ABSTRACT

Financial Literacy Educational Programs: Purpose, Availability, and Necessity

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This thesis conducts an analysis of the status of financial literacy programs that exist within the current educational system, specifically in the United States. By researching a variety of current financial literacy programs, teaching tactics, and statistics, an inconsistent system of educational implementation and a rapidly increasing knowledge gap between individuals were identified. Financial literacy proved to be a common factor between the increasing wealth gap and the financial struggles that individuals are facing. Financial education is essential to achieving financial stability in life. Therefore, a proposal of specifically identified methods and overall improvements are provided to implement consistency and aim to equitably equip students with the necessary knowledge to succeed financially.

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FINANCIAL LITERACY EDUCATIONAL PROGRAMS: PURPOSE, AVAILABILITY, AND NECESSITY

A Thesis Submitted to the Faculty of

Baylor University

In Partial Fulfillment of the Requirements for the

Honors Program

By

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Waco, Texas

May 2022

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DEDICATION

To my parents, for their unwavering support and encouragement.

To Professor Farish, for her endless guidance and mentorship throughout this thesis process.

CHAPTER ONE

Introduction

Where it all began

Growing up, I was not like all the other children. Most girls my age begged to play with dolls or play 'house' on the playground. While I still played along with them and had my own collection of dolls, I was much more interested in playing a different kind of game, the game I called 'store'. In this game, I enjoyed the checkout process the most when I tallied up prices and customer totals. I had a collection of miniature fake food that I would set out in their own aisles like you were at a grocery store. After playing store a few times, I realized that my piece of scratch paper was not sufficient to check people's purchases out. I then preceded to beg my mom to buy me a receipt pad from Walmart the next time we went to the store. I vividly remember standing in the paper supply aisle looking through all the receipt pad options until I found the perfect one that had carbon paper so I could provide my customer with a copy of their receipt as well as keep a copy for myself.

This infatuation with business and money continued to grow throughout my time in school. In the third grade, my birthday fell on the day right before we would be let out for fall break, which meant that the teachers had planned special programming for us. This year, we did a lesson with Junior Achievement where we learned how to write a check. Junior Achievement is currently the largest organization in the United States that focuses on providing students with the education they need to "make smart academic and economic choices" (*About JA | Junior Achievement USA*, n.d.). As a third grader, I was aware of what a check was and how you could use it but had not personally ever written one or had the need to write one before. Throughout the lesson, I was fascinated by how checks worked and how a piece of paper with simple writing on it could gain so much value just by adding a few numbers to it (*How to Write a Check - JA In The News | Junior Achievement of Central Indiana*, n.d.). I cannot remember much of what I did in the third grade, but this day truly stuck out to me. To this day, when I go to write a check, I still think back to what I learned on October 14th, many years ago. Although most children are not as interested in finances as I might have been, these examples show how the financial lessons I learned as a child has stuck with me.

Financial Industry Regulatory Authority Survey

The Financial Industry Regulatory Authority, or FIRNA, works alongside the Securities and Exchange Commission to regulate the financial industry so that they can protect investors. FIRNA conducts a study every three years to evaluate the financial knowledge of the United States citizens (*National Study by FINRA Foundation Finds Financial Prosperity Eludes Many Americans Despite Strong Economy | FINRA.Org*, n.d.). Within the survey, specific questions are asked to determine the importance of various factors that could influence one's financial capacity. In the most recent survey, conducted in 2018, it appeared that financial literacy has declined among the population. To measure financial literacy, they included a few questions about basic economic topics such as interest rates and mortgages. Out of all the people who took the survey, only 34% of them were able to correctly answer 80% of the questions. This is alarming since in 2009 when they did the first survey, 42% of respondents could answer that many questions correctly (*National Study by FINRA Foundation Finds Financial Prosperity Eludes Many Americans Despite Strong Economy | FINRA.Org*, n.d.). The downward trend in correct response can be seen below in Figure 1.

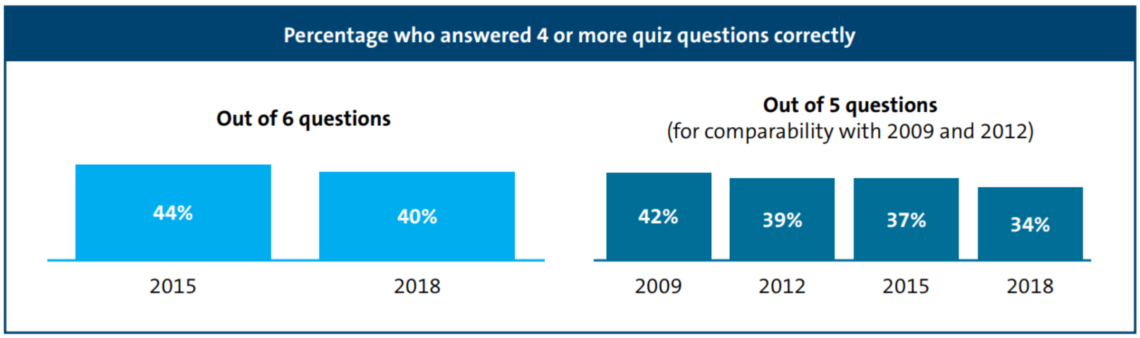

Figure 1: Percentage who answered 4 or more quiz questions correctly broken down by year. (*National Study by FINRA Foundation Finds Financial Prosperity Eludes Many Americans Despite Strong Economy | FINRA.Org*, n.d.)

This shows that there was an 8% decline in basic financial literacy over the span of fewer than 10 years. One key age group that has had the largest decline in accurate answers was young adults, which can be seen in Figure 2. One reason why the score in this age group might have decreased from the previous survey is because they have not experienced a financial crisis. The 2008 financial crisis caused some people to become aware of their financial situation and, therefore, become more financially literate (*National Study by FINRA Foundation Finds Financial Prosperity Eludes Many Americans Despite Strong Economy | FINRA.Org*, n.d.). But I also believe the scores of this age group heavily reflects on the impacts of financial education while in school.

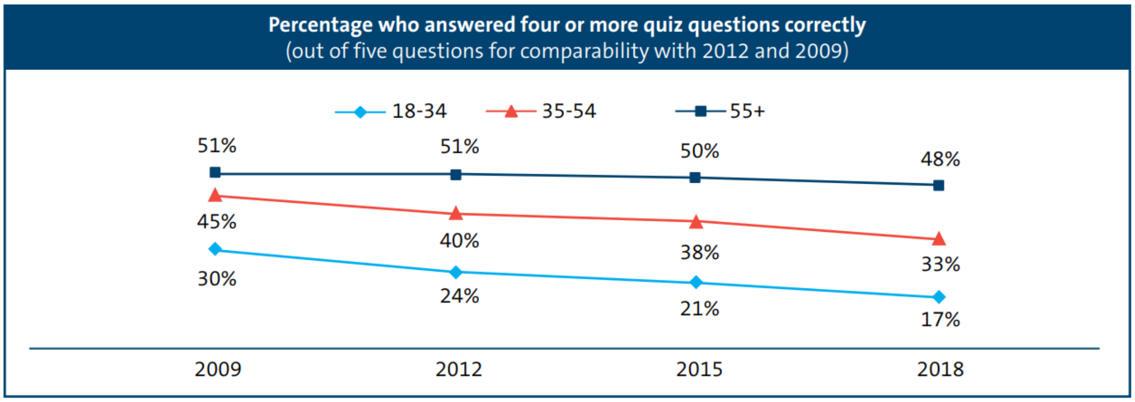

Figure 2: Percentage who answered four or more quiz questions correctly broken down by age group. (*National Study by FINRA Foundation Finds Financial Prosperity Eludes Many Americans Despite Strong Economy | FINRA.Org*, n.d.)

The FIRNA survey has collected data that proves that time focused on financial education positively impacts individuals' financial decisions in the future. People are more likely to make smart decisions regarding their finances if they participate in quality educational programs that emphasize these topics. This is especially seen in young adults, who in most cases, are financially independent in all aspects of their lives.

For some people, the first time they are solely in charge of their finances is during college or after they graduate and get a full-time job. College is a difficult transition for many students even when you do not consider the financial side of the situation. For many people, they are faced with the decision of trying to decide where they want to go, who they want to be, and what they want to do. But, when you add in the financial stress that comes along with those decisions, it can be overwhelming. This is exemplified by the fact that many students have not been given the opportunity to learn the basics of financials to know how to properly manage their money. Figure 3 visually depicts some of the most prominent financial stressors students face.

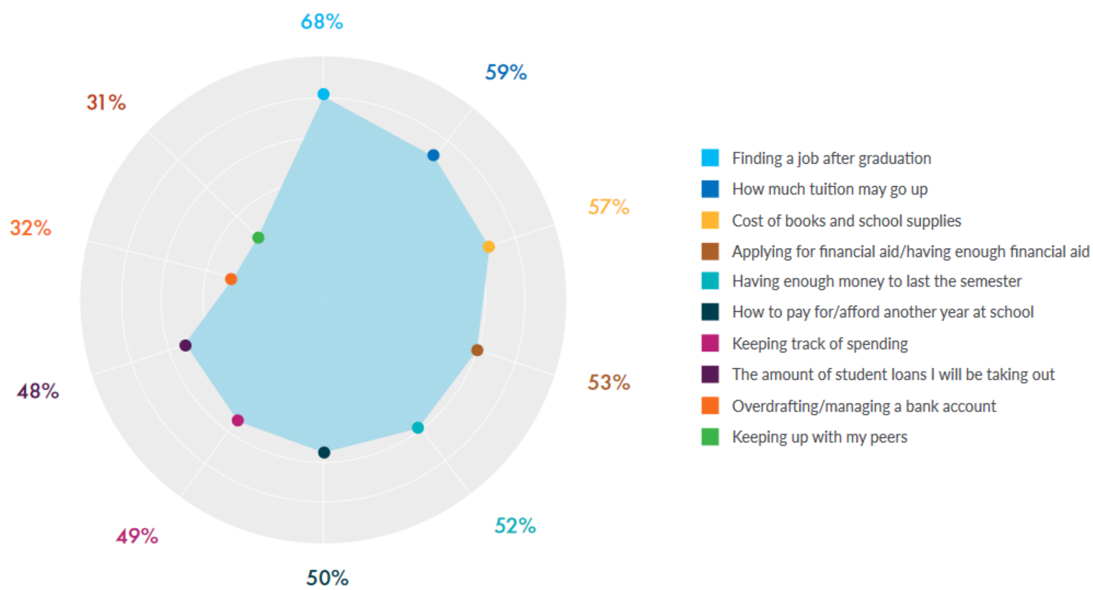

Figure 3: Percentage of Students Who Found Each Task At Least Moderately Stressful. From (*MoneyMatters-2019*, 2019).

Often, as students, we are told that we will "figure it out when the time comes" or that "we will learn it eventually". In many cases, the 'time' comes around and we feel unprepared to handle the situation and were never taught the lesson we were promised would be taught to us down the line. In a survey conducted by EVERFI, 53% of people in college felt the least prepared to handle their money on their own than in any other aspect of school they were dealing with (*MoneyMatters-2019*, 2019). This statistic shows that there is a need for more financial education that can be provided while children are in school so that they will feel more prepared for what is to come as they get older.

Among college students, finances are frequently talked about, because, for most people, it is the first time that they are actively overseeing their finances and do not have a parental figure watching their every transaction. This stage in life makes it evident whether the teachings and lessons the student was taught regarding finance, throughout their younger years, were beneficial or insufficient. Although the percentage of people who are not equipped to manage their finances when that time comes in their life is disturbing, studies have proven that financial education does lead to a positive outcome as the individual ages. In FIRNA's study, they determined that over 10 hours of financial education could lead to a larger percentage of people spending less money than they earn compared to people who did not receive this education (*National Study by FINRA Foundation Finds Financial Prosperity Eludes Many Americans Despite Strong Economy | FINRA.Org*, n.d.). Although, as a finance student, this sounds like common knowledge, to many people who do not have the privilege of receiving financial education or being surrounded by financially literate individuals, this is not common knowledge.

The issue of Financial Education

This topic brings up the question, when should individuals start learning about financial literacy? In a CNBC article, Griffin says, "If your kids are asking you about money, then it is time to start teaching them" (*Teaching Your Child About Credit: When to Start*, n.d.). There is not a specific or perfect time to start teaching children about these topics, but the younger they start associating money and financial decisions with the correct actions, the more successful they will be when they are having to make choices on their own. In the same article, one of the other teachers interviewed described that most children, when asked what they would spend money on if they were handed cash, proclaimed that they would purchase something with it. While there is nothing specifically wrong with this action, it shows that the children are programmed to associate money with spending instead of things like investing or saving. If this association is not switched in their mind while they are younger, they are going to continue to link money with the idea of consumption, which could lead to poor financial choices being made in the future. Instead of immediately choosing to save the excess money that they earn from their job, these children will be more likely to spend their money because that is what they have been practicing for the last 10 plus years of their life. This issue can be mitigated through continued financial education programs as well as through schools and parents who are actively teaching their children the proper ways to manage their money.

The educational system in the United States is created in a way that emphasizes continuous education through the act of building and expanding upon concepts throughout the years. This is very evident within schooling from kindergarten through twelfth grade. Students are introduced to concepts in a very basic way, then through course work, subsequent courses, and continued application, their knowledge is expanded so they can more fully understand the concept in a much deeper way. This type of learning program seems to work for most subjects taught in school and should therefore be applied to the subject of financial literacy. Continuous learning and application throughout one's schooling will be more beneficial in the long run because they have built up their knowledge and skillset over a longer period. Therefore, this format of teaching should reduce the risk of individuals growing a mountain of debt attached to their name before learning about proper financial management ("Financial Literacy," 2019).

Defining Financial Literacy

So far, I have been using financial literacy as a comprehensive term. By financial literacy, I am referring to the act of being able to use knowledge and skills to make smart financial decisions, manage money properly, and have financial well-being all within the current economic structure. To be financially literate, an individual should have an understanding of the following financial topics. Basic knowledge of money, savings, budgeting, interest, inflation, and investments. Some of the most common places that financial literacy is often taught are through real-world experiences, by parents to their children, and in schools. (Agnello et al., 2019)

There are many reasons why financial literacy is necessary for someone to have, but one of the main reasons is because it allows people to attain personal financial stability ("Financial Literacy," 2019). Gaining financial knowledge and skill sets will allow individuals to feel confident enough to make their own financial decisions. The thing many people struggle with is having the lack of confidence to put their ideas into action instead of dwell on whether they are correct or not. I have fallen victim to this before. Even if I knew what I should do, I had personally not had enough practice or exposure to proper financial management that I did not trust myself to make the decisions alone. By taking part in continuous educational opportunities and experiences that allow one to practice making these decisions, people will feel much more confident in their capabilities to manage their money sufficiently.

Another reason why financial literacy is important is that it helps people to have a realistic understanding of what their financial situation is. Understanding what they should currently be spending or saving their money for so that they can be stable in the future is invaluable. This is especially important when planning for retirement or paying off debt. Having financial literacy should allow people to know how to plan to tackle these larger financial demands so they set their future selves up for success.

Finally, being financially literate will help reduce one's risk of falling victim to fraud ("Financial Literacy," 2019). Fraud has become much more of a pressing issue in recent years due to the increased opportunities for engagement between the people committing fraud and those they are trying to engage with. The hope is that having a better understanding of finances will allow someone to notice the potential red flags when they come across a fraudulent request. This will help protect them from even more financial distress that can be caused by these scams.

Purpose of my Research

When determining a thesis topic, my initial thought was to explore the importance of financial literacy. Due to my personal experiences, being exposed to a multitude of voluntary and required financial education, I feel as though I can attest that even just a little learning of this topic can be extremely impactful. Also, I have seen firsthand the effects that poor financial education can have on someone and how it can cause them to frequently make poor financial decisions. I truly believe that financial literacy is necessary within our nation and today's economy. It should not only be available as a privilege to some but should be an integral part of our educational system. All should have access to financial education courses, no matter their race, age, gender, or socioeconomic status.

The research I will be presenting will focus on a review of the status of financial literacy and the inequalities that exist regarding this topic in the United States. Without knowing where society currently stands in this situation it would be difficult to understand the specific issues that need to be addressed moving forward. If we hope to improve financial literacy across society, provide more learning opportunities, and more practical application exercises, then it is necessary to understand the current system's shortfalls. I will also be presenting a more in-depth view of the benefits of financial literacy that will also identify some of the negative impacts the lack of financial literacy can have on an individual's life. This research will focus on supporting why this topic is so important in society right now and why individuals should be demanding that they receive the resources to learn this topic from a young age.

Additionally, I will be providing an analysis of some of the current educational programs that are available. Identifying the current financial educational offerings is crucial to recognizing what programs or regulations should be put in place moving forward to be the most effective. Because people learn differently at every age level and stage of life, and there is not one specific way that financial literacy should be taught, I will be reviewing a variety of educational techniques. These will include programs of varying structures and accessibility.

Finally, based on the research and analysis that has been done, I will identify tangible next steps that should be taken to equip students with the necessary knowledge needed to succeed financially. These recommendations will stem from a thorough understanding of the types of educational offerings that exist and the effectiveness that personal finance courses have on students. These topics as well as others will be covered in the following chapters as I work to show the importance of financial literacy and how it can be best achieved to properly prepare individuals for their future.

CHAPTER TWO

Literature Review

To fully understand the current situation of financial literacy, it is important to be aware of the programs that currently exist, the types of financial teaching that are being implemented throughout the educational system, and what requirements exist from the state and the government. This information will provide insights into how financial literacy is specifically being approached within our country.

While it is important to look at the financial literacy situation holistically, it is also crucial that we pinpoint the areas where there are significant knowledge gaps and analyze the studies that have tested the effectiveness of different teaching techniques. Without addressing the specific areas that are lacking in equal learning opportunities, the financial literacy gap will continue to grow and become more difficult to close. Regarding addressing areas in society that are lacking financial education and are not as literate on this topic as the rest of the country, I found that the *Racial Differences in the Returns to Financial Literacy Education* provided a lot of interesting insights into the growing wealth gap in the United States.

Racial Differences in the Returns to Financial Literacy Education

This article was created to focus on investigating the financial literacy gap. The research specifically focuses on the differences that exist between racial groups (Al-Bahrani et al., 2019). They were able to confirm that "whites have higher financial literacy scores relative to minorities and that financial literacy increases with participation in financial literacy education" (Al-Bahrani et al., 2019). But they also determined that even when both groups participated in financial education, those who were white gained more knowledge from the lesson than those of a minority race. This is an interesting takeaway that amplifies the idea that financial literacy education is necessary to improve literacy rates, but that there is more to it than just adding an educational program. In this paper, they often lumped women into the minority group, because they are proven to be less financially literate than their male counterparts.

In the Journal of Economic Literature, Vol. LII (March 2014), survey data also reinforces the financial literacy gender gap between males in females (Lusardi & Mitchell, 2014). It not only highlights the difference between these two groups in the United States, but also in other prominent countries. A visual representation of the results can be seen in Figure 4.

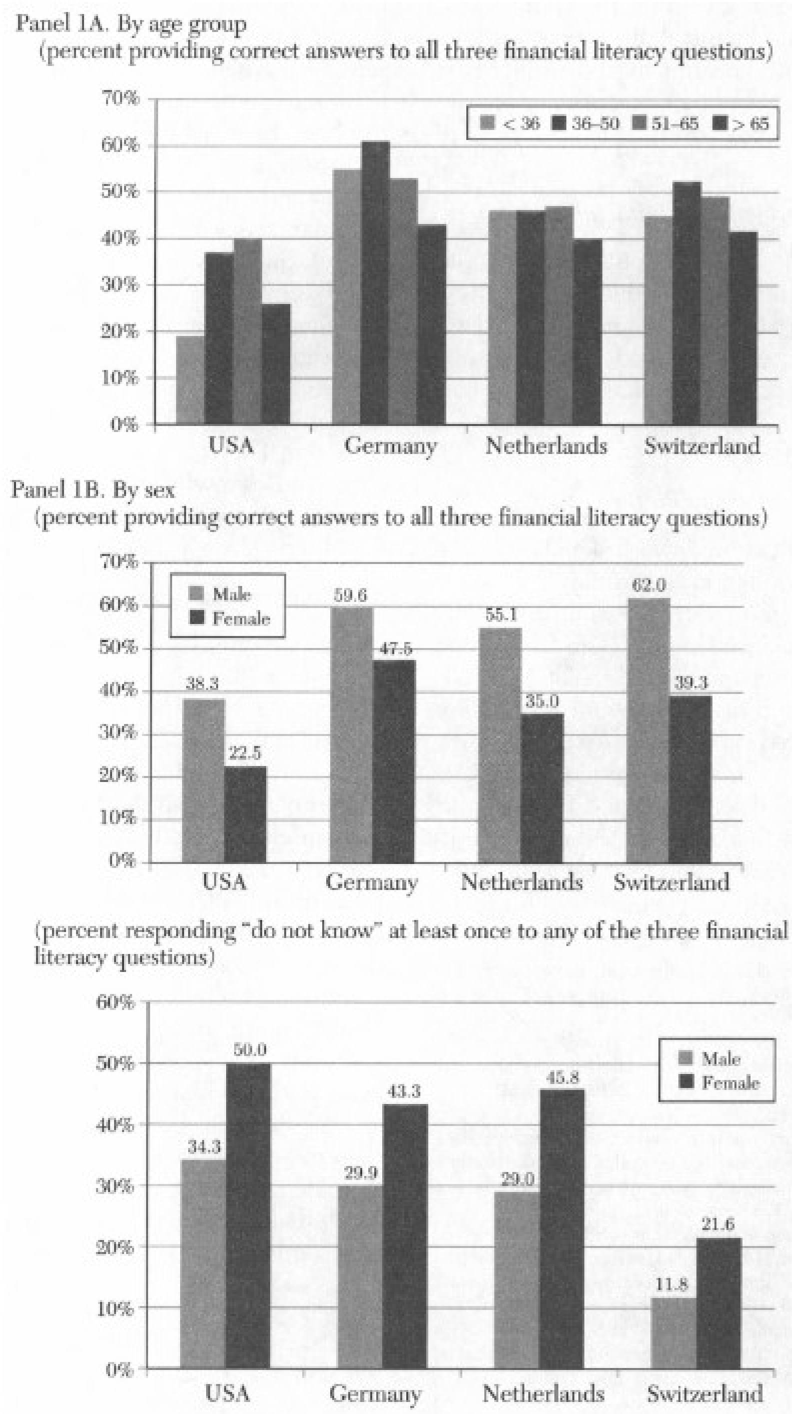

Figure 4: Financial literacy statistics for countries based on age group and sex. (Lusardi & Mitchell, 2014)

Although financial literacy will not completely close the racial or gender wealth gap, it has been proven that financial literacy and wealth are affected by one another (Al-Bahrani et al., 2019). At the time that they wrote this article, financial education improved literacy scores by 1.5% more for whites than it did for minority races (Al-Bahrani et al., 2019). Some of the racial issues are caused by the lasting effects of racism. It has caused a psychological shift in some people of minority races to believe that they do not have the capability or means to take part in financial endeavors such as taking a loan and purchasing a house. In reality, many of these people are just as financially capable of taking part in these activities but are lacking knowledge about the required credit or finances needed to even be considered. This is extremely critical to the racial wealth gap because "the largest contributor to differences in wealth accumulation is the ability to build home equity" (Al-Bahrani et al., 2019).

Another important point that this article examined was the increase in the number of states that have begun to require economic education. Beginning in the late 1990s there has been an increase in discussing the topic of financial literacy among all levels of policymakers. These discussions have caused an increase in states requiring these specific educational programs. Although this is a step in the right direction, there is a flaw in the plan they have put in place. The curriculum that they are requiring to be taught, was not consulted by the local educators and communities. Therefore, instead of targeting the gaps in economic education for specific areas and communities, they are implementing a general educational program (Al-Bahrani et al., 2019). While this will still help improve financial literacy rates among these teens, it is failing to properly address the issue of minorities and women having lower financial literacy rates.

Although many of the statistics and examples in this article and throughout my writing focus on financial literacy through the educational system, it is still critical that people are receiving this type of education elsewhere. Whether it be through the school, workplace, church, parents, or economic businesses we interact with, there is a multitude of resources where one can expand their economic knowledge (Al-Bahrani et al., 2019). The idea of implementing economic education programs through the schooling system would be one of the easier ways to confirm that there has been widespread implementation of solutions to the low financial literacy rates. This would help to ensure that every child has an equal opportunity of being exposed to this type of knowledge. But it is also important that economic education does not stop when individuals step foot outside of the school. The learning should continue as they age and as they come in contact with more in-depth financial situations.

In the conclusion of this article, it said, “we confirm participation in financial literacy education is statistically significant” (Al-Bahrani et al., 2019). For the purposes of this paper, it is important to know that economic education has a positive effect on financial literacy. The differences between the financial literacy rates of minorities and white males are caused by outside factors other than just the educational programs. This leads to there still being a wealth gap among these two groups, but with more specific programming in the future, and assistance from policymakers, the wealth gap might begin to decrease. While federal policymakers have the power to mandate financial literacy programs and initiatives countrywide, many of the targeted educational efforts will need to come from the local and state policymakers (Admin |, n.d.).

Using Stories to Teach

Along with focusing on the regulatory side of economic education implementation, I also believed it would be beneficial to research what some of those educational programs and lessons looked like and how effective they were in the classroom. The article, *Grabbing a Tiger by the Tale: Using Stories to Teach Financial Literacy,* focuses on recommending specific techniques for teachers to use when teaching about the economy (Agnello et al., 2019).

This article defines financial literacy as, "having the knowledge and ability to function momentarily within the existing economic system" (Agnello et al., 2019). This definition aligns with the description of financial literacy that was given in the first chapter. To confirm that individuals gain this financial knowledge, it is important that they begin to learn about the topics from a young age. But that comes along with the question of how do you teach children about the complex topics of finances and the economy?

The main concept the authors of this paper are trying to get across to the readers is that teachers should use stories and their applications to society as a way of teaching financial literacy in schools (Agnello et al., 2019). The authors are making the case that the same stories that are told to children to teach them about societal pressures and struggles should be used to teach them about finances. Stories are often used to teach people about cultures, morality, and life lessons that are important to understand, starting at a young age. While many educational systems use this way of teaching for life concepts and their application to the real world, there is nothing saying that they cannot teach financial literacy the same way. Religious groups, in particular protestant churches, are known for teaching through parables and stories. It is an effective way of applying truths in the Bible through practical examples that are understood by many. This same concept can be used to teach people about finances. Financial literacy is not just comprised of knowing how to do mathematical calculations, but it also includes knowing how to properly think about and treat money. An example of how financial literacy can be taught through stories is by teaching the ethics and morals that need to be maintained in the context of money (Agnello et al., 2019). Stories can also be used to explain the correct and incorrect ways to use money.

Storytelling is powerful because it “represents a process for making sense of human relationships and decision outcomes” (Agnello et al., 2019). Financial literacy is more than just understanding how to interact in the economy in a way to better one’s personal economic situation, but also understanding the moral and ethical expectations of someone who is interacting with money. Thus, storytelling is an effective way to teach about the moral side of finances, because it encourages there to be open group discussions about moral and ethical implications. Using stories to teach the lessons also allows the students to relate the finance topics to real-world situations. This allows them to understand the topics better and make them more likely to be able to make smart financial decisions in their personal life. Furthermore, the stories also focus on societal topics which prevent the students from learning to desire wealth and instead encourage them to be well-rounded and educated citizens in the future. By learning to understand the economic situations through stories and the reasons behind them, the students become more likely to begin to actively think through the moral and financial lessons they learned and apply them to their daily lives (Agnello et al., 2019).

Adding to College Coursework

While it is important to begin teaching lessons about financial literacy from a young age, it is also important to not assume that all people have had the opportunity to gain financial knowledge over the years. Therefore, as a college student, I felt as though it was important to investigate how financial literacy education could improve for those who were nearing the end of their schooling. The article, *Integrating Financial Literacy Into Introductory Programming* provides a look into how integrating specific learning materials into introductory programming within college can improve the student's financial literacy (Zhu and Shen, 2021).

One of the biggest issues facing graduating college students is that over two-thirds of them have student loans, but do not know the proper way to handle their debts (Zhu and Shen, 2021). As previously mentioned, implementing financial literacy programs in schools can be beneficial because it is regulated, and it is easy to see where the programs are in place and where they are not. The only issue with this is that if the proper lessons are not taught by the time the students graduate or leave school, then there becomes less accessibility to financial literacy education. Therefore, high school and college are critical times in one's schooling to gain financial knowledge that will set the tone for their financial success post-graduation.

The authors describe personal finance as involving "information processing and number crunching to compare various what-if scenarios" (Zhu and Shen, 2021). Since everything is computerized in today's world, it is valuable to teach the students how to properly compute these calculations using programming and computer calculations. This way they are actively learning how to apply these lessons to their real life. When teaching lessons like these, it is critical that the students see the value in the applications they are using because, if they do not, they will easily lose interest and gain no financial literacy from the lesson. Therefore, it is extremely important to research and test the financial curriculum for the intended audience. This will ensure that the curriculum is engaging and connects the learning in the classroom with the experiences they are encountering in the outside world.

The principles that these authors utilized to determine the topics they would use for their course are listed below.

> "Principle 1: Choose personal finance topics that are closely related to college students.
> Principle 2: Choose personal finance topics that require computation and are beneficial if knowing computation details.
> Principle 3: Programming examples and assignments should be personal finance related. When possible, use the same financial literacy concepts to demonstrate different solution approaches to the same problem.
> Principle 4: Succinct but sufficient background and calculation information should be provided for students to develop computational solutions to personal finance problems" (Zhu and Shen, 2021).

By keeping all the problems focused on the topic of personal finance it makes it clear what the students are trying to learn from the detailed lessons. The study found that it was beneficial to keep the examples and material focused on a specific field of study, rather than integrating multiple subject matters. This helps to not confuse the students and allows them to apply the lessons more easily at a later date (Zhu and Shen, 2021). The way they approached integrating financial lessons with teaching programming was by starting with simple finance application questions. As the students completed the simple finance and programming problems, the professors provided them with more complex and involved problems. This allowed students to progressively increase their knowledge in both fields without getting overwhelmed easily. Also, this allowed them to build upon the skills they were learning throughout the course rather than having to try and learn everything at once.

In the specific scenario used in this study, the educators were testing the effect of adding financial literacy lessons to a computer programming course. They conducted a survey before and after the course to see the impact in improvements in both fields of study. Once they had the results, they compared them to a control group to see if there was any improvement among the students. The results showed an increase in programming understanding, but there was not a statistically significant improvement in financial literacy. The course was more focused on teaching students specific programing skills and utilized financial literacy concepts as the application scenarios. Even though this specific program did not see a drastic change in the students' understanding of concepts, there was a shift in students' awareness of their financial choices as well as an increase in financial discussions within the classroom (Zhu & Shen, 2021).

To further emphasize the importance of financial literacy education, especially among college students, it is important to know the stress that the lack of financial literacy has on a student. Of the 40,000 college freshmen surveyed, 80% of them had daily stress caused by debt (Zhu and Shen, 2021). The financial stress that people deal with was also addressed in FIRNA's 2018 study. Over half of the respondents feel a sense of anxiousness about their finances. This response was primarily identified in results from young adults and unmarried women (Hasler et al., n.d.). Figure 5 provides further insight into the survey's results.

Agree (5 to 7 on 7-point scale)	Total	Gender		Age			Financially dependent children		Household retirement status	
		Male	Female	18-34	35-54	55+	Yes	No	Non-retired	Retired
"Thinking about my personal finances can make me feel anxious"	53%	47%	57%	63%	58%	39%	61%	48%	58%	33%
"Discussing my finances can make my heart race or make me feel stressed"	44%	38%	49%	55%	49%	30%	53%	38%	49%	25%

Figure 5: Anxiousness and stress related to financial literacy. (*National Study by FINRA Foundation Finds Financial Prosperity Eludes Many Americans Despite Strong Economy | FINRA.Org*, n.d.)

This response to one's finances is concerning because stress can negatively affect one's academic performance while in school as well as their mental health. Therefore, implementing unique programs for a variety of students with different financial needs is necessary to set them up for success throughout their life, rather than using a standard set of curriculums.

CHAPTER THREE

Analysis of Educational Programs

While financial literacy is the main area of growth among many age groups, there is a multitude of offerings that individuals or groups can participate in to expand their knowledge. These opportunities include a variety of programs that are offered in schools, in the local community, and online. This section will focus on the analysis of current educational programs that exist to improve the financial literacy of students.

Junior Achievement

One organization that focuses on providing young students with the tools needed to succeed in life is Junior Achievement. They reach over 3 million students per year through school programs. To function, Junior Achievement relies on volunteers to teach the students in after-school activities and programs that are held throughout the school year. (*About JA | Junior Achievement USA*, n.d.) The volunteers are adults who are passionate about teaching the younger generation valuable professional and economic lessons. By using their personal experiences, enthusiasm, and training provided to them by Junior Achievement, they can be the difference between a child continuing to struggle financially in life or succeeding.

For school administrators, Junior achievement makes it easy to find the right program offering to satisfy the needs of the students. On their website, they have an option to filter their offerings based on the grade level: elementary school, middle school, or high school students. Once the age group has been selected, a focus area can be selected. Junior achievement strives to improve students' entrepreneurial drive, work readiness, and financial literacy. Therefore, they have some programs that are more geared toward improving work readiness and some that target financial education. Junior Achievement has over 50 different program offerings all ranked on a scale based on which technical focus area they apply to more.

One of Junior Achievement's offerings that focuses equally on all three of their focus areas is JA Biztown. This is a popular program created for older elementary-aged students between fourth and sixth grade. The program starts with in-class learning modules to prepare the students for their visit to a simulated town. In the town, all the students are given different jobs to do during the day while also participating in normal community activities such as listening to the mayor speak or going to get their mail. This simulation allows the students to see what it is like to be a worker, citizen, and consumer within their local economy. Some of the jobs that the students have the opportunity of holding within the community are a bank teller, store manager, radio host, mayor, and CFO. To prepare for this experience, they learn about what actions they need to complete to satisfy their role, learn how to write a check, and discuss their rights as a community member. Overall, this experience provides students with a tangible way to learn about money management and economic activity through their personal experience of earning a paycheck, cashing money into the bank, and writing checks. This experience is unique because it allows the students to take the lessons, they have learned in the classroom thus far and apply them to a real-world simulation. By having a stronger understanding of what their work and community experience could look like in years to come, it provides a frame of reference for their future lessons and experiences as well.

Within the last ten years, Junior Achievement has conducted a study to determine if their programs were providing the impact they desired on their alumni. In the survey, they investigated the education level attained, position within their career, financial management, view of the economy, and overall income. Regarding education level, those who participated in Junior Achievement were more likely to graduate high school and 30% more likely to complete a four-year college degree. According to their survey, "1 in 3 (JA alumni), credit JA with influencing their career choice, while 20 percent of JA Alumni, or 1 in 5, say they work in the same career field as the JA volunteer who taught them as a student" (*Junior Achievement Program Evaluations | Junior Achievement USA*, n.d.). While students are young and working to determine where their passions lie, they need to experience a variety of interactions with people in different fields. This opens their minds to see the multitude of career paths that exist that they might not have ever heard of or thought were unreachable. Interacting with volunteers who are successful in their careers helps students to see the future potential in themselves, especially if their community or home environments are not filled with people who are successful or satisfied with what they do.

Another interesting statistic from the survey was that 48.7% of the general population is satisfied with the job(s) that they have held while 88% of Junior Achievement alumni are satisfied with their chosen careers. Financially, "90 percent of JA Alumni are confident in their ability to manage money" (*Junior Achievement Program Evaluations | Junior Achievement USA*, n.d.). One of the big places this is seen is within their likelihood of taking out a loan for college. Compared to the public, those who participated in Junior Achievement are less likely to take out a student loan when going to college. Those that needed to take out a loan were more likely to pay it off within the first 5 to 10 years rather than taking the average length to pay off a student loan which is 21 years.

Regarding the alumni's view of the economy, those who participated in Junior Achievement activities are more likely to view the economy in a positive way compared to the public. Also, by learning about business from a young age, the alumni are more likely to participate in entrepreneurial activities (*Junior Achievement Program Evaluations | Junior Achievement USA*, n.d.). Finally, when asked how Junior Achievement has impacted them, the majority of alumni said that the program(s) have improved their belief in their personal capabilities and skills. Overall, Junior Achievement has shown that its alumni score higher in many categories regarding finances, business, and economics compared to those who did not participate in their programs. While the improvement of technical skills is important, Junior Achievement has also shown the ability to improve students' perceptions of themselves and their individual capabilities, which is priceless.

Keys to Financial Success

Another financial education program that focuses on educating students on a variety of financial concepts is Keys to Financial Success. (Amagir et al., 2018) They specifically focus on providing coursework for high school students. Keys to Financial Success was created in 2001 when the "University of Delaware Center for Economic Education and Entrepreneurship, the Federal Reserve Bank of Philadelphia, the Delaware Bankers Association, and the Consumer Credit Counseling Service of Maryland and Delaware formed a partnership to provide curriculum resources and teacher training to

Delaware high school teachers interested in teaching a semester-long personal finance course." (*Keys to Financial Success*, n.d.)

One thing that sets this program apart from some others is that it can be taught through a variety of different educational departments. This means that instructors in math, science, and even history departments can teach their students about personal finances. Since the program has started, over 200 teachers in the Pennsylvania, Delaware, and New Jersey areas have completed training and are implementing simple economic concepts into their classroom discussions. Although there is a registration fee of $50 to participate in the development portion of the program, the rest of the materials needed to provide the program to students in the classroom setting is free for teachers and schools to acquire. With the low cost of the program, it helps to alleviate the monetary hurdle that could inhibit teachers or schools from being able to participate in financial education programs.

The program is designed to follow a specific set of steps. To begin, the Keys to Financial Success program includes 52 lesson plans that focus on 23 different finance topics. All the teachers involved in the program are trained on the various lesson plans. To determine if the students are gaining financial knowledge from the lessons, they participate in pre and post-tests to gauge the overall increase in understanding of specific financial concepts.

One characteristic of the program that the creators intentionally included was an easy form of application from the classroom to the real world. To achieve this, the teachers begin the course by instructing their students to research and choose a potential career path. Once this is chosen, they will consider this career when making financial decisions. This allows them to have a tangible real-life economic situation to apply their decisions to. Also, this approach helps motivate the students to make the best financial decisions possible since their hypothetical future will be affected by the choices they make. According to the Keys course plan, the nine themes that the lesson plans are created to improve upon are, “goals and decision-making, careers and planning, budgeting, saving and investing, credit, banking services, transportation issues, housing issues, and risk protection”. (*The Features and Effectiveness of the Keys to Financial Success Curriculum | Elsevier Enhanced Reader*, n.d.)

Once the course is completed, the students are evaluated to determine their overall understanding of the core concepts compared to what they knew on the pretest. Based on the high school students in the sample group, they improved their test scores by an average of 25.34 percentage points. (*The Features and Effectiveness of the Keys to Financial Success Curriculum | Elsevier Enhanced Reader*, n.d.) Based on the post-test results, the researchers determined that the Keys to Financial Success program helped students see the greatest amount of improvement in the areas that they originally performed the worst in. But, collectively, the largest areas of improvement among students from their pretest to their post-test were “credit history and records and the Rights and responsibilities of buyers, sellers, and creditors” which were also the sections that scored the lowest in the pre-test. (*The Features and Effectiveness of the Keys to Financial Success Curriculum | Elsevier Enhanced Reader*, n.d.) Through the use of passionate and trained *Keys* educators, students’ personal financial knowledge is being improved.

EVERFI

The two previous financial literacy educational programs were focused on providing classroom-based learning opportunities. While EVERFI's offerings can still be utilized within the classroom environment, it is solely a digital resource. EVERFI strives to provide a solid financial foundation for those who participate so that they will be able to apply the skills and knowledge learned to future experiences. To reach this goal, they provide their services for free to districts, schools, and teachers. EVERFI's products are designed for students who are in 4^{th} grade through 12^{th} grade. These free digital resources are divided into age groups based on elementary, middle, and high school-aged students. All the lessons can be accessed anywhere and at any time, which allows students to set their own learning pace.

Once a student begins a digital EVERFI lesson, they are presented with a variety of different scenarios that allow them to learn about various financial topics as well as put them into practice. One of their most successful courses offered is *FutureSmart*. *FutureSmart* is a financial literacy program specifically created for students in sixth through eighth grade. According to EVERFI, the course's specific goal is to teach the students how to "manage their finances, make sound decisions, and become financially responsible". (*FutureSmart*, n.d.) Similar to the rest of EVERFI's offerings, the course includes interactive lessons that allow students to put their financial knowledge to the test by making decisions regarding their finances within the simulation. These exercises focus on strengthening the student's understanding of goal setting, life planning, and budgeting. In a study that was recently conducted, it was determined that compared to a control group, the middle school students who participated in *FutureSmart* had a 20% increase in financial knowledge after the course was completed. (*MassMutual-Financial-Education-Study-Infographic.Pdf*, n.d.)

EVERFI is enjoyed by both the teachers and the students. The free materials come with many premade lesson plans, modules, and content for the students to take part in. By setting everything up digitally, EVERFI allows the teachers to easily retrieve the progress of every individual student. This feature is beneficial to the educators and makes the company's offering unique. Not only is it teacher-friendly, but it is also engaging to the students who are learning from the platform. EVERFI's engaging, digital simulations are different from other classroom activities, providing a more fun and engaging way to learn about the topic of financial literacy. It is allowing students to have a positive experience associated with the topics being learned. Also, by making it an enjoyable way to learn the students are more likely to pay attention to what they are learning about. Overall, EVERFI provides a unique, but effective way of learning financial literacy within a school setting.

Comprehensive look at financial literacy educational programs

After reviewing some of the successful financial literacy educational programs, it is evident that it is critical that the financial education programs that are created have clear criteria of what the goal of the lessons are. Once the goals are identified, the program needs to set a plan to evaluate how successful the lessons are in helping students to improve in the desired areas of knowledge. The more successful financial education programs include proper planning and testing and constant reviews to ensure that they are providing students with the most beneficial and applicable content.

This descriptive list of financial literacy education programs is not comprehensive. There are many more programs, camps, community opportunities, and digital offerings that exist nationally and locally. Please see the Appendix for a list of additional financial literacy programs and resources. With the multitude of opportunities that are available it brings up the question, why is financial literacy such an issue if there are so many educational offerings available to the public? One reason I have identified is that these programs are not marketed properly toward the correct target market. As an individual, we do not have control over what programs the schools promote and require, but we can control what we consume ourselves. This could look like playing games that involve economic, financial, or life decisions. It could also include taking part in camps or non-school-sponsored programs that allow students to gain an understanding of how finances work. If these options are expensive or unreachable for families, parents can take it into their own hands to teach their children about these important life lessons or find a local community member that could function as a mentor regarding life and economic decisions.

A question that is often asked regarding financial literacy education is why cannot students get this information from their families at home? While parents and families are often the main places where children are learning their economic habits, it is not fair to assume that all guardians are capable of providing the proper financial education needed to be economically successful in the child's future life. There is a large sector of adults that are not financially literate themselves. There is also another group of adults that were once financially literate but are not up to date with the current changes that have occurred since they were younger. In the next chapter, I will go into more detail about the struggles of the current financial literacy issue and how changes can be made to improve the knowledge of future generations.

CHAPTER FOUR

Conclusions

In recent years there have been several different situations that have put many individuals in an unstable financial position. The current ongoing pandemic and overseas wars are prime examples of unforeseen economic situations that have had a universal economic impact. With situations like these happening more frequently, it is more pertinent than ever that educators, guardians, and government officials work together to provide proper financial education to all individuals – especially students. Within Chapter One, the basic understanding of financial literacy was discussed. The term was defined as the act of being able to use knowledge and skills to make smart financial decisions, manage money properly, and have financial well-being all within the current economic structure. While the term seems to be a current buzzword, room for improvement and reassessment were identified. As discussed in Chapter Two, many studies have been conducted to evaluate the effectiveness of financial literacy teaching techniques as well as to show the importance of having proper economic knowledge. *Grabbing a Tiger by the Tale: Using Stories to Teach Financial Literacy* highlighted the importance of beginning to teach students financial knowledge at a young age (Agnello et al., 2019). Although young children are not able to comprehend complex scenarios or problems, they can understand more simple examples. One way that this source identified as being a beneficial way of teaching this younger age group through incorporating them into stories. Many moral and ethical lessons are taught using parables. Since at this young age the financial lessons that should be taught are focused more on financial practices and concepts, this same teaching style was proven to work well.

As students grow, financial concepts can be taught to them in different capacities. Instead of just incorporating concepts and ethical economic principles into stories, like one would need to do with children, teachers are able to begin to include more complex problems throughout their lesson plans. Another study that looked into combining financial examples with course work was *Integrating Financial Literacy Into Introductory Programming* (Zhu & Shen, 2021). This specific paper focused on providing coursework for college students. College is a transformative time in many students' lives. Whether it be the first time they are away from their parents and are having to learn how to budget or if they are financially responsible for putting themselves through college, students are facing a multitude of new financial issues during this time in their lives. By identifying college as being an opportunity to reiterate simple financial lessons while also tailoring the material to be more age-appropriate scenarios, it is a critical time to equip students with the financial knowledge they will need to survive in the real world.

While financial literacy is lacking throughout society, *Racial Differences in the Returns to Financial Literacy Education* highlighted the racial disparities that exist within these statistics (Al-Bahrani et al., 2019). In recent years, steps have been taken by some states to require financial literacy education courses for their students. While having a set requirement of coursework is a step in the right direction, in some ways, it is amplifying the racial wealth gap. Instead of collaborating with educators and local authorities to create lesson plans that assist students with the subject matter that they are most deficient in, it is instead providing a blanket program that is the same no matter where you live or what your skill level is at. This approach is harming minority groups and instead helping those who already have financial knowledge and access to such information. Therefore, creating a larger gap in knowledge that needs to be addressed.

During a time when financial literacy is so crucial to future success, I sought to analyze the value of financial literacy and the current program offerings that exist. Through my research of different programs and studies I was seeking to answer the following questions: why is financial literacy important? what financial literacy offerings exist? And finally, what should the next steps be?

Why is financial literacy important?

Through the multitude of studies, journals, articles, and resources I looked at, there was not one source that did not agree that financial literacy is an important skill to have. On top of this, they also agreed that it is critical to teach students these lessons to prepare them to have a stable financial life. Facing difficult financial decisions starts for many people when they are going into college. Over two-thirds of college graduates have a student loan (Zhu & Shen, 2021). The way that the students approach the way they will manage the loans will affect their financial situation for the rest of their life.

As someone who is about to graduate college and is surrounded by many people who have needed to take out loans to get themselves through college, I can confirm that many of them do not see the weight that their choices will have on their future. But this lack of understanding should not fall completely on the students. Instead, it should also be the responsibility of educators to ensure that people are prepared to enter society after they graduate with the skills needed to thrive. Whether the information is taught through a specific personal finance course or be integrated into another subject, it is pertinent that students are provided with financial lessons and steps on how to best approach situations.

When thinking about the financial decisions that an individual makes throughout their lives, they appear to have a ripple effect on each other. The way a recent college student approaches their student loans will affect them during all of their life milestones in the future (Lusardi & Mitchell, 2014). Whether it be a person's "ability to buy a first home, the ability to buy a car, the ability to start a family, the ability to save for retirement. It is all impacted" (Lusardi & Mitchell, 2014).

Sadly, in the most recent FIRNA study to evaluate the financial knowledge of the United States citizens only 34% of the people who took the survey were able to correctly answer 80% of the questions (*National Study by FINRA Foundation Finds Financial Prosperity Eludes Many Americans Despite Strong Economy | FINRA.Org*, n.d.). This percentage should be seen as alarming to everyone, especially since the percentage has gone down since the previous survey.

Having a lack of understanding of financial situations and the proper way to manage money can cause individuals a lot of unnecessary stress. FIRNA's 2018 study also inquired about the financial stress that its respondents were facing. Their results showed that over half of their respondents feel a sense of anxiousness when speaking and thinking about their finances. This response was most prominent among young adults and unmarried women (Hasler et al., n.d.). To further understand the information they had gathered, the researchers divided the respondents into groups of people who they identified as not financially literate and as being financially literate. Those who were put in the financially literate group were able to correctly answer the financial literacy questions in the survey. Once broken into these subgroups, they were able to see that there was a significant difference in results between the two. Although there was still a larger percentage of financially literate people who felt stressed about their finances, the number of people was substantially less than those who were not in this category (Hasler et al., n.d.).

All these resources show the variety of impacts a lack of financial literacy can have on people as well as the numerous benefits it can provide. These statistics also show that financial literacy education is not just beneficial in the physical aspect of improving people's ability to handle money properly, but it can also improve an individual's mental health regarding how they view finances as a whole.

What financial literacy offerings exist?

When conducting my research, I found there to be a wide variety of financial literacy educational programs available. As stated in Chapter Three, there are some programs associated with established banks, local organizations, religious groups, and even self-administered by teachers. Some are offered just to schools while others are offered directly to parents and students. With the multitude of offerings, all with varying program styles, it makes you wonder why there is still such a big issue with financial literacy among the United States population.

Specifically in the United States, according to the Council for Economic Education's (CEE) Survey of the States – 2022, only "23 states require students to take a course in personal finance to graduate" high school (*Survey of the States - 2022 by CEE*, n.d.). The survey also identified that out of these 23 states, 9 of them have a standalone personal finance course required rather than just incorporating the concepts into other subjects' lessons. Both the number of states that offer a dedicated personal finance course and the number of states that require the course to graduate have increased since the last time the CEE conducted the survey (*Survey of the States - 2022 by CEE*, n.d.). While the increase in programs is great progress, that still leaves 27 states without a required personal finance course to graduate high school. A map highlighting the states requiring a personal finance course is seen below in Figure 6.

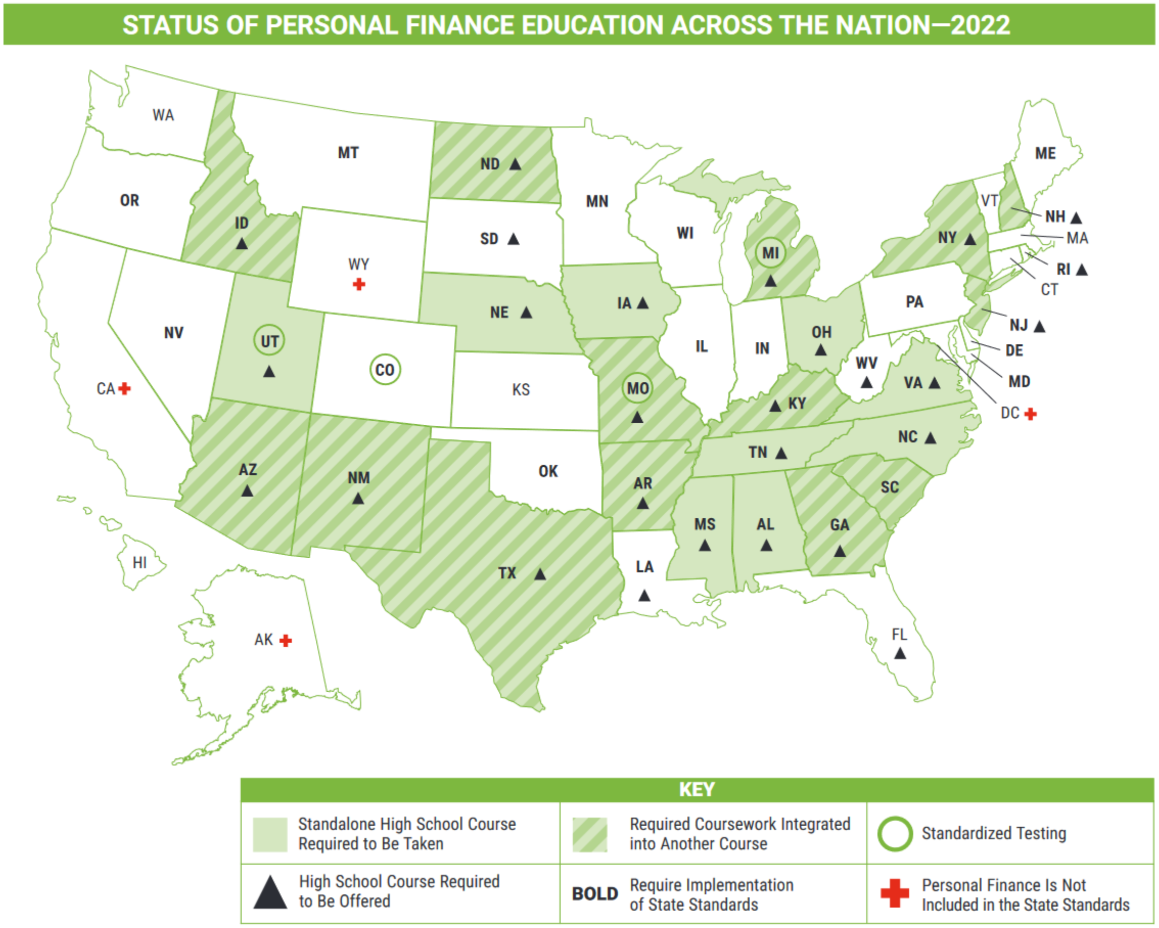

Figure 6: Status of Personal Finance Education Across the Nation – 2022. (*Survey of the States - 2022 by CEE*, n.d.)

As addressed in Chapter Three, financial literacy cannot be expected to be learned in a child's home setting. Ideally, they would be gaining financial education and guidance in all aspects of their life. But, to make an overall improvement on society's level of financial literacy, policymakers and educational leaders need to assume that the students do not have access to this information anywhere other than in the classroom. Without thinking in this way, there could be a continuation of the inequality of financial education like there is today.

Now what?

There seems to be a universal agreement that financial literacy is important, otherwise, all these programs would not exist or continue to be created. But there is a piece missing from the puzzle to have an impact on students' understanding of the subject. While there is not a single answer to solve the financial literacy problem, there are some solutions, that I have identified through my research, that will improve the situation.

As I was looking into different financial literacy programs, I was expecting to just find a few main options that have already been implemented in schools. Instead, I was surprised to see that there was a multitude of options available. While I was only able to highlight a few different offerings in Chapter three, there are many more that exist. There seem to be plenty of financial education offerings in the market, but a lack of implementation in the school districts. While it is not as simple as choosing a process and implementing it into a school's curriculum, I do believe there is still a disconnect between the two entities. One solution I have for this is marketing. Marketing for these programs can be as simple as reaching out to the schools to tell them more about their courses or as involved as holding an after-school session to show administrators what implementation might look like for them in their school.

The reason I recommend increasing marketing efforts by the financial literacy program companies is because there are many different organizations that could benefit from seeing this information. Some of the programs I saw were teacher sponsored. This means that the teacher identified the course work as being crucial to their student's learning and signed up for the program individually. Instead of the entire school being a part of the program, the teacher was only required to get approval to implement the learning into his or her classroom. Similarly, there are offerings that exist that are not school specific. Therefore, they could be executed by a religious organization or local community center. Furthermore, some of the offerings could be accessed by the student or parent. Not all of the offerings need to come from an established course program in a classroom setting, instead could be self-administered. While these options are not a solution for an overall improvement in financial literacy, it is a solution to ensure that the resources that exist are being seen and utilized by those for whom they are intended.

One of the main solutions that I recommend is a countrywide requirement of a personal finance course to graduate high school. To improve the education requirements and accessibility for students, the federal, state, and local governments will be tasked to work together. In 2003, the Financial Literacy and Education Commission (FLEC) was created. This group strives to provide a national policy regarding financial education as well as be a reputable resource for financial information (*Financial Literacy and Education Commission*, n.d.). The FLEC and the government help set the standard and a timeline for what the expected outcome should be, but the states and the local governments oversee the execution of these plans. By allowing the local governments to implement the overall vision, they are able to identify the specific needs of their community and apply financial education programs to schools that will be most beneficial to their students. This will improve the states' financial literacy rates while also helping to reduce the wealth gap. By being able to assess each school district or residential area individually, the schools will be able to employ tailored financial programming based on the current knowledge level of the students.

Throughout all the research and resources reviewed for this thesis, the importance of financial education is consistently identified. Not only does it benefit the students at the time they are learning the material, but it also improves their future knowledge, interest, and comfort in the subject. Although the students will just begin to scratch the surface of the subject in their personal finance course, having the basic knowledge is proven to help them to be less stressed and anxious about their financial situation (Hasler et al., n.d.).

In the early 1900s, home economics was seen as a necessary course for young individuals to take to be able to succeed in life past their schooling (*History of Home Economics | Home Economics and Household Management*, n.d.). As society changed drastically due to the industrial revolution and technological advancements, home economics became seen as less needed in many school districts. In today's educational system, it is rarely offered anymore and if it is, it is offered as an elective that students can personally decide to take. While it is no longer frequently taken, when my parents and grandparents were in school, it was a course that they all had to take to graduate. To this day, conversations about a lesson they learned in home economics still come up during our family gatherings. Whether it be about a recipe my grandmother had to make and bring to school or a pantsuit my mother had to learn to sew, the life lessons they were taught in this course have stuck with them many years later.

Since home economics was once seen as a necessary requirement for students to take across all schools, can personal finance become the next home economics? There were once teachers, course offerings, and availability in the curriculum to have a course based on teaching students' applicable life lessons. By bringing back this mindset of focusing on preparing students for the real world, a lack of financial literacy among the United States population could be an issue of the past.

APPENDIX

APPENDIX

Additional Financial Literacy Resources

Community Programs

Money Experience – Website: https://moneyexperience.com/about-us/
Provided for students, the community, the workplace, financial institutions, and the government.

Credit Abuse Resistance Education – Website: https://care4yourfuture.org/about
Provided for students and communities.

Money Smart for Adults – Website: https://www.fdic.gov/resources/consumers/money-smart/teach-money-smart/money-smart-for-adults.html
Provided for adults.

Money Starts Here – Website: https://moneystartshere.com/financial-literacy-programs/
Provided for college students and beyond.

The Chalmers Center: Faith & Finances - Website: https://chalmers.org/training/faith-finances/
Provided for low-income families.

Student Focused Programs

The IM Foundation – Website: https://www.theimfoundation.org/financial?gclid=CjwKCAjwgr6TBhAGEiwA3aVuIWAMSANj4eWELDjeoZ-FrnUQGSctBAMOrDcqwzNttWNCLE-K7xm29xoCq-AQAvD_BwE

Money Smart for Students – Website: https://www.fdic.gov/resources/consumers/money-smart/index.html

eVolve Personal Finance eLearning Center – Website: https://www.financialeducatorscouncil.org/online-financial-literacy-programs/

Partnership for After School Education: Fostering Financial Literacy for Youth – Website: https://pasesetter.org/initiatives/college-prep-and-success/financial-literacy

You for Youth: Financial Literacy – Website: https://y4y.ed.gov/learn/financial-literacy/

Books for children

A Boy, a Budget, and a Dream
By Jasmine Paul
For ages 4 to 8 years

Money Plan
By Monica Eaton
For ages 4 to 8 years

The Everything Kids Money Book: Earn it, save it, and watch it grow!
By Brette Sember
For ages 8 to 11 years

How to Turn $100 into $1,000,000: Earn! Save! Invest!
By James McKenna
For ages 10 to 12 years

A Smart Girl's Guide: Money: How to Make It, Save It, and Spend It
By Nancy Holyoke
For ages 10+ years

Books for teenagers

Official Money Guide for Teenagers
By Susan P. Beacham
For ages 10 to 18 years

Heads Up Money
By Marcus Weeks
For ages 13 to 17 years

I Want More Pizza: Real World Money Skills For High School, College, and Beyond
By Steve Burkholder
For ages 13 to 18 years

More Money, Please: The Financial Secrets You Never Learned in School
By Scott Gamm
For ages 18+ years

I Will Teach You to Be Rich
By Ramit Sethi
For older teenagers

This list of programs, books, and resources is not exhaustive. Rather, it provides a starting point for those looking to further their own or others' financial education.

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