4-24-2019

Financial Literacy: The Argument for Required Coursework Regarding Personal Finance in Schools

Maclain Canfield
Western Michigan University, maclaincanfield@gmail.com

WESTERN MICHIGAN UNIVERSITY

Financial Literacy

The Argument for Required Coursework regarding Personal Finance in Schools

Maclain Canfield

The goal of this paper is to argue the need for a personal finance course in high schools and universities by demonstrating the benefits of financial literacy as well as discussing the effectiveness of classwork in promoting financial literacy and positive financial behaviors. This paper will address these topics by synthesizing available research and statistics, as well as anecdotal examples from my experience working at a financial advisory firm. This paper will lay a foundation for further research into the effectiveness of mandated personal finance courses and demonstrate a need for personal finance education in America.

Contents

Introduction

Financial literacy is one of the most important skills for adults to possess, and therefore personal finance should be required education. Being financially literate provides individuals with the knowledge needed to make financially prudent decisions that substantially impact their lives (Kenton, 2019; Lusardi, 2008; Zucchi, 2018). However, only fifty-seven percent of adults in the United States are financially literate (Klapper, Lusardi, & Oudheusden, 2015).

Although financial literacy provides lifelong benefits, basic personal finance is seldom taught in schools (Council for Economic Education, 2018; NPR, 2019). Research shows that students are more financially literate where financial education in high school is required (Tennyson & Nguyen, 2001), yet only 17 states require high school students to take a personal finance course prior to graduating (Council for Economic Education, 2018). The lack of financial literacy amongst Americans has long-lasting negative repercussions on their financial, physical and mental health (American Psychological Association, 2017; Desjardins, 2018; Lusardi & Tufano, 2009; Sweet, Nandi, Adam, & McDade, 2013). While the negative effects of a lack of financial literacy persist, a growing amount of research indicates that financial education can meaningfully impact the financial behaviors that are causing these effects. For example, required personal finance courses in high schools have been shown to lead to greater wealth accumulation in adulthood in addition to better overall financial behaviors (Bernheim, Garrett, & Maki, 2001).

In addition to courses, different methods of delivery, such as applications available on phones and computers, allow for an increasing number of individuals to access financial knowledge which has historically been difficult to obtain (Collins, Gjertson, & O'Rourke, 2016). While many different methods of educating individuals on personal finance topics exist, there is only one option that ensures the majority of individuals will be exposed to this knowledge prior to adulthood; teaching personal finance in high schools.

In the following sections, I will first argue for a mandatory personal finance course by discussing the research-backed benefits of financial literacy and the effects that financial literacy has on financial behaviors. Following that, I will discuss several financial topics that could be covered in a personal finance course and demonstrate the need for education in these areas by citing various statistics. Lastly, I will argue that requiring a personal finance course in schools is the most effective method of rapidly increasing financial literacy by citing research that demonstrates both the benefits of coursework and scenarios as they pertain to effective financial literacy learning. Throughout many of these sections, I will also include my own experiences, both professionally as a financial assistant at a financial advisory firm and as a finance student, as anecdotal evidence to supplement the published research.

Benefits of Financial Literacy

Financial literacy can substantially improve an individual's quality of life by giving them the knowledge to thrive in the financial aspects of life. The benefits of financial literacy are exhibited through its impact on financial behaviors (Robb & Woodyard, 2011). Those who are more financially literate are more likely to plan for retirement (Lusardi & Mitchell, 2006a; 2011), less likely to choose mutual funds with higher fees (Hastings & Tejada-Ashton, 2008; Muller & Weber, 2008) more likely to invest in the stock market (van Rooij, Lusardi, & Alessie, 2011), diversify their portfolios (Abreau & Mendes, 2010) and do so profitably (Clark, Lusardi, & Mitchell, 2014).

Because of these positive effects on behaviors, research has shown that being financially literate leads to reduced stress (Northwestern Mutual, 2018; Taft, Hosein, Mehrizi, & Roshan, 2013), increases in wealth (Behrman, Mitchell, Soo, & Bravo, 2012; Lusardi, Michaud, & Mitchell, 2013; Lusardi & Mitchell, 2006b; van Rooij et al., 2011), and increases in overall happiness (Netemeyer, Warmath, Fernandes, & Lynch, 2018; Stone, Wier, & Bryant, 2007). These results are augmented by the age at which individuals become financially literate. For example, many financial habits have been shown to start developing in children between the ages of five and ten, and continue to develop throughout adolescence (Financial Literacy and Education Commission, 2016; Smith, Echelbarger, Gelman, & Rick, 2017). By gaining financial knowledge in high school or college, individuals can create positive habits towards financial behaviors such as budgeting and investing (Whitebread & Bingham, 2013) in addition to mitigating their susceptibility to poor financial decisions in early adulthood (Moffitt et al., 2011) such as taking out excessive student loans or ineffective use of credit card debt.

When considering the benefits of financial literacy, it is a disservice to many students that they are not systematically given the opportunity to learn it. The lack of formal education regarding personal finance in many states costs these students the opportunity to learn valuable knowledge and skills that they could potentially utilize throughout their lives.

Financial Topics to Address

Personal finance is a field that involves many different topics (Tennyson & Nguyen, 2001; Volpe, Chen, & Liu, 2006) and deciding what lessons to teach can be difficult for instructors. Research has shown that the most effective way to educate students about areas of personal finance is by keeping the curriculum relevant to the students learning it (Corporation for National & Community Service, 2019). Furthermore, keeping the financial curriculum relevant to the learners has been shown to create meaningful differences in their financial behavior and outcomes (Carpena, Cole, Shapiro, & Zia, 2016). I've experienced this firsthand while working with family, friends, and clients, as many of them were much more apt to learn financial topics brought up during discussions if they found them relevant to their current needs.

Because it is likely that students will gravitate towards topics they see impacting them now and in the immediate future, there is some expectation that general subjects will emerge in these courses (Tallman, 2016). In my experience with family, friends, and clients, I've found that income, expenses, budgeting, debt and investing are the areas wherein interest is consistently high. Research has shown that basic knowledge of these subjects can serve as a foundation for additional financial knowledge and advanced inquiries into more specialized topics (Financial Literacy and Education Commission, 2016).

For example, a close friend of mine who had just started her first full-time position following college wanted to understand why she would invest in a 401k plan. After discussing how a 401K was a tax-advantaged method of saving for retirement, the conversation shifted towards her take-home pay and budgeting. While working on her budget, we naturally addressed the topic of her student loan payments and how to pay them off proactively. Other subsequent conversations occurred regarding market returns, compound interest, asset allocations, and investment time horizon.

In this case, our discussion began around the basics of a 401k plan and developed into a lesson on numerous financial topics of varying complexity. From a knowledge standpoint, my friend not only became informed about how to make a decision regarding whether to invest in her 401k plan but also gained a knowledge that she has been able to use in other financial aspects of her life. This experience lends anecdotal credence to the idea that providing education on a wide range of topics and naturally progressing the focus of the discussion as interest shifts is an effective method of disseminating financial literacy.

While building a basic understanding of several financial areas is critical, it is also important for students to develop the ability to address more complex financial issues. This need is predicated on the consistently growing complexity of both financial products and the overall financial marketplace. For example, banks previously offered one form of a checking account, whereas now they have many different structures to incentivize certain spending and saving habits (Fontinelle, 2018). In order to utilize the account most suited for their situation, individuals will need to have an understanding of interest rates, liquidity, and accessibility that wasn't needed when only one option was present. The increase in complexity isn't limited to checking accounts, as demonstrated by the investing aspects of personal finance.

In the past, mutual funds were the investment of choice for investors seeking to gain exposure to the stock market and were commonly sold by brokers who were heavily compensated to sell these funds. Today, while mutual funds are still prevalent, the decline in the number of brokers actively selling to investors has created a much greater need for the average investor to be knowledgeable about what they are investing in.

Additionally, there are complex financial products with benefits and drawbacks that are commonly sold to investors by brokers and insurance agents. One such product is an annuity. In exchange for principal, the buyer of an annuity contract is given access to a lifelong stream of income. Annuities often contain different guarantees, withdrawal rates, and riders that can substantially affect each annuity's suitability for the buyer. There is terminology used in variable annuities that is not commonly utilized in other aspects of finance, such as benefit base, that are often first explained to investors as they are being sold the product. Because investors are commonly uneducated to both the benefits and drawbacks of each unique variable annuity until it is being sold to them, it is easy for the broker selling the policy to overemphasize the benefits and downplay the drawbacks of such policies in order to make the sale.

For example, a client had previously purchased a fixed annuity through an insurance agent. This annuity contract offered the client a fixed 2.75 percent interest rate that would be applied to the benefit base of the contract each year. The client was however unaware of the fact that while the benefit base on the contract was growing each year by this fixed rate, the fees associated with the annuity contract were causing the cash value to barely grow over time. This client, after owning the annuity for a little over two years, wanted to use the money in their annuity to buy a mutual fund. However, because the client had recently purchased the annuity contract, it still carried a surrender charge of ten percent on the cash value he sought to withdraw. Once again, the client was unaware that he would be subject to a surrender charge on the money he had invested. Combined, the slow growth in the cash value and the high surrender charge would have resulted in the client losing money during two strong market years. Ultimately, to avoid the surrender charge and gain access to some of the funds, the client elected to take annuity payments over the remainder of his life and use some of these proceeds to purchase shares in a mutual fund. Because of his lack of knowledge, this client purchased a financial product that he did not understand and that did not fit his situation. The client stated numerous times that had he been aware of the lack of growth and liquidity built into the annuity contract, he never would have purchased it. Overall, this decision cost this client thousands of dollars in lost opportunity with his investments.

Situations like the one experienced by this client seem to have become more common in the personal finance sector. The trend toward complexity in financial products is not new, but one that has been steadily growing for some time. In 2001, Alan Greenspan, former chairman of the Federal Reserve, remarked that there is a need for consumers to accumulate knowledge on how to make informed financial decisions in response to the increased levels of flexibility in the financial services available to them (Greenspan, 2001). Research supports the former chairman by finding that in order to make prudent financial decisions in today’s complex financial marketplace, individuals will need to possess a basic level of knowledge regarding a wide range of financial topics (Lusardi, 2012; Taft et al., 2013).

Income & Expenses

The ability to understand income and expenses is a key foundational aspect of financial literacy, as it is difficult for individuals to budget, invest, or otherwise plan for a financially healthy future without understanding the money they make and spend. Having knowledge of income and expenses creates a foundation from which other financial knowledge can be built as it is often one of the first financial topics that individuals are exposed to. More than half of the young adults between the ages of 16 and 24 in America work either a part-time or full-time job (Bureau of Labor Statistics, 2018; Child Trends, 2019). Therefore promoting financial literacy and the establishment of healthy financial habits amongst these young individuals during the time they are first exposed to discretionary income can greatly benefit financial behaviors (Jinhee & Swarn, 2013).

For example, as a teenager, I did not fully understand the significance of having a financial plan or the ways in which this would impact my future spending habits. Consequently, I spent most of the money I earned during my teenage years and have struggled with keeping my discretionary expenses low in my early adulthood. Retrospectively, I would've been well-positioned to invest most of the money I earned during those teenage years without negatively impacting my enjoyment of those years.

My experience is indicative of a compulsion to spend rather than save amongst many young Americans that has been demonstrated by several studies (Bachman, Staff, O'Malley, & Freedman-Doan, 2014; Charles Schwab Corporation, 2011). Reflecting on my own experience, my habits were a manifestation of my lack of financial literacy and the habits of my friends and family I was subconsciously emulating. To overcome this compulsion to spend, I established a budget that I closely tracked. Establishing and maintaining a budget has historically been an effective tool for reducing negative financial behaviors associated with income and expenses.

Budgeting

Budgeting is a financial behavior that helps individuals and their households to understand how much money they will make and spend in a given period. Budgeting plays a critical role in allowing individuals and their households to establish a long-term financial plan (Schwab-Pomerantz, 2018). Budgeting also allows individuals to see where adjustments may need to be made in order to reach their future financial goals (Pant, 2019). While budgeting can be a very positive financial behavior, it is uncommon amongst Americans, as only one in three American households utilize a budget (Jacobe, 2013).

In this regard, I've found through discussions with friends, family, and clients that budgeting is almost a taboo topic to discuss. Many of these individuals are uncomfortable restricting the amount of money they spend on a monthly basis and choose to ignore tracking them. As a result, many of these same friends, family, and clients are exhibiting poor financial behaviors such as overspending and underinvesting that will greatly hamper their futures if left unaddressed.

With two-thirds of American households not having a budget, many Americans face a situation similar to that of the friends, family, and clients I've worked with. Consequently, a lack of budgeting may be a contributing factor to many of the precarious and unhealthy financial habits exhibited by many Americans. For example, seventy-eight percent of American workers live paycheck to paycheck to make ends meet (CareerBuilder, 2017), forty-six percent of Americans do not have any emergency funds (FINRA, 2016), and thirty-nine percent of millennials admit to worrying at least once a week about their financial future (Fidelity, 2014). As a result of living paycheck to paycheck, many individuals will be unable to save for unexpected expenses that occasionally occur during life.

Saving

The ability to save for future purchases or unexpected expenses is the result of healthy financial behaviors such as budgeting and can lead to increased financial security. However, research shows that the saving rate of Americans has been declining over the long-term (Federal Reserve Bank of St. Louis, 2019). Consequently, only one in four American families are prepared for a financial emergency, such as a loss of income, with more than six months of living expenses saved (MassMutual, 2018). Many Americans do recognize that they should be doing more to save (MassMutual, 2018), but there are obstacles that prevent many individuals from being able to so.

For example, being able to save is contingent on having discretionary income to set aside. However, discretionary income varies greatly amongst different income levels. Lower income earners are inherently going to have less discretionary income to save than their higher-earning peers with similar spending habits. Other factors, such as having children, can also decrease discretionary income for extended periods of time. Despite these barriers and the many others that exist, research finds that individuals with financial knowledge who also maintain a financial plan are much more likely to save at above-average rates (Henager-Greene & Mauldin, 2015).

Without having this knowledge or a financial plan, individuals are more susceptible to inadequately saving for emergencies. For example, research has found that four in ten adults would not be able to cover an unexpected $400 expense or they would need to sell an item or borrow money to meet this financial obligation (Board of Governors of the Federal Reserve System, 2018). Many individuals who lack sufficient savings utilize high-interest forms of debt such as credit cards to meet their short-term needs. Therefore, Americans' low rate of saving is likely a contributing factor to the increasing amounts of debt in the United States.

Debt

Debt has become a common yet critical issue for Americans. On average, Americans carry a personal debt, exclusive of a home mortgage, of over $38,000 (Northwestern Mutual, 2018). While this level of personal debt is high, research has demonstrated that possessing knowledge of the mechanisms of debt, such as debt compounding, leads to reduced overall debt loads (Lusardi & Tufano, 2009) and that financial literacy education decreased the number of negative debt outcomes amongst young adults (Brown, Grigsby, van der Klaauw, Wen, & Zafar, 2013).

While the financial benefits of understanding debt are important, there are further benefits to debt literacy in the way of one's health. American adults with higher levels of debt exhibit higher levels of stress, depression, diastolic blood pressure, and overall worse self-reported general health than their less-indebted peers (Sweet et al., 2013).

With the health consequences associated with carrying debt, it is important to consider how prevalent debt is. To that end, one of the most common forms of debt amongst Americans is credit card debt. Forty-three percent of Americans frequently carry a balance on their credit cards every month (Bricker et al., 2017), and due to the substantially high rate of interest paid on credit cards (Comoreanu, 2019), credit card debt can quickly develop if the balance is not paid off. On average, credit card debt has grown at six percent since 2014, and the typical U.S. adult with a credit card carries a balance of $5,839 (Federal Reserve, 2019). While credit card debt amongst the average American continues to grow, research has shown that financially literate individuals find themselves in less debt due to their propensity to seek out lower-interest alternatives (Lusardi & Tufano, 2009). Outside of credit cards, there are other forms of debt, such as student loans, that a typical young adult might utilize in order to prepare for a career.

Seventy-one percent of all students completing a four-year degree carry student loan debt upon graduation (The Institute for College Access & Success, 2014). In exchange for their education, students who utilize student loans are regularly borrowing tens of thousands of dollars (Board of Governors of the Federal Reserve System, 2017); many without the certainty of a job following graduation. While interest rates for student loans are significantly less than those of a credit card (U.S. Department of Education, 2019), there is often still a large amount of interest to be paid on them as a result of their large balances and long payback periods (Board of Governors of the Federal Reserve System, 2017; U.S. Department of Education, 2019). As such, student loans can significantly affect the ability of young adults to participate in the traditional goals of American life.

The presence of student loans impacts many young adults' ability to purchase a home, take a vacation, rent an apartment, or continue with their education (National Association of Realtors, 2017). Furthermore, research has indicated that the presence of student loans amongst young adults significantly reduces the rate at which they accumulate retirement assets through age thirty (Rutledge, Sanzenbacher, & Vitagliano, 2016). In my experience, I've found that student loans have both significantly reduced my friends' ability to enjoy their lives and prepare for their financial futures through investing.

For example, one of my friends, after obtaining his bachelor's degree in business administration, had student loans totaling over $90,000. His debt was to be paid over a period of ten years at a five-percent interest rate. After graduating, he had found a job where his annual income was nearly $40,000. As a result, my friend was extremely burdened by his monthly student loan payments, which were greater than $950. When added up over the year, his monthly loan payments totaled over a quarter of his annual income. As a result of this large monthly payment, my friend has decided to not save for retirement until his student debt has been paid back. When discussing why he decided to get so far into debt, my friend stated that it was a fact of life for many college students to have debt and that he had never considered any other option.

Due to these potential negative effects, it is critical that high school students be knowledgeable of the related financial, physical, and mental costs of these loans before they are incurred. Research indicates that seventy percent of high school graduates enter college by October of the year that they graduate from high school (National Center for Education Statistics, 2018). Consequently, an increasing number of students are encountering overwhelming levels of student debt. Students under the age of 30 represent both the largest number of student loan borrowers, as well as the greatest amount of outstanding student loan debt (Federal Reserve Bank of New York, 2016). Because of the prevalence of debt amongst young adults, it will be difficult for many young Americans to have the money to invest for their futures.

Investing

Investing is critical to the accumulation of wealth amongst Americans. However, many Americans do not invest (Long, 2017). Research has shown that this issue is even worse amongst young adults, as only thirty-seven percent of American adults thirty-five or younger invest in the stock market (Norman, 2018). By not investing, these young adults and many other Americans are not positioning themselves to accumulate wealth and as a result, are at a significant risk of underfunding their retirements.

To understand why investing is so impactful for wealth accumulation, it is critical for individuals to understand how the stock market works and how it has historically generated wealth. Over a period ranging from 1926 to 2017, the average return on both small company and large company stocks has exceeded ten percent on average (Morningstar, 2018). Due to compounding, an investor who held stocks and similar investments for a lengthy period would have likely seen significant gains that far outpaced what they might have earned from bonds or money held in a savings account.

While long-term stock returns greatly exceed the return on cash over an extended period (Morningstar, 2018), only about fifty-two percent of American Households in 2016 owned stock (Federal Reserve, 2017). More startling however is that young adults show a lack of confidence in the ability of the stock market to generate returns exceeding cash over time (Tepper, 2018). Because a significant number of young adults exhibit this belief, there is a great amount of wealth that is not going to be utilized most effectively by otherwise capable investors.

Consequently, we can observe change in the utilization rates of tax-advantaged retirement plans. Less than seventy-five percent of adults who are eligible to use a 401k plan contribute to it (Bassett, Fleming, & Rodrigues, 1998; Pew Trusts, 2017). Additionally, only eighteen percent of individuals in the United States contribute to an IRA account each year (TIAA-CREF, 2015).

While many adults do not invest in the stock market or utilize these tax-advantaged accounts, there is an opportunity for change going forward. Research has shown that financially literate individuals are much more likely to participate in the stock market (Lusardi & Mitchell, 2006b; van Rooij et al., 2011) and that they are far more likely to be retirement ready than their less financially literate peers (Lusardi & Mitchell, 2009).

Summary of Topics

The topic areas discussed above are some of the most fundamental aspects of personal finance. While personal finance may not be taught universally in schools, students have shown a desire to possess more financial knowledge. Sallie Mae in 2009 found that eighty-four percent of college students said that they needed more information about financial management topics, with sixty-four percent wishing they would have received this information in high school, and forty percent wishing they would have received this information as college freshman (Sallie Mae, 2009). Sallie Mae's research is supported by a survey conducted by the Charles Schwab Corporation, which found that eighty-six percent of teenagers would rather learn about money management in a class prior to making a mistake in the real world, and that seventy-five percent of teenagers include learning about budgeting, saving, and investing as one of their top priorities (Charles Schwab Corporation, 2011).

The benefits of becoming financially literate as they pertain to the topics above are a result of the financial behaviors it affects. Despite these benefits, there remains a great lack of knowledge amongst American adults regarding these topics that results in many suboptimal financial decisions. The breadth of these statistics indicates that there is substantial room for improvement. Furthermore, these statistics indicate that financial literacy education can have positive impacts on the financial behaviors of adults in America that are causing these adverse statistics.

How to Address these Areas

Creating systemic change in the United States' overall financial literacy is a significant task and is one that starts by addressing the education of Americans. Research indicates that more individuals learn personal finance from their parents or by teaching themselves rather than through courses or other forms of formal education (Charles Schwab Corporation, 2011; Jinhee & Swarn, 2013).

In recent years, one of the ways through which states have begun to focus on improving their citizens' financial literacy is through requiring coursework in high schools. In 2002, only 4 states required a personal finance course to be taken prior to graduation; by 2016, this number had grown to 17 states (Council for Economic Education, 2019). This growth indicates that states are increasingly seeing a benefit to financial literacy education, and thus encouraging that more states will continue to require a personal finance course in the coming years.

Beyond state-mandated curriculum changes in high school, numerous universities have also begun to take proactive steps towards improving financial literacy amongst their students, staff, and the local community. For example, Western Michigan University, in 2019, established the Sanford Center for Financial Planning and Wellness at the Haworth College of Business, with the goal of increasing students' and community members' ability to make financially prudent decisions. Western Michigan University plans to promote financial literacy through this center by providing one-on-one coaching, workshops, seminars, summer camps, and research to individuals who make use of this service (Western Michigan University, 2019a). Furthermore, faculty at Western Michigan University's Haworth College of Business have created a tool – Cash 'n' Careers – that seeks to better educate individuals on the costs and benefits of investing in a college education and assist in making the decision to pursue a college degree (Ross & DeMello, personal communication, 2017).

While both the Sanford Center for Financial Planning and Wellness and the Cash 'n' Careers tool will benefit individuals who seek out these resources and utilize them, they are currently limited to that domain. In this regard, Western Michigan University is again taking action by implementing two new courses, Personal Finance & Financial Coaching, through the WMU Essential Studies program, which is a list of required curriculum for undergraduate students (Western Michigan University, 2019b). While the Essential Studies program does not ultimately require students to take part in these particular courses, it provides students with the opportunity to choose these topics as part of their required general education. This change will hopefully lead to increased financial literacy and better financial outcomes for Western Michigan University students. Per figure 1, these two courses seek to incorporate information literacy, quantitative literacy, financial literacy, and financial planning with the Substance Abuse and Mental Health Services Administration's Wellness Wheel model in order to promote financial success for students following graduation (Ross M., personal communication, 2019).

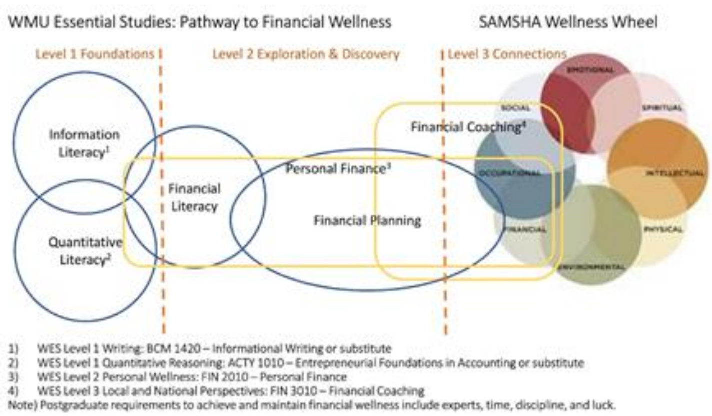

Figure 1: WMU Essential Studies: Pathway to Financial Wellness (Ross M., personal communication, 2019)

These courses will address the lack of personal finance knowledge amongst students. In conjunction, these courses will serve to greatly enhance the financial literacy of students at Western Michigan University, and subsequently, the financial literacy of the Kalamazoo community.

Courses

With prevalent internet access, Americans have never been closer to financial knowledge should they seek to learn it. Information on various financial topics has been available online for decades and can be found with a quick search. However, having access to personal finance resources online has not proven to be effective at bettering the financial literacy rates of young adults (Lusardi, Curto, & Mitchell, 2009). To ensure that many students do gain exposure to financial knowledge and resources, the best course of action is to require students to take part in a class on the subject while attending high school and university.

Teaching students personal finance while in school has been shown to be effective at both raising students' knowledge of finance and positively influencing financial behaviors. Personal finance curriculum in high schools has been shown to significantly raise students' exposure to financial topics (Bernheim et al., 2001) while school-based financial education programs have improved student's overall financial knowledge and behaviors (Amagir, Groot, Maassen van den Brink, & Wilschut, 2017; Danes, Huddleston-Casas, & Boyce, 1999; Walstad, Rebeck, & MacDonald, 2010). Specifically, high-school personal finance courses have been shown to improve students' rate of asset accumulation post-graduation (Bell & Lerman, 2005) in addition to increasing their credit scores and reducing delinquency rates on their credit cards (Brown, Collins, Schmeiser, & Urban, 2014). In particular, the "Money Talks: Should I be Listening?" curriculum, which was designed specifically for teenagers to improve financial literacy, has been shown to help improve financial literacy and subsequently financial behaviors in high school students at different schools (Varcoe, Martin, Devitto, & Go, 2005).

An important consideration as to why these classes are effective is the motivation for these students to learn the material. Grading (Lekholm, 2010), as well as other incentives, are positively linked to financial literacy acquisition amongst students enrolled in personal finance courses (Mandell & Klein, 2007). This research indicates that students do gain financial literacy and demonstrate better financial behaviors as a result of participating in personal finance courses.

While various methods of teaching have been proven effective in increasing financial literacy and promoting better financial behaviors in students, there isn't a specific curriculum evidenced as the most effective. However, research shows that scenarios and other forms of experiential learning can benefit students who encounter similar scenarios in their real lives

(Amagir et al., 2017). For example, research has shown that students, when assigned the task of creating household budgets for fictitious life situations, were subsequently better at making cost-benefit tradeoff decisions in adulthood after having made these simulated decisions (Carlin & Robinson, 2010). Some additional scenarios and topics that could be discussed with young adults include the following bulleted items:

- What would you do if you inherited $10,000 right now? -Focuses on investing, debt repayment, and budgeting.
- What is a reasonable amount of money for emergency savings? -Focuses on risk management, credit utilization, and budgeting.
- What would happen if I got fired from a job? Would I be ready? -Focuses on risk management, budgeting, and emergency preparedness.
- Where do I want to be 5 years from now? 10 years? 20 years? -Focuses on investing, budgeting, and long-term planning.
- How quickly could I pay off my debt were I to focus on it? What would be the best way to do so? Can I get further into debt safely? -Focuses on debt management and budgeting.

These scenarios and others like them can be used to prompt lessons into a wide range of topics. Additionally, because personal finance is a part of every person's life, instructors can utilize their past experiences to offer unique scenarios for each classroom in order to cater to their student's desire to learn a specific subject. In my experiences working with friends, family, and clients, scenarios have been an incredibly effective tool to demonstrate financial topics. I've found that it is much easier for individuals to compare end results that they can visualize, rather than conceptualize ideas as they are presented, which lends credence to the notion that scenarios can be effective.

Without such coursework and exposure to scenarios, many adults state that they learned the most about personal finance from their parents (Charles Schwab Corporation, 2011; Princeton Survey Research Associates International, 2008). Relying on parents to educate their children is potentially tenuous as there is no guarantee that parents will be financially literate or take the time needed to properly educate their children on these subjects. Furthermore, many parents are actually reluctant to discuss financial matters with their children (T.Rowe Price, 2017) for various reasons.

Without being able to rely on teachers or parents to educate them on personal finance topics, students may try to educate themselves. However, the effectiveness of self-learning amongst students is inadequate when compared to the effectiveness of traditional teacher-led courses (Leddo, Boddu, Krishnamurthy, Yuan, & Chippala, 2017).

Outside of these methods, there are non-traditional courses available on-demand for students through the internet. Such courses are not only desired by students (Varcoe, Peterson, Swanson, & Johns, 2010), but also effective in improving financial literacy amongst students (Lusardi et al., 2014), and in improving subsequent financial behaviors (Carlin, Jiang, & Spiller, 2014). This indicates that there are numerous effective methods by which states can increase their students' exposure to financial topics and ultimately improve their financial literacy.

Conclusion

Financial literacy has been an ongoing issue amongst many adults throughout the United States. In recent years, several states have added a requirement for personal finance courses at the high school level. While this trend is promising, the majority of states still do not require students to take a personal finance course in high school or in college. As a result, hundreds of thousands of students each year will progress to full-time work without having been taught financial topics formally, and there is no guarantee that these individuals will be taught correct information by their parents or peers. Subsequently, these financially illiterate students will be more likely to make financial mistakes which ultimately results in them being more susceptible to financial, physical, and mental health issues throughout their lives.

To address the lack of financial literacy in adults, several methods have been shown to be effective. However, to address the systemic lack of financial literacy in the United States, it is imperative that steps be taken to ensure young adults are exposed to accurate information on a variety of financial topics. To that specific goal, courses are a proven effective method as they allow for discussions and scenarios on a wide range of topics.

Requiring that states implement changes to their schools' curriculum in pursuit of financial literacy is a legislative process that can take years to accomplish. However, in 2018, twenty-nine states brought legislation that addressed financial literacy to their respective legislative sessions (Morton, 2018). Some of these bills were approved and put into action, while others were summarily rejected, but there is an encouraging trend amongst numerous states to improve the financial literacy of their citizens.

Several issues persist today with the implementation of personal finance coursework in high schools and universities that could be overcome. Requiring specific personal finance curriculum to be added may impose time and budget constraints on schools that they cannot afford. Alternative methods of providing financial education to students in these situations do exist, such as encouraging access to publicly available online resources, adapting current courses to include personal finance topics, or encouraging community involvement with financial firms or non-profit organizations are all viable methods for providing a personal finance education to students. How each state decides to address financial literacy in the upcoming years remains to be seen, but based on recent progress, there appears to be a hopeful future for financial literacy in America.

References

Abreau, M., & Mendes, V. (2010). *Financial Literacy and Portfolio Diversification*. Retrieved from Taylor & Francis Online: https://www.tandfonline.com/doi/full/10.1080/14697680902878105?casa_token=u7CAow51GiAAAAAA:SSnuWzgEOcfLrWzpdE7XcS2NndsIMwH341pXE3Kf72zfNe1FNRP5xHvqOvsILC9aLc6qGXcsFjKhGw

Amagir, A., Groot, W., Maassen van den Brink, H., & Wilschut, A. (2017). *A Review of Financial-Literacy Education Programs for Children and Adolescents*. Retrieved from https://eric.ed.gov/?id=EJ1175630

American Psychological Association. (2017). *The State of our Nation: Stress in America*. Retrieved from American Psychological Association: https://www.apa.org/news/press/releases/stress/2017/state-nation.pdf

Bachman, J. G., Staff, J., O'Malley, P. M., & Freedman-Doan, P. (2014). *What do teenagers do with their earnings, and does it matter for their academic achievement and development?* Retrieved from Monitoring the Future: http://monitoringthefuture.org/pubs/occpapers/mtf-occ78.pdf

Bassett, W. F., Fleming, M. J., & Rodrigues, A. P. (1998). *How Workers Use 401(k) Plans: The Participation, Contribution, and Withdrawal Decisions*. Retrieved from The New York Federal Reserve Bank: https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr38.pdf

Behrman, J. R., Mitchell, O. S., Soo, C. K., & Bravo, D. (2012). *How Financial Literacy Affects Household Wealth Accumulation*. Retrieved from HHS Public Access: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3554245/

Bell, E., & Lerman, R. I. (2005). *Can Financial Literacy Enhance Asset Building?* Retrieved from Research Gate: https://www.researchgate.net/profile/Robert_Lerman/publication/242743409_Can_Financial_Literacy_Enhance_Asset_Building/links/544660390cf2d62c304db692/Can-Financial-Literacy-Enhance-Asset-Building.pdf

Bernheim, D. B., Garrett, D. M., & Maki, D. M. (2001). Education and Saving: The Long-Term Effects of High School Financial Curriculum Mandates. *Journal of Public Economics*, 435-465. Retrieved from National Bureau of Economic Research: https://www.nber.org/papers/w6085.pdf

Board of Governors of the Federal Reserve System. (2017). *Report on the Economic Well-Being of U.S. Households in 2016 - May 2017*. Retrieved from Board of Governors of the Federal Reserve System: https://www.federalreserve.gov/publications/2017-economic-well-being-of-us-households-in-2016-education-debt-loans.htm

Board of Governors of the Federal Reserve System. (2018). *Report on the Economic Well-Being of U.S. Households in 2017.* Retrieved from Federal Reserve:

https://www.federalreserve.gov/publications/files/2017-report-economic-well-being-us-households-201805.pdf

Bricker, J., Dettling, L. J., Henriques, A., Hsu, J. W., Jacobs, L., Moore, K. B., . . . Llanes, E. (2017). *Changes in U.S. Family Finances from 2013 to 2016: Evidence from the Survey of Consumer Finances.* Retrieved from Federal Reserve Bulletin: https://www.federalreserve.gov/publications/files/scf17.pdf

Brown, A. J., Collins, M., Schmeiser, M., & Urban, C. (2014). *State Mandated Financial Education and the Credit Behavior of Young Adults*. Retrieved from Connecticut General Assembly House Republicans: https://www.cthousegop.com/wp-content/uploads/2015/06/State-Mandated-Financial-Education-and-the-Credit-Behavior-of-Young-Adults-Federal-Reserve-Board-2014.pdf

Brown, M., Grigsby, J., van der Klaauw, W., Wen, J., & Zafar, B. (2013). *Financial Education and the Debt Behavior of the Young*. Retrieved from Federal Reserve Bank of New York: Staff Reports: https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr634.pdf

Bureau of Labor Statistics. (2018). *Employment and Unemployment Among Youth Summary*. Retrieved from Bureau of Labor Statistics: https://www.bls.gov/news.release/youth.nr0.htm

CareerBuilder. (2017). *Living Paycheck to Paycheck is a Way of Life for Majority of U.S. Workers, According to New CareerBuilder Survey.* Retrieved from Career Builder Press Room: http://press.careerbuilder.com/2017-08-24-Living-Paycheck-to-Paycheck-is-a-Way-of-Life-for-Majority-of-U-S-Workers-According-to-New-CareerBuilder-Survey

Carlin, B. I., & Robinson, D. T. (2010). *What Does Financial Literacy Training Teach Us?* Retrieved from National Bureau of Economic Research: https://www.nber.org/papers/w16271.pdf

Carlin, B. I., Jiang, L., & Spiller, S. A. (2014). *Learning Millennial-Style*. Retrieved from National Bureau of Economic Research: https://www.nber.org/papers/w20268.pdf

Carpena, F., Cole, S. A., Shapiro, J., & Zia, B. (2016). *The Abcs of Financial Education: Experimental Evidence on Attitudes, Behavior, and Cognitive Biases*. Retrieved from SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2661139

Charles Schwab Corporation. (2011). *2011 Teens & Money Survey Findings: Insights into Money Attitudes, Behaviors and Expectations of 16- to 18-Year Olds*. Retrieved from Schwab Money Wise: https://www.schwabmoneywise.com/public/file/P-4192268/

Child Trends. (2019). *Youth Employment*. Retrieved from Child Trends: https://www.childtrends.org/indicators/youth-employment

Clark, R. L., Lusardi, A., & Mitchell, O. S. (2014). *Financial Knowledge and 401(k) Investment Performance*. Retrieved from National Bureau of Economic Research: https://www.nber.org/papers/w20137.pdf

Collins, M. J., Gjertson, L., & O'Rourke, C. (2016). *MyBudgetCoach Pilot Study: Summary of Findings*. Retrieved from Center for Financial Security: https://centerforfinancialsecurity.files.wordpress.com/2016/06/mybc_brief_june20161.pdf

Comoreanu, A. (2019). *Credit Card Landscape Report – Terms, Trends & More.* Retrieved from WalletHub: https://wallethub.com/edu/credit-card-landscape-report/24927/#interest-rates

Corporation for National & Community Service. (2019). *Identifying topics for financial literacy training*. Retrieved from Corporation for National & Community Service: https://www.nationalservice.gov/resources/economic-opportunity/identifying-topics-financial-literacy-training

Council for Economic Education. (2018). *Survey of the States: Economic and Personal Finance Education in our Nation's Schools.* Retrieved from Council for Economic Education: https://www.councilforeconed.org/wp-content/uploads/2018/02/2018-SOS-Layout-18.pdf

Council for Economic Education. (2019). *The State of Programs across the Nation*. Retrieved from Survey of the States: http://www.surveyofthestates.com

Danes, S. M., Huddleston-Casas, C., & Boyce, L. (1999). *Financial Planning Curriculum For Teens: Impact Evaluation*. Retrieved from Penn State University: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.503.9761&rep=rep1&type=pdf

Desjardins, J. (2018). *America's Growing Financial Literacy Problem*. Retrieved from Visual Capitalist: https://www.visualcapitalist.com/americas-growing-financial-literacy-problem/

Federal Reserve. (2017). *Changes in U.S. Family Finances from 2013 to 2016: Evidence from the Survey of Consumer Finances.* Retrieved from Federal Reserve: https://www.federalreserve.gov/publications/files/scf17.pdf

Federal Reserve. (2019). *Consumer Credit - G.19.* Retrieved from Federal Reserve: https://www.federalreserve.gov/releases/g19/20190108/

Federal Reserve Bank of New York. (2016). *Center for Microeconomic Data*. Retrieved from Federal Reserve Bank of New York City: https://www.newyorkfed.org/microeconomics/databank.html

Federal Reserve Bank of St. Louis. (2019). *Personal Saving Rate*. Retrieved from Domestic Capital Account (Saving & Investment): https://fred.stlouisfed.org/series/PSAVERT

Fidelity. (2014). *The Fidelity Investments Millennial Money Study: Facts, Figures and Findings*. Retrieved from Fidelity: https://www.fidelity.com/bin-public/060_www_fidelity_com/documents/fidelity/millennial-money-study.pdf

Financial Literacy and Education Commission. (2016). *Promoting Financial Success in the United States: National Strategy for Financial Literacy 2016 Update*. Retrieved from U.S. Department of the Treasury: https://www.treasury.gov/resource-center/financial-education/Documents/National%20Strategy%20for%20Financial%20Literacy%202016%20Update.pdf

FINRA. (2016). *Financial Capability in the United States 2016*. Retrieved from US Financial Capability: http://www.usfinancialcapability.org/downloads/NFCS_2015_Report_Natl_Findings.pdf

Fontinelle, A. (2018). *The 6 Different Types of Checking Accounts*. Retrieved from Investopedia: https://www.investopedia.com/personal-finance/6-different-types-checking-accounts/

Greenspan, A. (2001). *Remarks by Chairman Alan Greenspan*. Retrieved from Federal Reserve: https://www.federalreserve.gov/boarddocs/speeches/2001/20010406/default.htm

Hastings, J. S., & Tejada-Ashton, L. (2008). *Financial Literacy, Information, and Demand Elasticity: Survey and Experimental Evidence from Mexico*. Retrieved from National Bureau of Economic Research: https://www.nber.org/papers/w14538.pdf

Henager-Greene, R., & Mauldin, T. (2015). *Financial Literacy: The Relationship to Saving Behavior in Low-to Moderate-income Households*. Retrieved from Research Gate: https://www.researchgate.net/publication/281769266_Financial_Literacy_The_Relationship_to_Saving_Behavior_in_Low-_to_Moderate-income_Households

Jacobe, D. (2013). *One in Three Americans Prepare a Detailed Household Budget*. Retrieved from Gallup: https://news.gallup.com/poll/162872/one-three-americans-prepare-detailed-household-budget.aspx

Jinhee, K., & Swarn, C. (2013). *Childhood Financial Socialization and Young Adults' Financial Management*. Retrieved from ProQuest: https://search.proquest.com/docview/1412584809?pq-origsite=gscholar

Kenton, W. (2019). *Financial Literacy*. Retrieved from Investopedia: https://www.investopedia.com/terms/f/financial-literacy.asp

Klapper, L., Lusardi, A., & Oudheusden, P. (2015). *Financial Literacy Around the World: Insights from The Standard & Poor's Ratings Services Global Financial Literacy Survey.* Retrieved from Global Financial Literacy Excellence Center: https://gflec.org/initiatives/sp-global-finlit-survey/

Leddo, J., Boddu, B., Krishnamurthy, S., Yuan, K., & Chippala, S. (2017). *The effectiveness of self-directed learning vs. teacher-led learning on gifted and talented vs. non-gifted and talented students.* Retrieved from Research Gate: https://www.researchgate.net/publication/320831845_The_effectiveness_of_self-directed_learning_vs_teacher-led_learning_on_gifted_and_talented_vs_non-gifted_and_talented_students

Lekholm, A. K. (2010). *Effects of grades on student motivation and learning in compulsory school*. Retrieved from European Educational Research Association: https://www.eera-ecer.de/ecer-programmes/conference/3/contribution/4245/

Long, H. (2017). *Dow milestone? Shrug. Most Americans don't benefit from record stock market gains.* Retrieved from Chicago Tribune: https://www.chicagotribune.com/business/ct-americans-dow-22000-investing-20170803-story.html

Lusardi, A. (2008). *Financial Literacy: An Essential Tool for Informed Consumer Choice?* Retrieved from National Bureau of Economic Research: https://www.nber.org/papers/w14084

Lusardi, A., & Mitchell, O. S. (2006a). *Baby Boomers Retirement Security: The Role of Planning, Financial Literacy and Housing Wealth*. Retrieved from National Bureau of Economic Research: https://www.nber.org/papers/w12585.pdf

Lusardi, A., & Mitchell, O. S. (2006b). *Financial Literacy and Planning: Implications for Retirement Wellbeing*. Retrieved from Dartmouth: https://www.dartmouth.edu/~alusardi/Papers/FinancialLiteracy.pdf

Lusardi, A., & Mitchell, O. S. (2009). *How Ordinary Consumers Make Complex Economic Decisions: Financial Literacy and Retirement Readiness*. Retrieved from National Bureau of Economic Research: https://www.nber.org/papers/w15350

Lusardi, A., & Mitchell, O. S. (2011). *Financial Literacy and Retirement Planning in the United States*. Retrieved from National Bureau of Economic Research: https://www.nber.org/papers/w17108.pdf

Lusardi, A., & Tufano, P. (2009). *Debt Literacy, Financial Experiences, and Overindebtedness*. Retrieved from National Bureau of Economic Research: https://www.nber.org/papers/w14808

Lusardi, A., Curto, V., & Mitchell, O. S. (2009). *Financial Literacy Among the Young: Evidence and Implications for Consumer Policy.* Retrieved from National Bureau of Economic Research: https://www.nber.org/papers/w15352.pdf

Lusardi, A., Michaud, P.-C., & Mitchell, O. S. (2013). *Optimal Financial Knowledge and Wealth Inequality*. Retrieved from The National Bureau of Economic Research: https://www.nber.org/papers/w18669.pdf

Lusardi, A., Samek, A. S., Kapteyn, A., Glinert, L., Hung, A., & Heinberg, A. (2014). *Visual Tools and Narratives: New Ways to Improve Financial Literacy*. Retrieved from National Bureau of Economic Research: https://www.nber.org/papers/w20229

Mandell, L., & Klein, L. S. (2007). *Motivation and financial literacy*. Retrieved from ECS Soft Tech: http://www.ecssofttech.com/Datamining/4/2013_sco_flac_financial_literacy_motivation.pdf

MassMutual. (2018). *The American Dream Today: A Family Reality or Only Just a Dream?* Retrieved from Mass Mutual: https://www.massmutual.com/~/media/files/FY1104GP_081618MR.pdf

Morningstar. (2018). *Fundamentals for Investors.* Retrieved from https://advisor.mp.morningstar.com/resourceDownload?type=publicForms&id=3f9dff3c-f085-47a1-98ba-0bc008df9f25

Morton, H. (2018). *Financial Literacy 2018 Legislation*. Retrieved from National Conference of State Legislatures: http://www.ncsl.org/research/financial-services-and-commerce/financial-literacy-2018-legislation.aspx

Muller, S., & Weber, M. (2008). *Financial Literacy and Mutual Fund Investments: Who Buys Actively Managed Funds?* Retrieved from University of Mannheim: https://ub-madoc.bib.uni-mannheim.de/2278/1/SSRN_ID1314778_code698431.pdf

National Association of Realtors. (2017). *Student Loan Debt and Housing Report 2017: When Debt Holds You Back.* Retrieved from National Association of Realtors: https://www.nar.realtor/research-and-statistics/research-reports/student-loan-debt-and-housing-report

National Center for Education Statistics. (2018). *Fast Facts: Immediate transition to college*. Retrieved from https://nces.ed.gov/fastfacts/display.asp?id=51

Netemeyer, R. G., Warmath, D., Fernandes, D., & Lynch, J. G. (2018). *How Am I Doing? perceived Financial Well-Being, Its potential Antecedents, and Its relation to Overall Well-Being*. Retrieved from Oxford Academic Journal of Consumer Research: https://academic.oup.com/jcr/article/45/1/68/4600084

Norman, J. (2018). *Young Americans Still Wary of Investing in Stocks*. Retrieved from Gallup: https://news.gallup.com/poll/233699/young-americans-wary-investing-stocks.aspx

Northwestern Mutual. (2018). *Planning & Progress Study 2018* . Retrieved from Northwestern Mutual: https://news.northwesternmutual.com/planning-and-progress-2018

NPR. (2019). *Money Moves: The Push For Financial Literacy In Schools.* Retrieved from NPR: https://www.npr.org/2019/01/23/687924531/money-moves-the-push-for-financial-literacy-in-schools

Pant, P. (2019). *4 Surprising Advantages to Budgeting.* Retrieved from The Balance: https://www.thebalance.com/benefits-to-budgeting-453688

Pew Trusts. (2017). *Retirement Plan Access and Participation Across Generations*. Retrieved from Pew Trusts: https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2017/02/retirement-plan-access-and-participation-across-generations

Princeton Survey Research Associates International. (2008). *2008 Financial Literacy Survey*. Retrieved from National Foundation for Credit Counseling: http://espanol.nfcc.org/newsroom/FinancialLiteracy/files/2008SummaryReportTopline.pdf

Robb, C. A., & Woodyard, A. S. (2011). *Financial Knowledge and Best Practice Behavior*. Retrieved from ERIC Institute of Educational Sciences: https://files.eric.ed.gov/fulltext/EJ941903.pdf

Ross, M. (2019). WMU Essential Studies: Pathway to Financial Wellness. *Personal Communication*.

Ross, M. M., & DeMello, J. P. (2017). Cash 'n' Careers: Human Capital Investment. *Personal Communication*.

Rutledge, M. S., Sanzenbacher, G. T., & Vitagliano, F. M. (2016). *How Does Student Debt Affect Early-Career Retirement Saving?* Retrieved from Center for Retirement Research at Boston College: https://crr.bc.edu/working-papers/how-does-student-debt-affect-early-career-retirement-saving/

Sallie Mae. (2009). *How America Pays for College*. Retrieved from Sallie Mae: https://news.salliemae.com/sites/salliemae.newshq.businesswire.com/files/publication/file/GCR1979_2009_PAYS_survey_final_091609.pdf

Schwab-Pomerantz, C. (2018). *10 Steps to a DIY Financial Plan.* Retrieved from Charles Schwab: https://www.schwab.com/resource-center/insights/content/10-steps-to-diy-financial-plan

Smith, C. E., Echelbarger, M., Gelman, S. A., & Rick, S. I. (2017). *Spendthrifts and Tightwads in Childhood: Feelings about Spending Predict Children's Financial Decision Making*. Retrieved from Wiley Online Library: https://onlinelibrary.wiley.com/doi/abs/10.1002/bdm.2071

Stone, D., Wier, B., & Bryant, S. M. (2007). *Does Financial Literacy Contribute to Happiness?* Retrieved from The CPA Journal: http://archives.cpajournal.com/2007/907/perspectives/p6.htm

Sweet, E., Nandi, A., Adam, E., & McDade, T. (2013). *The High Price of Debt: Household financial debt and its impact on mental and physical health*. Retrieved from US National Library of Medicine: National Institutes of Health: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3718010/

T.Rowe Price. (2017). *2017 Parents, Kids & Money Survey Results*. Retrieved from Money Confident Kids: http://www.moneyconfidentkids.com/content/money-confident-kids/en/us/media/research/2017-parents--kids---money-survey-results.html

Taft, M. K., Hosein, Z. Z., Mehrizi, S. M., & Roshan, A. (2013). *The Relation between Financial Literacy, Financial Wellbeing and Financial Concerns*. Retrieved from Research Gate: https://www.researchgate.net/profile/Seyyed_Mehrizi/publication/271316355_The_Relation_between_Financial_Literacy_Financial_Wellbeing_and_Financial_Concerns/links/5b5f91f1a6fdccf0b20263b4/The-Relation-between-Financial-Literacy-Financial-Wellbeing-and-Fin

Tallman, B. (2016). *What Do Students Really Want to Learn About Personal Finance?* Retrieved from Centsai: https://centsai.com/smarter-money/experts/expert-blogs/what-do-students-really-want-to-learn-about-personal-finance/

Tennyson, S., & Nguyen, C. (2001). *State Curriculum Mandates and Student Knowledge of Personal Finance*. Retrieved from JSTOR: https://www.jstor.org/stable/pdf/23860574.pdf?casa_token=6mQ_islUyrAAAAAA:8S82JrL9wcZuV_jZfo89AdT2BD7CwbL3MvO_Dk8KT3s8ebTsL6oLRF88AMqfumAogocC2I0DwczHxNcZxcsrcGndhrjHPmoS_KMMapK_bkp1n1p2kTY

Tepper, T. (2018). *Millennials prefer cash over stocks — and it could cost them millions*. Retrieved from Bankrate: https://www.bankrate.com/investing/financial-security-july-2018/

The Institute for College Access & Success. (2014). *Quick Facts about Student Debt*. Retrieved from The Institute for College Access & Success: https://ticas.org/sites/default/files/pub_files/Debt_Facts_and_Sources.pdf

TIAA-CREF. (2015). *TIAA*. Retrieved from TIAA: https://www.tiaa.org/public/pdf/C22552_2015_IRA_Survey-Executive_Summary-FINAL.pdf

U.S. Department of Education. (2019). *Federal Student Aid: Interest Rates and Fees*. Retrieved from Student Aid: https://studentaid.ed.gov/sa/types/loans/interest-rates

van Rooij, M. C., Lusardi, A., & Alessie, R. J. (2011). *Financial Literacy, Retirement Planning and Household Wealth*. Retrieved from National Bureau of Economic Research: https://www.nber.org/papers/w17339

Varcoe, K. P., Martin, A., Devitto, Z., & Go, C. (2005). *Using A Financial Education Curriculum For Teens* . Retrieved from University of California: http://www.ucanr.org/sites/consumereconomics/files/136495.pdf

Varcoe, K. P., Peterson, S. S., Swanson, P. W., & Johns, M. C. (2010). *What Do Teens Want to Know About Money— A Comparison of 1998 and 2008*. Retrieved from Amazon AWS: https://s3.amazonaws.com/academia.edu.documents/45322175/What_Do_Teens_Want_to_Know_About_Money-A20160503-4708-1macs3.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1557679137&Signature=QKHpFbGflJ2dKnWqhChtpFbpbp4%3D&response-content-disposition=inline%3

Volpe, R. P., Chen, H., & Liu, S. (2006). *An analysis of the importance of personal finance topics and the level of knowledge possessed by working adults*. Retrieved from Penn State University: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.392.598&rep=rep1&type=pdf

Walstad, W. B., Rebeck, K., & MacDonald, R. A. (2010). *The Effects of Financial Education on the Financial Knowledge of High School Students*. Retrieved from Wiley Online Library: https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1745-6606.2010.01172.x

Western Michigan University. (2019a). *About: Sanford Center for Financial Planning and Wellness*. Retrieved from Western Michigan University: https://wmich.edu/financialplanning/about

Western Michigan University. (2019b). *WMU Essential Studies*. Retrieved from Western Michigan University: https://wmich.edu/facultysenate/wmuessentialstudies

Whitebread, D., & Bingham, S. (2013). *Habit Formation and Learning in Young Children*. Retrieved from The Money Advice Service: https://mascdn.azureedge.net/cms/the-money-advice-service-habit-formation-and-learning-in-young-children-may2013.pdf

Zucchi, K. (2018). *Why financial literacy is so important*. Retrieved from Investopedia: https://www.investopedia.com/articles/investing/100615/why-financial-literacy-and-education-so-important.asp