groups, K-12 and use volunteers from the local business community to deliver hands-on learning experiences. For example, the JA *Finance Park* programs use community volunteers to teach business and financial concepts with the coordination of educators and to implement simulation experiences. Evaluations of the program have been favorable with pre- to post-test changes in students demonstrating an overall increase in content knowledge (Evaluation and Training Institute, 2008). Students also demonstrated a positive change in confidence and self-efficacy related to personal finance. In terms of the classroom lessons, students liked working in groups and enjoyed the games and activities, but they disliked the workbooks and class discussions. In regard to the simulation, students responded favorably to their preparedness for the simulation, and the time spent at the simulation. Nearly half (47%) said they would grade the simulation an "A" and 35% would grade the simulation a "B". Overall, teachers and volunteers were satisfied with the materials, curriculum, simulation, and their training.

Other Unique Delivery Methods

This section primarily describes the financial education delivery methods for young children. A scarcity of empirical evidence exists on the effectiveness of financial literacy program delivery methods for very young children. First, because very young children are not required to be in school, any curriculum must include a home component (Holden et al., 2009). Second, financial education for very young children must take into account cognitive development and the ability of young children to grasp basic yet abstract concepts such as time and money (Holden et al., 2009). As stated previously, linking these concepts to concrete experiences will help young children understand the concepts related to finances. Providing opportunities to translate their real-life experiences into play (e.g., allowing them to pretend to be a bank teller), might help expose them to aspects of the financial world that they might not otherwise have.

Another consideration for young children is to provide financial education via multiple modes of delivery, which is what one innovative Cooperative Extension educator did in Maryland's Lower Eastern Shore. The *Parents and Teachers as Wealth Coaches* project is a program that integrates multiple modes of communication (e.g., music movement, reading aloud, call-and-response, and paper and pencil

activities) with school-to-home activities and teacher guides (O'Neil-Haight, 2010). O’Neil-Haight (2010) found an improvement in money management, increased saving, decreased debt, greater knowledge about financial education tools and intent to talk more and teach more effectively about money matters for the teachers that attended the training. This study had limitations, however, which include a lack of follow-up, the timing of the post-test (e.g., post-test administered immediately following the training), and a lack of information provided about the instrumentation used to collect the data.

FINANCIAL READINESS PROGRAM INVENTORY

Having described the key components and effective delivery methods that emerged from the current literature, the current report will now provide an inventory of programs in use across the U.S. The methods used to identify, review, and create this inventory of financial literacy programs are described below and the inventory can be found in Appendix C.

Methodology

Multiple search strategies were utilized to surface financial readiness programs and to compile the inventory of programs in use across the U.S. First, in conjunction with the literature review component described in the current report, articles that identified specific program components and effective delivery methods for offering youth financial readiness programs were further examined. As articles were reviewed for the literature review, financial education programs described in articles were noted and retained. In addition, the Jump$tart Clearinghouse was used to identify financial education programs where the target user was “Teacher, classroom or after school” and the resource type was “Comprehensive Curriculum.”

In total, approximately 225 programs were initially identified. Programs that met all of the following criteria were retained:

- The program had empirical research evidence[1]
- The program focused on some aspect of financial literacy (general money knowledge, financial planning, etc.)
- The program included a curriculum (e.g., lessons, teacher guides, etc.)
- The program focused on youth (ages 3-21 years)
- The program was conducted in the U.S.

Twenty-two programs met these criteria and were retained for further examination of their evidence-based quality, as well as four special cases (see Appendix C). These special cases include programs that appear to be in wide use across the U.S. (and often aligned with national financial education standards), but which did not meet one of the above criteria (i.e., no empirical evidence found or was a game rather than a curriculum). These 26 programs were then sent on to the Clearinghouse for Military Family Readiness at Pennsylvania State University for an evidence review.

[1] To determine if a program had empirical research evidence, comprehensive searches were conducted through PsycInfo, Google Scholar, and Google to surface any reports or published articles documenting whether the program is effective (e.g., youth or instructor reports).

SUMMARY AND CONCLUSIONS

National surveys have raised questions about the effectiveness of high school courses in increasing financial literacy. It is imperative to identify best practices in terms of the key components and delivery methods of effective programming. AZ REACH conducted a comprehensive review of the current literature with a focus on identifying the key components and effective delivery methods (e.g., youth-friendly), and also compiled an inventory of financial education programs currently in use across the U.S.

There were eight themes that emerged and described key components of effective youth financial readiness programming. These included:

- Establishment and Alignment with Standards and Benchmarks
- Parent Involvement
- Evaluation
- Instructor Knowledge and Training
- Starting at Early and Continuing
- Addressing Diverse Backgrounds and Needs
- Alignment with Student Motivation and Interest
- Essential Knowledge

Overall, policy makers, scholars, and researchers agreed that financial education for youth is of vital importance for long-term fiscal well-being of individuals, families, and our nation as a whole. Several strengths were identified, including broad acknowledgment of the importance of financial literacy as well as the establishment of national standards in youth financial education. Still, the literature identified several areas in which policy makers and program practitioners must meet challenges. To date, few states require the implementation of financial education standards. Further, when programs are implemented, rigorous evaluation of the effectiveness of these programs remains a challenge. For example, although over 200 programs and curricula were initially surfaced for our program inventory, evaluation information was available for only 22 of these programs and there was great variability in the quality of their evaluations. Some "best practices" in evaluation include the use of matched comparison groups, reliable and valid measures of financial literacy and/or behaviors provided pre- and post-intervention, and longitudinal follow-ups to determine the long-term effectiveness of programming including which components of the programming were most effective.

In addition, although standards, benchmarks, and rigorous evaluation tools and methods are needed to ensure quality financial education for all youth, programs must consider the contextual environments in which children and youth live. Educational approaches may need to be tailored when working with specific groups of youth such as those from low-income or urban contexts. Related to context, the involvement and financial knowledge of parents and teachers who are educating youth is also an important consideration. These adults provide the immediate contexts in which youth will be learning about money. Greater effort may also be needed in reaching young children (e.g., preschool and elementary-aged) with developmentally appropriate financial education and evaluation methods. Reaching youth before poor financial habits are established and inaccurate information about money is internalized is important in promoting long-term financial well-being. Developmental appropriateness of educational efforts also emerged as a theme across the key components.

Finally, key financial education topics which should be included in all basic education (e.g., budgeting and saving, investing, credit, etc.) should also be taught in ways that align with youth interest. The

Jump$tart national surveys have indicated that motivation is an important factor in financial literacy, and finding ways to relate topics to youth's immediate interests and goals may foster longer-term success.

Documents were also reviewed to surface best practices and current methods of effective delivery. The following themes emerged:

- Interactive Learning Experiences
- Use of Real Money
- Integration of Curriculum
- Involving the Community
- Other Unique Delivery Methods

Overall, the most effective methods of financial education are likely to be those that utilize active learning experiences and activities. Several of the themes that emerged were related to this concept. Educational activities which permit youth the opportunity to engage in hands-on activities and use real money are likely to be internalized and applied more. Moreover, involving credit unions or other members of the local community may help to solidify these experiences. There is some debate, however, as to whether financial education is most appropriately integrated into existing curricula or taught in standalone classes or programs. More research is needed in this area, but whether financial education is integrated into existing courses, taught as standalone courses, or implemented through community programs, the most effective educational efforts are likely to be those that utilize interactive learning experiences with the opportunity for students to participate in hands-on activities with real money and real financial institutions, when possible.

References

Beutler, I., Beutler, L., & McCoy, J. K. (2008). Money aspirations about living well: Middle school student perceptions. *Financial Counseling and Planning, 19*, 44-60.

Borden, L. M., Lee, S. A., Serido, J., & Collins, D. (2008). Changing college students' financial knowledge, attitudes, and behavior through seminar participation. *Journal of family and economic issues, 29*, 23-40.

Box, J. M. (2006). Twenty-first century learning after school: The case of Junior Achievement Worldwide. *New Directions for Youth Development, 2006*, 141-147.

Breitbard, S. H., & Reynolds, C. (2003). Jump-starting financial literacy. *Journal of Accountancy, 196*, 56-61.

Caliber Associates. (2007). *JA worldwide's JA dollars and $ense program summative evaluation.*: Retrieved from http://www.jaworldwide.org/files/afterschool/JA_Dollars_&_$ense_Final_Formative_Eval_Rpt.pdf.

Capital One. (2007). Capital One's annual back to school survey finds more teens eager to learn about money, yet parents continue to overlook simple opportunities to talk dollars and cents. *News Release*.

Carlin, B. I., & Robinson, D. T. (2010). *What does financial literacy training teach us? (Working Paper No. 16271)*. Retrieved from National Bureau of Economic Research website http://www.nber.org/papers/w16271.pdf.

Dalto, M. (2011). Expanding financial education to include students and families who receive public benefits. *Policy & Practice, 69,* 24-26.

Devane, B. (2009). 'Get Some Secured Credit Cards Homey': hip hop discourse, financial literacy and the design of digital media learning environments. *E-Learning and Digital Media, 6*, 4-22.

Diem, J., Burke, M., Bessell, A. G., Coyne, T. (n.d.). JA economics for success program evaluation: Final report. *JA Website*.

Evaluation and Training Institute. (2008). JA Finance Park Final Report. *JA Website*, 1-90.

Evaluation and Training Institute. (2010). Junior Achievement Finance Park Virtual 2010 Final Report. *JA Website*.

Fox, J., Bartholomae, S., & Lee, J. (2005). Building the case for financial education. *Journal of Consumer Affairs, 39*, 195-214.

Fox, L., Hoffmann, J., & Welch, C. (2004). Federal reserve personal financial education initiatives. *Fed. Res. Bull., 90*, 447-457.

Grossi, D. L. (2012). *More is better: Examining the relationship between states' requirements for personal finance intrusiton and financial literacy.* California State University.

Hagedorn, E. A. (2004a). *Money Savvy Kids: Basic personal finance curriculum*. Evaluative Report, Chicago Public Schools Program.

Hagedorn, E. A. (2004b). *Money Savvy Kids: Basic personal finance curriculum*. Evaluative Report,Cleveland Grades 1,2,3 and 4. Hagedron Evaluation Services.

Hagedorn, E. A. (2005a). *Money Savvy Kids: Basic personal finance curriculum*. Evaluative Report Do Learning Gains Pesist?

Hagedorn, E. A. (2005b). *Money Savvy Kids: Basic personal finance curriculum*. Evaluative Report, Department of Financial Institutions Program Washington State. Hagedron Evaluation Services.

Hagedorn, E. A. (2005c). *Money savvy kids: Basic personal finance curriculum*. Evaluative Report, North Dakota Department of Securities. Hagedron Evaluation Services.

Hagedorn, E. A. (2005d). *Money Savvy Kids: Basic personal finance curriculum*. Evaluative Report, Suburban Chicago. Hagedron Evaluation Services.

Hagedorn, E. A. (2007). *Money Savvy Kids: Basic personal finance curriculum*. Evaluative Report, Memphis. Hagedron Evaluation Services.

Harder+Company Community Research. (2009). Junior Achievement Presents: The NEFE High School Financial Planning Program. 1-103.

Harter, C., & Harter, J. F. R. (2010). Is financial literacy improved by participating in a stock market game. *Journal for economic educators, 10*, 21-32.

Hinojosa, T., Miller, S., Swanlund, A., Hallberg, K., Brown, M., & O'Brien, B. (2009). The Stock Market Game™ Study: Brief Report (pp. 1-17): Chicago, IL: Learning Point Associates.

Holden, K., Kalish, C., Scheinholtz, L., Dietrich, D., & Novak, B. (2009). Financial literacy programs targeted on pre-school children: Development and evaluation. *Credit Union National Association (CUNA). Retrieved December, 10*, 1-85.

Johnson, E., & Sherraden, M. S. (2007). From financial literacy to financial capability among youth. *J. Soc. & Soc. Welfare, 34*, 119-146.

Kelly, K. (2005). Financial education why it matters. *Illinois Banker, 90,* 10-12.

Kiviat, B. (2010). How to teach kids about money. *Time Online, 25*, 1-3.

Klemme, D. (2002). National Jump $tart coalition for financial literacy benchmarks: Curriculum inclusion and pedagogical practice in Wisconsin. *Journal of Family and Consumer Sciences Education, 20*, 12-19.

Lindsey-Taliefero, D., Kelly, L., Brent, W., & Price, R. (2011). A review of Howard University's financial literacy curriculum. *American Journal of Business Education (AJBE), 4*, 73-84.

Loibl, C. (2008). Survey of financial education in Ohio's high schools: Assessment of teachers, programs, and legislative efforts (pp. 1-68): Columbus, OH: The Ohio State University.

Lucey, T. A. (2003). Economic influenced perceptions and their implications for early 21st century education. *Educational Foundations, 17*, 41-54.

Lucey, T. A. (2007). The art of relating moral education to financial education: An equity imperative. *Social Studies Research and Practice, 2*, 486-500.

Lucey, T. A., & Giannangelo, D. M. (2006). Short Changed The Importance of Facilitating Equitable Financial Education in Urban Society. *Education and urban society, 38*, 268-287.

Mandell, L. (2008b). Financial literacy of high school students. In J. Xiao (Ed.), *Handbook of consumer finance research* (pp. 163-183). New York: Springer Publishing.

Mandell, L. (2008c). The financial literacy of young American adults: Results of the 2008 National Jump$tart Coalition survey of high school seniors and college students. *University of Washington and the Aspen Institute*, 1-243.

Mandell, L., & Klein, L. S. (2007). Motivation and financial literacy. *Financial Services Review, 16*, 105-116.

Maurer, T. W., & Lee, S. A. (2011). Financial education with college students: Comparing peer-led and traditional classroom instruction. *Journal of family and economic issues, 32*, 680-689.

McCormick, M. H. (2009). The effectiveness of youth financial education: A review of the literature. *Journal of Financial Counseling and Planning Volume, 20*, 70-83.

Morton, J. S. (2005). The interdependence of economic and personal finance education. *Social Education, 69*, 66-68.

National Association for State Boards of Education. (2006). *Who will own our children: The need for financial literacy standards.* Paper presented at the NASBE, Alexandria, VA.

National Endowment for Financial Education. (2002). Financial literacy in America: Individual choices, national consequences.

Niederjohn, M. S., Schug, M. C. (2006). An evaluation of Learning, Earning and Investing: A model program for investor education. *Journal of Private Enterprise, 22*, 180-190.

O'Neil-Haight, M. (2010). Educator teams up to teach finance to young children. *Journal of Family and Consumer Sciences, 102*, 43-47.

Operation Hope. (2012). *Banking on our future 2011 annual student learning impact*. Retrieved from http://www.operationhope.org/images/uploads/Files/2011-BOOF-Impact-Results.pdf.

Parrish, L., & Servon, L. (2006). Policy options to improve financial education: Equipping families for their financial futures. *Washington, DC: Asset Building Program, New America Foundation*, 1-14.

Posnanski, T. J., Schug, M. C., & Schmitt, T. (2007). Can students learn economics and personal finance in a specialized elementary school? *International Journal of Social Education, 21*, 196-205.

Posnanski, T. J., Schug, M. C., & Wynn, R. L. (2002). Improving economic and financial education: A program for urban schools. *Social Education, 66*, 239-244.

Scanlon, E., Buford, A., & Dawn, K. (2009). Matched savings accounts: A study of youths' perceptions of program and account design. *Children and Youth Services Review, 31*, 680-687.

Schuchardt, J., Hanna, S. D., Hira, T. K., Lyons, A. C., Palmer, L., & Xiao, J. J. (2009). Financial literacy and education research priorities. *Journal of Financial Counseling and Planning Volume, 20*, 84-95.

Schug, M. C., & Hagedorn, E. A. (2005). The Money Savvy Pig™ goes to the big city: Testing the effectiveness of an economics curriculum for young children. *The Social Studies, 96*, 68-71.

Sherraden, M. S., Johnson, E., Elliott, W., Porterfield, S., & Rainford, W. (2007). The "I Can Save" program: School-based children's saving accounts for college. *Children and Youth Services Review, 29*, 294-312.

Sherraden, M. S., Johnson, L., Guo, B., & Elliott, W. (2011). Financial capability in children: Effects of participation in a school-based financial education and savings program. *Journal of family and economic issues, 32*, 385-399.

Shobe, M. A., & Sturm, S. L. (2007). Youth individual development accounts: Retirement planning initiatives. *Children & Schools, 29*, 172-181.

Suiter, M., & Meszaros, B. T. (2005). Teaching about saving and investing in the elementary and middle school grades. *Social Education, 69*, 92-95.

The Education Group. (2004). The impact on students of participation in JA Worldwide: Selected cumulative and longitudinal findings.

Tobe, E. (2005). Successful State Collaborations. *Credit Union Magazine, 71,* 16A-17A.

Todd, R. M. (2006, May). Lessons learned from a financial education pilot for Native youth. *Fedgazette,* 1-3.

Tschache, C. A. (2009). *Importance of financial literacy and financial literacy content in curriculum.* Montana State University Bozeman.

U.S. Department of the Treasury. (2004). Treasury launches financial education newsletter and outlines elements of a successful financial education program. Retrieved from: http://www.treasury.gov/press-center/press-releases/Pages/js1111.aspx

U.S. Department of the Treasury Financial Literacy and Education Commission. (2006). *Taking ownership of the future: The national strategy for financial literacy.*

U.S. Department of Treasury. (2009). 2008 Annual Report to the President, President's Advisory Council on Financial Literacy.

U.S. Department of Treasury. (2009a). 2008 Annual Report to the President, President's Advisory Council on Financial Literacy. (pp. 1). Washington D.C.

Varcoe, K. P., Peterson, S. S., Wooten Swanson, P., & Johns, M. C. (2010). What Do Teens Want to Know About Money—A Comparison of 1998 and 2008. *Family and Consumer Sciences Research Journal, 38*, 360-371.

Walstad, W. B., Rebeck, K., & MacDonald, R. A. (2010). The effects of financial education on the financial knowledge of high school students. *Journal of Consumer Affairs, 44*, 336-357.

Watts, M., & Walstad, W. B. (2006). Research on economic education in the schools: A review of findings and a new agenda. In N. C. o. E. Education (Ed.), *What works: A review of research on outcomes and effective program delivery in precollege economic education* (pp. 11-17). New York.

Wolfe-Hayes, M. A. (2010). Financial literacy and education: An environmental scan. *The International Information & Library Review, 42*, 105-110.

Article Information		Key Components								Effective Delivery Methods				
Citation	Age Focus (If stated)	Establishment and Alignment with Standards and Benchmarks	Parent Involvement	Evaluation	Instructor Knowledge and Training	Starting Early and Continuing Education for Youth	Addressing Diverse Backgrounds and Needs	Alignment with Young People's Motivation and Interest	Essential Knowledge**	Interactive Learning Experiences	Use of Real Money	Integration of Curriculum	Involving the Community	Other Unique Delivery Methods
*Auten, S., Culver, K., Millan, F., Rasnake, R. (2008).	High School								x	x			x	
Bernanke, B. S. (2006).														
*Beutler, I., Beutler, L., & McCoy, J. K. (2008).	Middle School							x	x					
*Borden, L. M., Lee, S. A., Serido, J., & Collins, D. (2008).	College/Young Adult								x					x
Box, J. M. (2006).	Elementary Middle School High School College			x						x			x	
Breitbard, S. H., & Reynolds, C. (2003).	Elementary Middle School High School	x							x	x		x	x	
Business Wire. (2011).	High School								x	x			x	
*Caliber Associates. (2007).	Elementary								x	x				

*** Denotes papers with empirical data**
**** For a detailed list of topics of essential knowledge, refer to Appendix B**

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Citation	Age Focus (If stated)	Establishment and Alignment with Standards and Benchmarks	Parent Involvement	Evaluation	Instructor Knowledge and Training	Starting Early and Continuing Education for Youth	Addressing Diverse Backgrounds and Needs	Alignment with Young People's Motivation and Interest	Essential Knowledge**	Interactive Learning Experiences	Use of Real Money	Integration of Curriculum	Involving the Community	Other Unique Delivery Methods
*Capital One. (2007).	High School		x											
*Carlin, B. I., & Robinson, D. T. (2010).	High School								x	x				
Dalto, M. (2011).	Middle School High School						x							x
Danes, S. M., & Brewton, K. E. (2012).	High School								x					x
*Devane, B. (2009).	Middle School High School College/Young Adult						x	x		x				x
*Diem, J., Burke, M., Bessell, A. G., Coyne, T. (n.d.).	Middle School								x			x		
Eldridge, J., & Finegold, B. R. (2011).									x	x				
*Evaluation and Training Institute. (2006).	Middle School									x				
*Evaluation and Training Institute. (2008).	Middle School High School								x	x			x	

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*Evaluation and Training Institute. (2010).	Middle School High School								x	x				x
Fox, J., Bartholomae, S., & Lee, J. (2005).				x										
Fox, L., Hoffmann, J., & Welch, C. (2004).	Elementary Middle School High School College/Young Adult						x		x					
*Grody, A., Grody, D., Kromann, E., & Sutliff, J. (2008).	Elementary								x	x				x
*Grossi, D. L. (2012).	High School College/Young Adult	x												
*Gutter, M., & Copur, Z. (2011).	College/Young Adult								x					
*Hagedorn, E. A. (2004a).	Elementary		x	x	x				x	x	x			
*Hagedorn, E. A. (2004b).	Elementary		x	x	x				x	x	x			
*Hagedorn, E. A. (2005a).	Elementary		x	x	x				x	x	x			

* Denotes papers with empirical data

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*Hagedorn, E. A. (2005b).	Elementary		x	x	x				x	x	x			
*Hagedorn, E. A. (2005c).	Elementary		x	x	x				x	x	x			
*Hagedorn, E. A. (2005d).	Elementary		x	x	x				x	x	x			
*Hagedorn, E. A. (2007).	Elementary		x	x	x				x	x	x	x		
*Harder+Company Community Research. (2009).	High School			x					x	x			x	
*Harter, C. L., & Harter, J. F. R. (2007).	Elementary Middle School High School			x										
*Harter, C., & Harter, J. F. R. (2010).	High School			x	x				x	x				
Haynes, D. C., & Chinadle, N. (2007).	Middle School High School				x					x		x		
*Hinojosa, T., Miller, S., Swanlund, A., Hallberg, K., Brown, M., & O'Brien, B. (2009).	Elementary Middle School High School								x	x				

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Article Information		Key Components								Effective Delivery Methods				
Citation	Age Focus (If stated)	Establishment and Alignment with Standards and Benchmarks	Parent Involvement	Evaluation	Instructor Knowledge and Training	Starting Early and Continuing Education for Youth	Addressing Diverse Backgrounds and Needs	Alignment with Young People's Motivation and Interest	Essential Knowledge**	Interactive Learning Experiences	Use of Real Money	Integration of Curriculum	Involving the Community	Other Unique Delivery Methods
Holden, K., Kalish, C., Scheinholtz, L., Dietrich, D., & Novak, B. (2009).	Preschool	x	x	x		x			x	x				x
Johnson, E., & Sherraden, M. S. (2007).	Elementary Middle School High School		x				x		x		x		x	
*Junior Achievement of Rhode Island Inc. (2010).	Middle School							x	x	x			x	
Kelly, K. (2005).			x										x	
Kiviat, B. (2010).						x					x			
*Klemme, D. (2002).	Middle School High School				x							x		
*Krueger, A. B., & McIntosh, M. F. (2008).	High School									x				x
Lerman, R. (2006).														
*Lindsey-Taliefero, D., Kelly, L., Brent, W., & Price, R. (2011).	College/Young Adult								x					

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Article Information		Key Components								Effective Delivery Methods				
Citation	Age Focus (If stated)	Establishment and Alignment with Standards and Benchmarks	Parent Involvement	Evaluation	Instructor Knowledge and Training	Starting Early and Continuing Education for Youth	Addressing Diverse Backgrounds and Needs	Alignment with Young People's Motivation and Interest	Essential Knowledge**	Interactive Learning Experiences	Use of Real Money	Integration of Curriculum	Involving the Community	Other Unique Delivery Methods
*Loibl, C. (2008).	High School				x				x					
Lucey, T. A. (2003).							x			x				
*Lucey, T. A. (2005).	High School													
Lucey, T. A. (2007).					x	x	x		x	x				
Lucey, T. A., & Giannangelo, D. M. (2006).			x	x			x		x	x			x	
Mandell, L. (2006).														
*Mandell, L. (2008a).	High school		x					x		x				
*Mandell, L. (2008b).	High school				x				x	x				
*Mandell, L. (2008c).	High School College/Young Adult								x	x				

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Article Information		Key Components								Effective Delivery Methods				
Citation	Age Focus (If stated)	Establishment and Alignment with Standards and Benchmarks	Parent Involvement	Evaluation	Instructor Knowledge and Training	Starting Early and Continuing Education for Youth	Addressing Diverse Backgrounds and Needs	Alignment with Young People's Motivation and Interest	Essential Knowledge**	Interactive Learning Experiences	Use of Real Money	Integration of Curriculum	Involving the Community	Other Unique Delivery Methods
*Mandell, L. (2009a).	High School College/Young Adult								x					
*Mandell, L. (2009b).	Middle School								x					x
*Mandell, L., & Klein, L. S. (2007).	High School								x					
*Maurer, T. W., & Lee, S. A. (2011).	College/Young Adult			x					x					x
McCormick, M. H. (2009).		x		x	x	x	x	x	x		x	x		
*Morton, J. S. (2005).	Elementary Middle School High School College/Young Adult				x				x			x		
National Association for State Boards of Education. (2006).	Elementary Middle School High School College/Young Adult	x		x	x				x				x	
National Endowment for Financial Education. (2002).		x	x		x			x	x			x		x
*Niederjohn, M. S., Schug, M. C. (2006).	Elementary Middle School High School			x	x				x					

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Citation	Age Focus (If stated)	Establishment and Alignment with Standards and Benchmarks	Parent Involvement	Evaluation	Instructor Knowledge and Training	Starting Early and Continuing Education for Youth	Addressing Diverse Backgrounds and Needs	Alignment with Young People's Motivation and Interest	Essential Knowledge**	Interactive Learning Experiences	Use of Real Money	Integration of Curriculum	Involving the Community	Other Unique Delivery Methods
*O'Neil-Haight, M. (2010).	Preschool Elementary		x	x	x				x	x				
*Operation Hope. (2012).	Elementary High School			x					x					
Parrish, L., & Servon, L. (2006).			x					x	x	x		x		x
*Peng, T. C. M., Bartholomae, S., Fox, J. J., & Cravener, G. (2007).	High School Young Adults								x					x
*Posnanski, T. J., Schug, M. C., & Schmitt, T. (2007).	Elementary			x					x					
*Posnanski, T. J., Schug, M. C., & Wynn, R. L. (2002).	High school			x	x				x	x				
*Scanlon, E., Buford, A., & Dawn, K. (2009).	Middle School High School			x			x		x		x			x
Scheinholtz, L., Holden, K., & Kalish, C. (2012).									x					
Schroeder, K. (2006).														

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Citation	Age Focus (If stated)	Establishment and Alignment with Standards and Benchmarks	Parent Involvement	Evaluation	Instructor Knowledge and Training	Starting Early and Continuing Education for Youth	Addressing Diverse Backgrounds and Needs	Alignment with Young People's Motivation and Interest	Essential Knowledge**	Interactive Learning Experiences	Use of Real Money	Integration of Curriculum	Involving the Community	Other Unique Delivery Methods
Schuchardt, J., Hanna, S. D., Hira, T. K., Lyons, A. C., Palmer, L., & Xiao, J. J. (2009).				x										
*Schug, M. C., & Hagedorn, E. A. (2005).	Elementary		x	x	x	x			x	x	x			
Schug, M., & Lopus, J. (2008).					x									
*Sherraden, M. S., Johnson, E., Elliott, W., Porterfield, S., & Rainford, W. (2007).	Elementary		x	x					x	x	x		x	
*Sherraden, M. S., Johnson, L., Guo, B., & Elliott, W. (2011).	Elementary		x	x	x				x	x	x		x	x
Shobe, M. A., & Sturm, S. L. (2007).						x	x							
*Smith, R. C., Sharp, E. H., & Campbell, R. (2011).	Middle School			x					x					
Suiter, M., & Meszaros, B. T. (2005).		x				x			x					
Supon, V. (2012).						x						x		

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Citation	Age Focus (If stated)	Establishment and Alignment with Standards and Benchmarks	Parent Involvement	Evaluation	Instructor Knowledge and Training	Starting Early and Continuing Education for Youth	Addressing Diverse Backgrounds and Needs	Alignment with Young People's Motivation and Interest	Essential Knowledge**	Interactive Learning Experiences	Use of Real Money	Integration of Curriculum	Involving the Community	Other Unique Delivery Methods
*Tenagila, L. (2010).	College/Young Adult								x					
*Tennyson, S., & Nguyen, C. (2001).	High School													
*The Education Group. (2004).	Elementary Middle School High School			x										
Tobe, E. (2005).									x	x			x	
*Todd, R. M. (2006, May).	Middle School High School	x		x			x					x		
*Tschache, C. A. (2009).	High School								x					
U.S. Department of the Treasury Financial Literacy and Education Commission. (2006).				x	x		x		x	x		x	x	
U.S. Department of the Treasury. (2004).		x		x			x		x					
U.S. Department of Treasury. (2009).		x				x			x					

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Citation	Age Focus (If stated)	Establishment and Alignment with Standards and Benchmarks	Parent Involvement	Evaluation	Instructor Knowledge and Training	Starting Early and Continuing Education for Youth	Addressing Diverse Backgrounds and Needs	Alignment with Young People's Motivation and Interest	Essential Knowledge**	Interactive Learning Experiences	Use of Real Money	Integration of Curriculum	Involving the Community	Other Unique Delivery Methods
*Valentine, G. P., & Khayum, M. (2005).	High School								x					
*Varcoe, K. P., Martin, A., Devitto, Z., & Go, C. (2005).				x					x	x				
*Varcoe, K. P., Peterson, S. S., Wooten Swanson, P., & Johns, M. C. (2010).	Middle School High School Not in School		x			x		x	x	x				x
*Varcoe, K., Peterson, S., Go, C., Johns, M., Rene-Fitch, P., Powell, C., & Costello, C. (2002).	Middle School High School Not in School								x	x				x
*Walstad, W. B., Rebeck, K., & MacDonald, R. A. (2010).	High School			x					x					
Watts, M., & Walstad, W. B. (2006).	Pre-College				x	x		x	x	x		x		
Wolfe-Hayes, M. A. (2010)		x												

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**** For a detailed list of topics of essential knowledge, refer to Appendix B**

Article Information		Essential Knowledge									
Citation	Age Focus (If stated)	Budgeting and Saving	Investing	Credit	Financing/Debt	Taxes	Insurance	Banking and Financial Services	Goal Setting and Decision Making	Fraud and Identity Theft	Special Topics for Young Children
*Auten, S., Culver, K., Millan, F., Rasnake, R. (2008).	High School							x			
Bernanke, B. S. (2006).											
*Beutler, I., Beutler, L., & McCoy, J. K. (2008).	Middle School	x		x							
*Borden, L. M., Lee, S. A., Serido, J., & Collins, D. (2008).	College/Young Adult	x		x			x				
Box, J. M. (2006).	Elementary Middle School High School College/Young Adult										
Breitbard, S. H., & Reynolds, C. (2003).	Elementary Middle School High School	x	x	x	x						
Business Wire. (2011).	High School	x	x	x	x			x	x		
*Caliber Associates. (2007).	Elementary	x							x		

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Article Information		Essential Knowledge									
Citation	Age Focus (If stated)	Budgeting and Saving	Investing	Credit	Financing/Debt	Taxes	Insurance	Banking and Financial Services	Goal Setting and Decision Making	Fraud and Identity Theft	Special Topics for Young Children
*Capital One. (2007).	High School										
*Carlin, B. I., & Robinson, D. T. (2010).	High School	x							x		
Dalto, M. (2011).	Middle School High School										
Danes, S. M., & Brewton, K. E. (2012).	High School	x	x	x			x				
*Devane, B. (2009).	Middle School High School College/Young Adult										
*Diem, J., Burke, M., Bessell, A. G., Coyne, T. (n.d.).	Middle School			x	x	x	x		x		
Eldridge, J., & Finegold, B. R. (2011).		x	x	x	x			x			
*Evaluation and Training Institute. (2006).	Middle School										

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Article Information		Essential Knowledge									
Citation	Age Focus (If stated)	Budgeting and Saving	Investing	Credit	Financing/Debt	Taxes	Insurance	Banking and Financial Services	Goal Setting and Decision Making	Fraud and Identity Theft	Special Topics for Young Children
*Evaluation and Training Institute. (2008).	Middle School High School	x	x	x	x	x		x	x		
*Evaluation and Training Institute. (2010).	Middle School High School	x									
Fox, J., Bartholomae, S., & Lee, J. (2005).											
Fox, L., Hoffmann, J., & Welch, C. (2004).	Elementary Middle School High School College/Young Adult	x	x	x							
*Grody, A., Grody, D., Kromann, E., & Sutliff, J. (2008).	Elementary										x
*Grossi, D. L. (2012).	High School College/Young Adults										
*Gutter, M., & Copur, Z. (2011).	College/Young Adult	x		x	x				x		
*Hagedorn, E. A. (2004a).	Elementary	x	x								x

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Article Information		Essential Knowledge									
Citation	Age Focus (If stated)	Budgeting and Saving	Investing	Credit	Financing/Debt	Taxes	Insurance	Banking and Financial Services	Goal Setting and Decision Making	Fraud and Identity Theft	Special Topics for Young Children
*Hagedorn, E. A. (2004b).	Elementary	x	x								x
*Hagedorn, E. A. (2005a).	Elementary	x	x								x
*Hagedorn, E. A. (2005b).	Elementary	x	x								x
*Hagedorn, E. A. (2005c).	Elementary	x	x								x
*Hagedorn, E. A. (2005d).	Elementary	x	x								x
*Hagedorn, E. A. (2007).	Elementary	x	x								x
*Harder+Company Community Research. (2009).	High School	x	x	x			x		x	x	
*Harter, C. L., & Harter, J. F. R. (2007).	Elementary Middle School High School										

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Article Information		Essential Knowledge									
Citation	Age Focus (If stated)	Budgeting and Saving	Investing	Credit	Financing/Debt	Taxes	Insurance	Banking and Financial Services	Goal Setting and Decision Making	Fraud and Identity Theft	Special Topics for Young Children
*Harter, C., & Harter, J. F. R. (2010).	High School		x								
Haynes, D. C., & Chinadle, N. (2007).	Middle School High School										
*Hinojosa, T., Miller, S., Swanlund, A., Hallberg, K., Brown, M., & O'Brien, B. (2009).	Elementary Middle School High School	x	x								
Holden, K., Kalish, C., Scheinholtz, L., Dietrich, D., & Novak, B. (2009).	Preschool	x	x	x	x	x	x	x	x		x
Johnson, E., & Sherraden, M. S. (2007).	Elementary Middle School High School	x	x					x	x		x
*Junior Achievement of Rhode Island Inc. (2010).	Middle School	x		x	x						
Kelly, K. (2005).											
Kiviat, B. (2010).											

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Article Information		Essential Knowledge									
Citation	Age Focus (If stated)	Budgeting and Saving	Investing	Credit	Financing/Debt	Taxes	Insurance	Banking and Financial Services	Goal Setting and Decision Making	Fraud and Identity Theft	Special Topics for Young Children
*Klemme, D. (2002).	Middle School High School										
*Krueger, A. B., & McIntosh, M. F. (2008).	High School										
Lerman, R. (2006).											
*Lindsey-Taliefero, D., Kelly, L., Brent, W., & Price, R. (2011).	College	x	x		x	x		x	x		
*Loibl, C. (2008).	High School	x	x	x		x	x		x		
Lucey, T. A. (2003).											
*Lucey, T. A. (2005).	High School										
Lucey, T. A. (2007).		x	x	x							

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Article Information		Essential Knowledge									
Citation	Age Focus (If stated)	Budgeting and Saving	Investing	Credit	Financing/Debt	Taxes	Insurance	Banking and Financial Services	Goal Setting and Decision Making	Fraud and Identity Theft	Special Topics for Young Children
Lucey, T. A., & Giannangelo, D. M. (2006).		x	x	x				x			
Mandell, L. (2006).											
*Mandell, L. (2008a).	High School										
*Mandell, L. (2008b).	High School	x	x	x							
*Mandell, L. (2008c).	High School College/Young Adult	x		x							
*Mandell, L. (2009a).	High School College/Young Adult	x	x	x		x		x			
*Mandell, L. (2009b).	Middle School	x									
*Mandell, L., & Klein, L. S. (2007).	High School			x				x			

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Article Information		Essential Knowledge									
Citation	Age Focus (If stated)	Budgeting and Saving	Investing	Credit	Financing/Debt	Taxes	Insurance	Banking and Financial Services	Goal Setting and Decision Making	Fraud and Identity Theft	Special Topics for Young Children
*Maurer, T. W., & Lee, S. A. (2011).	College/Young Adult	x		x					x		
McCormick, M. H. (2009).		x	x	x		x	x	x			x
*Morton, J. S. (2005).	Elementary Middle School High School College/Young Adult	x		x							
National Association for State Boards of Education. (2006).	Elementary Middle School High School College/Young Adult		x								
National Endowment for Financial Education. (2002).				x				x			
*Niederjohn, M. S., Schug, M. C. (2006).	Elementary Middle School High School	x	x	x					x		
*O'Neil-Haight, M. (2010).	Preschool Elementary	x							x		x
*Operation Hope. (2012).	Elementary High School	x		x						x	

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Article Information		Essential Knowledge									
Citation	Age Focus (If stated)	Budgeting and Saving	Investing	Credit	Financing/Debt	Taxes	Insurance	Banking and Financial Services	Goal Setting and Decision Making	Fraud and Identity Theft	Special Topics for Young Children
Parrish, L., & Servon, L. (2006).		x		x			x				
*Peng, T. C. M., Bartholomae, S., Fox, J. J., & Cravener, G. (2007).	High School Young Adults	x	x								
*Posnanski, T. J., Schug, M. C., & Schmitt, T. (2007).	Elementary	x	x					x			
*Posnanski, T. J., Schug, M. C., & Wynn, R. L. (2002).	High School	x	x	x							
*Scanlon, E., Buford, A., & Dawn, K. (2009).	Middle School High School	x		x	x					x	
Scheinholtz, L., Holden, K., & Kalish, C. (2012).		x									x
Schroeder, K. (2006).											
Schuchardt, J., Hanna, S. D., Hira, T. K., Lyons, A. C., Palmer, L., & Xiao, J. J. (2009).											

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Article Information		Essential Knowledge									
Citation	Age Focus (If stated)	Budgeting and Saving	Investing	Credit	Financing/Debt	Taxes	Insurance	Banking and Financial Services	Goal Setting and Decision Making	Fraud and Identity Theft	Special Topics for Young Children
*Schug, M. C., & Hagedorn, E. A. (2005).	Elementary	x									x
Schug, M., & Lopus, J. (2008).											
*Sherraden, M. S., Johnson, E., Elliott, W., Porterfield, S., & Rainford, W. (2007).	Elementary	x		x	x				x		
*Sherraden, M. S., Johnson, L., Guo, B., & Elliott, W. (2011).	Elementary	x		x	x				x		
Shobe, M. A., & Sturm, S. L. (2007).											
*Smith, R. C., Sharp, E. H., & Campbell, R. (2011).	Middle School	x		x							
Suiter, M., & Meszaros, B. T. (2005).		x		x							
Supon, V. (2012).											

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Article Information		Essential Knowledge									
Citation	Age Focus (If stated)	Budgeting and Saving	Investing	Credit	Financing/Debt	Taxes	Insurance	Banking and Financial Services	Goal Setting and Decision Making	Fraud and Identity Theft	Special Topics for Young Children
*Tenagila, L. (2010).	College/Young Adult			x							
*Tennyson, S., & Nguyen, C. (2001).	High School										
*The Education Group. (2004).	Elementary Middle School High School										
Tobe, E. (2005).		x		x	x			x			
*Todd, R. M. (2006, May).	Middle School High School										
*Tschache, C. A. (2009).	High School	x	x	x	x	x	x	x	x	x	
U.S. Department of the Treasury Financial Literacy and Education Commission. (2006).		x	x	x	x	x		x	x	x	
U.S. Department of the Treasury. (2004).		x		x	x				x		

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Article Information		Essential Knowledge									
Citation	Age Focus (If stated)	Budgeting and Saving	Investing	Credit	Financing/Debt	Taxes	Insurance	Banking and Financial Services	Goal Setting and Decision Making	Fraud and Identity Theft	Special Topics for Young Children
U.S. Department of Treasury. (2009).		x	x	x	x	x	x	x	x	x	
*Valentine, G. P., & Khayum, M. (2005).	High School	x		x	x		x				
*Varcoe, K. P., Martin, A., Devitto, Z., & Go, C. (2005).		x		x	x		x		x		
*Varcoe, K. P., Peterson, S. S., Wooten Swanson, P., & Johns, M. C. (2010).	Middle School High School Not in School	x		x	x	x	x	x	x	x	
*Varcoe, K., Peterson, S., Go, C., Johns, M., Rene-Fitch, P., Powell, C., & Costello, C. (2002).	Middle School High School Not in School	x		x	x			x	x		
*Walstad, W. B., Rebeck, K., & MacDonald, R. A. (2010).	High School	x	x	x	x			x			
Watts, M., & Walstad, W. B. (2006).	Pre-College	x	x	x							x
Wolfe-Hayes, M. A. (2010)											

*** Denotes papers with emirical data**

Program	URL	Contact Information	Target Age Range	Research Evidence
Credit-Wise Cats	http://creditwisecats.org	Becky Barry bbarry@email.arizona.edu Phone: 520-621-7630 Fax: 520-626-4234 Juan Ciscomani jc3@email.arizona.edu Phone: 520-626-4209 Fax: 520-626-4234	College-age students, but also caters to Middle School and High School students (ages 11-23)	Borden, L. M., Lee, S., Serido, J., & Collins, D. (2008). Changing college students' financial knowledge, attitudes, and behavior through seminar participation. *Journal of Family and Economic Issues, 29*, 23–40. Borden, L. M., Lee, S., Serido, J., & Collins, D. (2008). Changing college students' financial knowledge, attitudes, and behavior through seminar participation. Journal of Family and Economic Issues, 29, 23–40.
Peer Financial Counseling	http://osfa.uga.edu/pfc/	Peer Financial Counseling University of Georgia 220 Holmes/Hunter Academic Building Athens, GA 30602-6114 Email: pfc@uga.edu Phone: -706-542-6147	College-age (ages 18-23)	Maurer, T. W., & Lee, S. (2011). Financial education with college students: Comparing peer-led and traditional classroom instruction. *Journal of Family and Economic Issues, 32*(4), 680-689. doi:http://dx.doi.org/10.1007/s10834-011-9266-z
Banking on Our Future (BOOF) through Operation HOPE	http://www.bankingonourfuture.org/	Banking on Our Future program contacts http://www.bankingonourfuture.org/Contact.html	Grades K-8 (ages 5-13) Grades 4–12 (ages 9-18) College-age (ages 17-23)	Operation Home. (2012). Banking on our future 2011 annual student learning impact. Retrieved from http://www.operationhope.org/images/uploads/Files/2011-BOOF-Impact-Results.pdf
Financial Fitness for Life	http://fffl.councilforeconed.org/	Council for Economic Education 122 East 42nd Street, Suite 2600 New York, NY 10168 customerservice@councilforeconed.org Phone: 212-730-7007 Fax: 212-730-1793	Grades K-2, 3-5, 6-8, & 9-12 (ages 5-19)	Smith, R., Sharp, E., & Campbell, R. (2011). Evaluation of financial fitness for life program and future outlook in the Mississippi delta. *Journal of Economics and Economic Education Research, 12*(2), 25-39. Sherraden, M. S., Johnson, L., Elliott, W., Porterfield, S., & Rainford, W. (2007). School-based children's saving accounts for college: The I can save program. Children and Youth Services Review, 29(3), 294-312. Sherraden, M. S., Johnson, L., Guo, B., & Elliott, W. (2011). Financial capability in children: Effects of participation in a school-based financial education and savings program. Journal of Family and Economic Issues, 32(3), 385-399. Walstad, W. B., Rebeck, K., & MacDonald, R. A. (2010). The effects of financial education on the financial knowledge of high school students. Journal of Consumer Affairs, 44(2), 336-357. Harter, C. L., & Harter, J. R. (2009). Assessing the effectiveness of financial fitness for life in Eastern Kentucky. Journal of Applied Economics and Policy, 28(1), 20-33. Morton, J. S. (2005). The interdependence of economic and personal finance education. Social Education, 69(2), 66-68.

***Note.* For "Target Age Range" we first listed what the program identified as the target range, which was often by grade-level (e.g., Grades K-5, High School, etc.). Following this, in parentheses, we assigned numerical ages.**

Program	URL	Contact Information	Target Age Range	Research Evidence
Junior Achievement Programs (general)	http://www.ja.org/programs/programs.shtml	Junior Achievement USA® One Education Way Colorado Springs, CO 80906	K-12 (ages 5-19)	Box, J. M. (2006). Twenty-first century learning after school: The case of Junior Achievement Worldwide. *New Directions for Youth Development*, 141–147. doi: 10.1002/yd.174
Financing Your Future	http://financingyourfuture.councilforeconed.org/	Council for Economic Education Email: customerservice@councilforeconed.org	Grades 9-12 (ages 13-19)	Walstad, W. B., Rebeck, K., & MacDonald, R. A. (2010). The effects of financial education on the financial knowledge of high school students. *Journal of Consumer Affairs, 44*(2), 336-357.
Money Talks: Should I Be Listening?	http://moneytalks4teens.org	Connie Costello University of California Cooperative Extension 135 C Highlander Hall Riverside, CA 92521 Phone: 951-827-5241 Fax: 951-827-5607 connie.costello@ucr.edu	"Teens" (ages 13-19)	Varcoe, K. P., Martin, A., Devitto, Z., & Go, C. (2005). Using a financial education curriculum For teens. *Journal of Financial Counseling and Planning, 16*(1), 63-71.
High School Financial Planning Program (NEFE)	http://www.hsfpp.org/	National Endowment for Financial Education 1331 17th Street, Suite 1200 Denver, CO 80202	Grades 9-12 (ages 13-19)	Danes, S. M., & Brewton, K. E. (2010). *Evaluation of the national endowment for financial education high school financial planning program 2009-2010.* University of Minnesota Family Social Science Department College of Education and Human Development. Retrieved from: http://www.nefe.org/Portals/0/Who%20We%20Help/Educators/PDF/NEFE_HSFPP_ImpactStudy_2009-2010.pdf Danes, S. M., & Brewton, K. E. (2012). National endowment for financial education high school financial planning program 2007 curriculum evaluation: A study of reported learning and behavior outcomes associated with NEFE's Financial Competency-Based Curriculum. National Endowment for Financial Education. Retrieved from: http://www.hsfpp.org/Portals/0/Documents/NEFE%20HSFPP%20Impact%20Study%20Summary%202012.pdf Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. Federal Reserve Bulletin, 89, 309-322. Harder+Company Community Research. (2009). Junior achievement presents: The NEFE high school financial planning program. Retrieved from: http://www.myja.org/programs/evaluation/reports/ja_nefe_evaluation_local_results.pdf

Note. **For "Target Age Range" we first listed what the program identified as the target range, which was often by grade-level (e.g., Grades K-5, High School, etc.). Following this, in parentheses, we assigned numerical ages.**

Program	URL	Contact Information	Target Age Range	Research Evidence
JA Economics	http://www.ja.org/programs/programs_high_econ_obj.shtml	Junior Achievement USA® One Education Way Colorado Springs, CO 80906 Phone: 719-540-8000 Fax: 719-540-6299	Grades 11-12 (ages 16-19)	Junior Achievement. (n.d.) High school programs evaluation. Retrieved from http://www.ja.org/programs/programs_eval_high.shtml
Learning, Earning, and Investing	http://lei.councilforeconed.org/	Council for Economic Education 122 East 42 Street, Suite 2600 New York, NY 10168 Phone: 1-800-338-1192	Grades 9-12 (ages 13-19)	Niederjohn, M. S., & Schug, M. C. (2006). An evaluation of learning, earning and investing: A model program for investor education. *Journal of Private Enterprise, 22*, 180-190.
JA Finance Park	http://www.ja.org/programs/programs_mid_park.shtml	Junior Achievement USA®One Education WayColorado Springs, CO 80906Phone: 719-540-8000Fax: 719-540-6299	Middle School and Grades 9-12 (ages 11-19)	Carlin, B. I., & Robinson, D. T. (2010). *What does financial literacy training teach us? (Working Paper No. 16271)*. Retrieved from http://www.nber.org/papers/w16271.pdf Evaluation and Training Institute. (2008). JA Finance Park: Final report. Retrieved from http://www.myja.org/financepark/evaluation/ja_finance_park_2008_evaluation.pdf Evaluation and Training Institute. (2010). Junior Achievement Finance Park Virtual 2010 Final Report. Retrieved from: http://www.jaworldwide.org/files/white_papers/JA-FPV-FINAL-Report-2010.pdf
JA Economics for Success	http://www.ja.org/programs/programs_mid_econ_success.shtml	Junior Achievement USA® One Education Way Colorado Springs, CO 80906 Phone: 719-540-8000 Fax: 719-540-6299	Middle School (ages 11-14)	Diem, J., Burke, M., Bessell, A. G., & Coyne, T. (n.d.). *JA Economics for Success Summative Evaluation Final Report*. Retrieved from http://www.myja.org/programs/evaluation/reports/ja_economics_for_success_evaluation.pdf Junior Achievement of Rhode Island, Inc. (n.d.). JA Economics for success: Overall student results. Retrieved from http://jarhodeisland.org/sites/default/files/Economics%20for%20Success%202011.pdf
JA Global Marketplace	http://www.ja.org/programs/programs_mid_global_obj.shtml	Junior Achievement USA® One Education Way Colorado Springs, CO 80906 Phone: 719-540-8000 Fax: 719-540-6299	Middle School (ages 11-14)	Evaluation and Training Institute. (2006). J*A global marketplace summative evaluation: Final Report.* Retrieved from http://www.myja.org/programs/evaluation/reports/ja_global_marketplace_evaluation.pdf

Note. **For "Target Age Range" we first listed what the program identified as the target range, which was often by grade-level (e.g., Grades K-5, High School, etc.). Following this, in parentheses, we assigned numerical ages.**

Program	URL	Contact Information	Target Age Range	Research Evidence
JA It's My Business!	http://www.ja.org/programs/programs_mid_mybusiness_obj.shtml	Junior Achievement USA® One Education Way Colorado Springs, CO 80906 Phone: 719-540-8000 Fax: 719-540-6299	Grades 6-8 (ages 11-14)	Van Scotter, R., Van Dusen, L., & Worthen, B. (1996). Starting early: Junior Achievement's Elementary School program. *Educational Leadership, 8*, 33-37.
Money Savvy Kids	http://www.msgen.com	Melinda Voelcker Phone: 847-234-9477 x203 Email: Melinda@msgen.com Michael L. Beacham Email: mlb@msgen.com	Grades K-5 (ages 5-11)	Schug, M. C., & Hagedorn, E. A. (2005). The money savvy pig™ goes to the big city: Testing the effectiveness of an economics curriculum for young children. *The Social Studies, 96*(2), 68-71. Hagedorn, E. A. (2007). Money Savvy Kids: Basic Personal Finance Curriculum. Evaluative Report, Memphis. Retrieved from http://www.msgen.com/downloads/MSkids%20Memphis%20Report.pdf Hagedorn, E. A. (2004a). Money Savvy Kids: Basic Personal Finance Curriculum. Evaluative Report, Chicago Public Schools Program. Retrieved from http://www.msgen.com/downloads/MSKids%20Chicago%20Report.pdf Hagedorn, E. A. (2004b). Money Savvy Kids: Basic Personal Finance Curriculum. Evaluative Report, Cleveland Grades 1,2,3 and 4. Retrieved from http://www.msgen.com/downloads/MSKids%20Cleveland%20Report.pdf Hagedorn, E. A. (2005b). Money Savvy Kids: Basic Personal Finance Curriculum. Evaluative Report, Department of Financial Institutions Program Washington State. Retrieved from http://www.msgen.com/downloads/MSKids%20Washington%20report.pdf Hagedorn, E. A. (2005c). Money Savvy Kids: Basic Personal Finance Curriculum. Evaluative Report, Suburban Chicago. Retrieved from http://www.msgen.com/downloads/MSKids_Suburban_Chicago_Report.pdf Hagedorn, E. A. (2005d). Money Savvy Kids: Basic Personal Finance Curriculum. Evaluative Report, North Dakota Department of Securities. Retrieved from http://www.msgen.com/downloads/MSKids_ND%20Report.pdf
JA Our Nation	http://www.ja.org/programs/programs_elem_nation_obj.shtml	Junior Achievement USA® One Education Way Colorado Springs, CO 80906 Phone: 719-540-8000 Fax: 719-540-6299	Grade 5 (ages 10-11)	Van Scotter, R., Van Dusen, L., & Worthen, B. (1996). Starting early: Junior Achievement's Elementary School program. *Educational Leadership, 8*, 33-37. The Education Group. (2004). The impact on students of participation in JA Worldwide: Selected cumulative and longitudinal findings. Retrieved from http://www.jaworldwide.org/files/white_papers/JA_Longitudinal_summary.pdf
JA Our Region	http://www.ja.org/programs/programs_elem_region.shtml	Junior Achievement USA® One Education Way Colorado Springs, CO 80906 Phone: 719-540-8000 Fax: 719-540-6299	Grade 4 (ages 9-10)	Van Scotter, R., Van Dusen, L., & Worthen, B. (1996). Starting early: Junior Achievement's Elementary School program. *Educational Leadership, 8*, 33-37.

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Program	URL	Contact Information	Target Age Range	Research Evidence
JA Our City	http://www.ja.org/programs/programs_elem_city_obj.shtml	Junior Achievement USA® One Education Way Colorado Springs, CO 80906 Phone: 719-540-8000 Fax: 719-540-6299	Grade 3 (ages 8-9)	Van Scotter, R., Van Dusen, L., & Worthen, B. (1996). Starting early: Junior Achievement's Elementary School program. *Educational Leadership, 8*, 33-37.
JA Our Community	http://www.ja.org/programs/programs_elem_comnty_obj.shtml	Junior Achievement USA® One Education Way Colorado Springs, CO 80906 Phone: 719-540-8000 Fax: 719-540-6299	Grade 2 (ages 7-8)	Van Scotter, R., Van Dusen, L., & Worthen, B. (1996). Starting early: Junior Achievement's Elementary School program. *Educational Leadership, 8*, 33-37.
JA Dollars & $ense	http://www.myja.org/programs/afterschool/ja_dollars_and_sense.html	Junior Achievement USA® One Education Way Colorado Springs, CO 80906 Phone: 719-540-8000 Fax: 719-540-6299	Grades 3-5 (ages 8-11)	Caliber Associates. (2007). *JA Worldwide's JA Dollars and $ense Program Summative Evaluation.* Retrieved from http://www.jaworldwide.org/files/afterschool/JA_Dollars_&_$ense_Final_Formative_Eval_Rpt.pdf Box, J. M. (2006). Twenty-first century learning after school: The case of Junior Achievement Worldwide. New Directions for Youth Development, 141–147. doi: 10.1002/yd.174
JA Our Families	http://www.ja.org/programs/programs_elem_fam_obj.shtml	Junior Achievement USA® One Education Way Colorado Springs, CO 80906 Phone: 719-540-8000 Fax: 719-540-6299	Grade 1 (ages 6-7)	Van Scotter, R., Van Dusen, L., & Worthen, B. (1996). Starting early: Junior Achievement's Elementary School program. *Educational Leadership, 8*, 33-37.
JA Ourselves	http://www.ja.org/programs/programs_elem_selves.shtml	Junior Achievement USA® One Education Way Colorado Springs, CO 80906 Phone: 719-540-8000 Fax: 719-540-6299	Kindergarten (ages 5-6)	Van Scotter, R., Van Dusen, L., & Worthen, B. (1996). Starting early: Junior Achievement's Elementary School program. *Educational Leadership, 8*, 33-37.
JA Our City	http://www.ja.org/programs/programs_elem_city_obj.shtml	Junior Achievement USA® One Education Way Colorado Springs, CO 80906 Phone: 719-540-8000 Fax: 719-540-6299	Grade3 (ages 8-9)	Van Scotter, R., Van Dusen, L., & Worthen, B. (1996). Starting early: Junior Achievement's Elementary School program. *Educational Leadership, 8*, 33-37.

***Note.* For "Target Age Range" we first listed what the program identified as the target range, which was often by grade-level (e.g., Grades K-5, High School, etc.). Following this, in parentheses, we assigned numerical ages.**

Special Cases				
Program	**URL**	**Contact Information**	**Target Age Range**	**Research Evidence**
Money Matters: Make it Count	http://www.moneymattersmakeitcount.com/Pages/Default.aspx	Boys & Girls Clubs of America 1275 Peachtree St. NE Atlanta, GA 30309-3506 Phone: 404-487-5700 Website: www.bgca.org	"Teens" (ages 13-19)	From website- http://www.bgca.org/meetourpartners/Pages/Schwab.aspx. There is no evaluation or empirical evidence; however, this is a very widely used program that might deserve a look.
Money Math: Lessons for Life	http://www.treasurydirect.gov/indiv/tools/tools_moneymath.htm	Bureau of the Public Debt	Middle School Grades 7-9 (ages 12-15)	Could not locate and evaluation or empirical evidence; however, this is a very widely used program and might warrant a look.
Money Savvy U	http://www.msgen.com/assembled/money_savvy_u.html	Melinda Voelcker Phone: 847-234-9477 x203 Email: Melinda@msgen.com Michael L. Beacham Email: mlb@msgen.com	Grades 6-10 (ages 11-16)	There was no evidence found for this particular program but there was extensive evaluation on Money Savvy Kids and so it might be worth looking at this intermediate program as well.
The Stock Market Game	http://www.stockmarketgame.org/	SIFMA Foundation Phone: 212-313-1200 Email: smg@sifma.org	Grade 4 – college-age (ages 9-23)	Hinojosa, T., Miller, S., Swanlund, A., Hallberg, K., Brown, M., & O'Brien, B. (2009). The stock market game study: Brief report. FINRA Investor Education Foundation. Retrieved from http://www.finra.org/web/groups/foundation/@foundation/documents/foundation/p119855.pdf Harter, C., & Harter, F. (2010). Is financial literacy improved by participating in a stock market game? Journal For Economic Educators, 10(1), 21-32. Mandell, L. (2008). The financial literacy of young American adults: Results of the 2008 national jumpstart coalition survey of high school seniors and college. Retrieved from http://www.jumpstart.org/assets/files/2008SurveyBook.pdf

***Note.* For "Target Age Range" we first listed what the program identified as the target range, which was often by grade-level (e.g., Grades K-5, High School, etc.). Following this, in parentheses, we assigned numerical ages.**