The Financial Education Crisis

Opinion Snapshot

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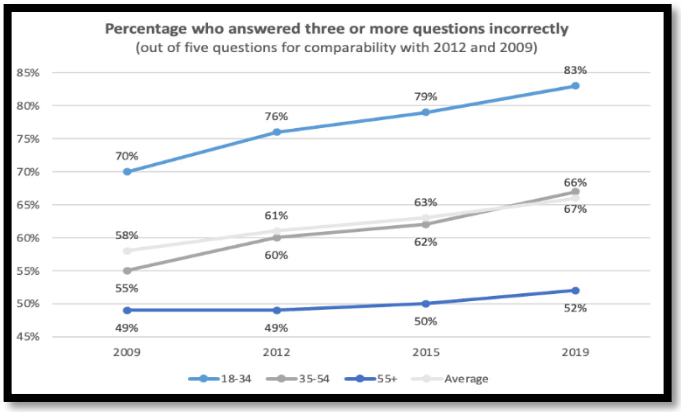
"Questioning the Effectiveness of Current Programs and Recommending Solutions for the Future"

Introduction

According to the Center for Disease Control and the United States Census Bureau, approximately 10.07% of Americans have contracted Covid-19 as of June 30, 2021, totaling 33,496,454 confirmed cases nationwide.[1] While that number is catastrophically high, we present a different and even more shocking number: 216,115,689. That is the estimated number of how many Americans today are considered financially uneducated.[2] A number like that is nearly incomprehensible to the average individual, so let's put it into perspective. 216,115,689 is approximately 65% of the American public, which is about 4% more than the percentage of total Americans who voted in the 2020 presidential election.[3]

Figure 1: Graph Showing the Percentage of Americans who Cannot Pass FINRA's Financial Literacy Test



Source: Data from https://www.usfinancialcapability.org/downloads/NFCS_2018_Report_Natl_Findings.pdf.

If those statistics aren't enough to call our nation's lack of financial education an epidemic, here are a few more. As of 2018, the Financial Industry Regulatory Authority (FINRA) reported that 66% of participants in its National Financial Capability Survey (NFCS) were unable to answer more than three questions assessing financial knowledge correctly.[4] Figure 1 shows the difference in the percentage of individuals in each age group over the years who can't pass FINRA's financial literacy test.[5] The 2020 Survey of the States conducted by the Council for Economic Education (CEE) found only 17% of all students are required to take a financial education class before graduating high school.[6] Additional statistics imply that many Americans are suffering from this lack of financial education. The NFCS also found that 46% of the 2018 NFCS survey participants do not have assets set aside in a "rainy day" fund.[7] According to a 2020 National Financial Educators Council (NFEC) survey, the average American loses an average of $1,634 a day due solely to lack of financial education.[8]

Over the past 30 years, a variety of public and private sector entities implemented financial education programs. State-sponsored programs are mainly focused on high school, but as discussed below, researchers indicate that starting sooner and continuing throughout all K-12 years is more effective.[9] Financial services providers including Vanguard, Ally Bank, Morgan Stanley, and Fidelity are also trying to help, setting aside millions of dollars to fund their own financial education programs.[10] However, little research has been published to see how effective these financial services provider programs are, and it is unclear whether providers are measuring their success at all. In addition, there is not a standard measure of success, meaning that those programs which have been considered effective by one measure may not be considered so by another. There is not even an agreed upon definition of financial education, which in and of itself hinders progress.

In this paper, we will first define terms related to financial education that we believe best encompass what financial education programs should be striving to teach. Then we will briefly look at the history of financial education in this country to better understand how we ended up in the present-day situation before analyzing the research on the effectiveness of financial education programs.[11] Next, we will review examples of programs currently being provided by leading financial services providers and public entities. Finally, we will provide recommendations for the public and private sectors in the hopes of creating more financially capable future generations

Recommendations for the Future of Financial Education:

- *Standardize definition of financial education and measures of effectiveness.*
- *Create national standardized curriculum, adaptable within states and communities.*
- *Form Joint Trades Committee that partners with Financial Literacy and Education Commission.*
- *Track effectiveness of current financial services provider financial education programs.*
- *Use just in time courses and longitudinal programs that are experiential.*

What is Financial Education?

Financial Literacy

To fully understand the state of financial education, we first need to define financial literacy. In 1997, Jump$tart Coalition, a group of national organizations focusing on improving financial literacy among students, coined the term "financial literacy"[12] as the "ability to use knowledge and skills to manage financial resources effectively for lifetime financial security."[13] Others have come up with their own definitions for financial literacy, but one stands out as it demonstrates the necessity of financial education. In her study, "Financial knowledge and subjective and objective financial well-being," Jinhee Kim defines financial literacy as the "basic knowledge that people need in order to survive in a modern society."[14]

Financial Knowledge

There are a few other terms that we feel are important when discussing the financial education crisis. The first is financial knowledge. Studies that have measured the effectiveness of financial education programs almost always use a test or survey that assesses participants' level of financial knowledge. Going forward, when using the term "financial knowledge," we mean "an operationalized measure of financial literacy that can be determined by basic finance-related questions."[15] For example, researchers determine financial knowledge levels through a series of true/false questions about savings, credit, or other financial management matters.[16]

Financial Capability

Most current financial education programs teach financial knowledge; however, we believe that someone with financial knowledge may not necessarily be able to put that knowledge to use. Researchers Simon Starček and Aleš Trunk argue that for individuals to claim they are financially capable, they must be able to manage personal and/or family finances, have the ability to plan, make informed decisions about financial products/services, and monitor financial news pertaining to their needs.[17] For our paper, the term "financial capability" means "the ability to make economic and financial decisions that positively affect their financial well-being." We believe this definition encompasses the end goal of financial education and is what providers of these programs should be striving to teach their participants.

Financial Well-Being

Much of the literature refers to "financial well-being" as a coveted level of success that all individuals want to achieve. The Consumer Financial Protection Bureau (CFPB) defines financial well-being as a "state of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future, and is able to make choices that allow enjoyment of life."[18] The CFPB argues, and we agree, that when measuring financial well-being, researchers cannot just use income or net worth because that doesn't include the freedom to live a satisfied life. That said, we understand measuring the ability to enjoy life is not an easy task; however, we believe that determining some way to evaluate financial well-being as we've defined it above is crucial in measuring the true effectiveness of financial education programs.

Financial Education

Before defining financial education, we want to explain why we are choosing to use the term financial education instead of financial literacy. We believe that the term "financial literacy" might have a negative connation for some individuals. If someone hasn't received financial education training or is unable to answer a certain number of finance-related questions correctly, they would be labeled as financially illiterate.[19] It is our opinion that some people may feel alienated by thinking of themselves as illiterate, so they might have avoided financial education programs. If the term "financial education" replaces financial literacy, we believe it could entice more people to investigate financial education programs as a way of improving their overall education.

That said, when referring to the results of the literature, we will continue to use financial literacy to align with this literature, especially since researchers in the past have defined financial education as the process by which one becomes financially literate.[20] For this paper, we will define "financial education" as "the knowledge of financial concepts and the development of decision-making skills that ensure lifetime financial stability."

See Figure 2 below for key terms defined in this section.

Figure 2: Definitions of Key Terms

Term	Definition	Source
Financial Literacy	Ability to use knowledge and skills to manage financial resources effectively for lifetime financial stability	Jump$tart Report 2017
Financial Knowledge	An operationalized measure of financial literacy that can be determined by basic finance-related questions	Hasting et al., 2013
Financial Capability	The ability to make economic and financial decisions that positively affect their financial well-being	Starček and Trunk, 2013
Financial Well-Being	State of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future, and is able to make choices that allow enjoyment of life	CFPB Report
Financial Education	The knowledge of financial concepts and the development of decision-making skills that ensure lifetime financial stability	Team-created definition

The Problem That Needs Solving

Historical Significance

In 1737, Benjamin Franklin penned the earliest documented financial advice in the history of the United States. He wrote, "A Penny sav'd is Twopence clear," which loosely translated today means, "A penny saved is a penny earned."[21] In a time where banking was reserved for the wealthy elite, Franklin and other early financial education advocates worked to create easy-to-follow advice about banking accessible to everyday Americans, but that was essentially the extent of financial education training until the 1900s.

At the turn of the 20th century, government funded research began to look closely at consumer economics, family finances, and the importance of home economics classes. The Hatch Act was the first piece of financial education legislation passed in the United States. Initially, it established education in "agriculture and the mechanic arts," but by the early 20th century, that training would evolve into home economics courses.[22] Students began learning the importance of cooking, cleaning, and, most relevant to our case, keeping a household budget.[23] These lessons in budgeting lacked lessons on investing, retirement, and financial markets, and focused more on creating the perfect housewife instead of teaching topics related to modern-day economics. Nonetheless, antiquated lessons about basic budgeting and savings accounts continue to be taught in some schools today.

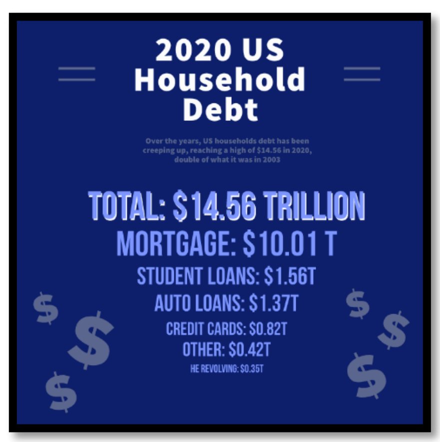
Why the Push?

Although there have been several movements over the last hundred years which have advocated for reform in the way the United States educates its students about finance, the first significant push came in 2000 when the National Endowment for Financial Education turned over the organization of Youth Financial Literacy Day to the Jump$tart Coalition.[24] With the help of other national coalitions, Jump$tart expanded its previous one-day initiative into Financial Literacy Month in 2004.[25] Financial Literacy Month's mission is to "promote, advocate for and support financial literacy efforts across the U.S. targeting children and teens."[26]

The financial education movement lost some of its momentum in the early 2000s, but the push rose once again during the Great Recession of 2008.[27] A combination of banking entities' desire for revenue and consumers' lack of understanding of the mortgage loans they took out created the perfect conditions for the worst recession since the Great Depression. The recession exposed the truth about individuals' lack of financial education, much like the Covid-19 pandemic has done now.

Since the 2008 recession, U.S. household debt has continued to grow. People continued spending at record levels without the means to pay back their mortgages, student loans, and credit card debts.[28] By 2020, U.S. household debt had risen to $14.56 trillion, hitting the highest peak in American history.[29] See Figure 3. As this enormous amount of debt continued to rise, costing Americans trillions of dollars of principal and interest payments, the pandemic hit. Unemployment rates skyrocketed, stock prices were incredibly volatile, and people were experiencing financial instability. These unprecedented circumstances of the last year and a half have exposed how many Americans are living in financial survival mode, living paycheck to paycheck without any kind of savings for a rainy day (or year).[30]

Figure 3: Infographic Showing the Level of U.S. Household Debt as of the End of 2020



Source: Data collected from https://www.visualcapitalist.com/the-state-of-household-debt-in-america/.

Why Now?

Covid-19 has shed light on just how financially uneducated our nation is, but it's not the only factor that answers the question "why now?" As we have outlined above, groups have been advocating strongly over the last 25 years to change consumers' lack of financial education. This push has resulted in 25 states and the District of Columbia introducing legislation in 2021 requiring financial education in their schools' curricula. See Figure 4 below. In addition, financial services providers are creating their own solutions, but why has this change occurred now?

Current statistics may point to an answer: this is a problem which can no longer be ignored. 78% of adults live paycheck to paycheck, 66% of adults lack any type of emergency fund, and 60% do not keep any kind of budget.[31] Lacking the financial capability to plan and save, households are finding themselves in massive debt without the resources to dig themselves out. We believe the most attention being paid to financial education is happening now which could lead to considerable progress; however, exponential changes need to be made before we can honestly say meaningful progress has occurred.

The Success and Failure of Current Financial Education Programs

As referenced in our earlier sections, the importance and relevance of financial education has come to the forefront over the past 25 years. As a result, there has been extensive research to determine what drives the success and failure of financial education programs.

Lack of Standard Measure of Effectiveness and Lack of Measuring

Financial education programs vary drastically; there are financial service provider funded programs, employer sponsored programs, government funded programs, and state sponsored programs, each with their own curriculum and target audience.

Unfortunately, there is no standard unit to measure effectiveness, with researchers and program providers determining their own standard for who is "financially capable," or in past literature "financially literate." For example, the Jump$tart Coalition uses a grading scale from 0% to 100% on a multiple-choice exam setting forth a series of questions about budgeting, saving, credit, inflation, interest, taxes, etc.[32] A person is considered "literate" upon receiving above 75%.[33] Similar to Jump$tart, several companies and schools use exams setting forth a series of questions but using a letter grading scale from A to F; others use a Financial IQ score where a score of 70 is considered literate.[34] Additionally, some programs have measured success based on a change in financial outcomes. For example, JA Finance Park, an experiential financial education program run by Junior Achievement targeting grades K-12 and sponsored by several financial service providers such as Edward Jones and Fidelity, measures its success based on how much students increased their savings after completing its program on budgeting and saving.[35] Experiential programs such as these use a barometer of success that is based on a positive financial outcome, such as an increase in savings, increase in enrollment of 401k programs, increase in confidence in financial decision making, etc. Success is not measured in terms of financial literacy but rather in terms of financial capability.

In addition to a lack of a standardized measure of effectiveness, it is unclear whether public and private sector providers of financial education programs are measuring their success. Financial service providers have been allocating millions of dollars to financial education programs, yet published results are few and far between. Evidence is seen on pages such Wells Fargo,[36] Progressive,[37] and American Express[38] where there is no information on the results of their programs; the only information provided is about their curriculum and target audience. Financial education program providers are not publishing results and if they are measuring results, they are doing so without a standard method. Thus, it makes it difficult to identify which variables lead to success and which to failure.

In-School Programs

Although financial education programs lack a uniform measurement of effectiveness, studies have pointed to certain variables of success. For example, Vanguard's My Classroom Economy, a program geared toward elementary school students, creates a simple economy where students must earn and budget their school dollars.[39] Vanguard released a statement claiming that financial knowledge increased by 5% and budgeting knowledge increased by 9% after completing the program.[40] Both findings were statistically significant, proving the success of the program.[41] Similarly, JA Finance Park has also yielded positive results.[42] At JA Finance Park, students are given a fictional adult identity with a monthly income, number of dependents, marital status, etc.[43] They then must design a budget that includes insurance, entertainment, car purchases, dining, and more. They essentially role-play the life of everyday adults and decide how to handle their income.[44] A 2012 study by Daniel Robinson and Bruce Ian Carlin found that after attending JA Finance Park, students saved four times as much as they did prior to the program's completion.[45]

Both My Classroom Economy and JA Finance Park use an experiential learning design where students make financial decisions themselves after learning key finance-related concepts. More importantly, they deal with the consequences of these decisions. For example, in My Classroom Economy, students must rent their desks in the classroom. If they do not have enough money saved, they risk losing their desks.[46] Thus, they are forced to think about budgeting and saving. The success of these programs indicates that learning from experience appears effective.

Employer-Sponsored Programs

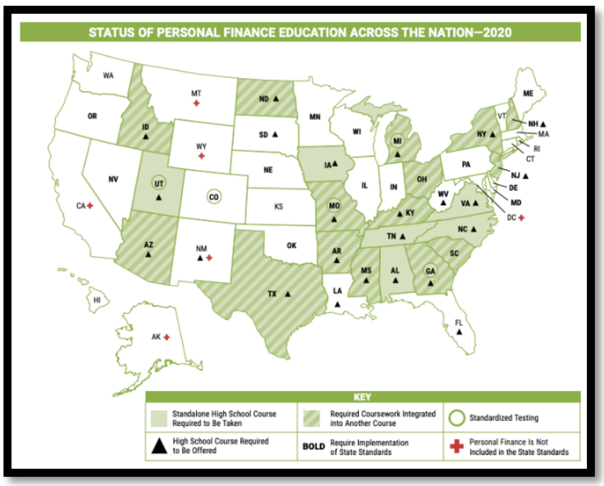
Similar to experiential programs, employer sponsored programs have also met success; this is evidenced in studies such as Douglas Bernheim and Daniel Garrett's.[47] They found there was a 12.1 percentage point difference in participation rates in 401k plans between those who participated in 401k plan related financial education programs provided by their employers and those who did not.[48] This suggests that those who participated in the program were much more likely to be saving and budgeting for retirement. More generally, Bernheim and Garrett found that the overall savings rates of participants were higher when employers provided financial education programs.[49] Additionally, in a study looking at a Southeastern chemical production company's financial education program, 75% of employees who participated in the workplace financial education program felt they made better financial decisions than before completing the program.[50] What we take away from these two studies is that individuals are more likely to adopt behaviors taught in a course because it is relevant to what is happening in their life right then.

In that vein, many studies find that these "just-in-time programs" are successful. "Just-in-time" courses have curriculum that is tailored to a specific financial decision and those who participate in the program take it right before they make the decision. A perfect example of this is Affordable Gold. Affordable Gold is Freddie Mac's pre-purchase home buying course that advises participants about the weight and implications of a mortgage.[51] In studying the effectiveness of the program, researchers Hirad and Zorn found that those who participated in Affordable Gold had on average 19% lower 90-day delinquency rates on their mortgages.[52] Additionally, participants were 13% less likely to become "60-day delinquent borrowers" compared to those who did not receive counseling.[53]

In 2014, Marvin Smith, Daniel Hochberg, and William Greene conducted a study to explore the effect of pre-purchase homeownership counseling on credit scores of those trying to qualify for a mortgage.[54] Participants were randomly assigned to either the treatment group or control group. Members of the treatment group received a two-hour group counseling session and one-on-one counseling. After participating, the treatment group increased their mean credit score by 16.1 points, a statistically significant change.[55] Those in the control group only experienced an 8.2-point increase in credit scores which was not statistically significant.[56] Interpreting these results, we can conclude that receiving pre-purchase counseling has significant positive effects on credit scores, thus increasing creditworthiness. When analyzing these two programs, the success of "just-in-time" financial education courses is clear as there was no time for their knowledge to decay. Advising occurred right before the decision, making the curriculum extremely relevant and more likely to resonate.

High School Programs

Figure 4: Each State's Legislation Surrounding Financial Education



Source: Data gathered from CEE 2020 Survey of States.[57]

Existing literature typically agrees on the effectiveness of specific programs, but when it comes to high school sponsored personal finance courses, there seems to be disagreement. For example, in a 1999 study, Bernheim, Garrett, and Dean Maki analyzed the financial behaviors of those who participated in a personal finance course in high school ranging from three to 40 years prior to the year the study was conducted.[58] They found that those who had received high school financial education five years prior had savings rates that were 1.5 percentage points higher than those who did not take a state sponsored finance course.[59] It is important to note that the savings rates in this study were self-reported.[60]

Research done by Lewis Mandell and Linda Schmid Klein in 2009 offers a different conclusion. They compared the 2004 Jump$tart survey scores of those who had taken a high school financial education course four years prior to those who did not. Mandell and Klein found the average score of those who had taken a course to be 68.7% and those who had not to be 69.9%.[61] They link this outcome to decay of knowledge.[62] High school students do not use the knowledge obtained in these courses for many years and end up losing it. The financial lessons and topics taught in these courses occur way too far in advance to have realistic influence on future financial decisions. For example, students may be taught lessons on managing a mortgage several years before it is even relevant to them.[63] This is the equivalent of asking someone to balance a chemical equation nearly 15 years after taking high school chemistry; there is a high chance that this knowledge evaporates. Although 25 states and Washington DC have introduced legislation requiring financial education (See Figure 4), we must question whether this is worthwhile as empirical research lacks a definitive conclusion about the effectiveness of state sponsored programs.

A Closer Look at the Financial Education Programs of Financial Services Providers

Many financial services providers have created their own programs to help solve the financial education crisis. Above, we discussed Vanguard's My Classroom Economy program which has been shown to be effective; however, Vanguard is not the only financial institution addressing the situation. In this section, we will dive deeper into a few specific firms and their individual approach to financial education. We focus on these specific firms due to their varying approaches to the same issue; we believe that these firms represent a broad range of financial education programs.

Financial education curricula offered by financial services providers often include descriptions of financial products such as the difference between a stock and a bond or a fixed versus adjustable-rate mortgage; financial concepts like inflation, diversification, and credit scores; teaching mathematical skills needed for "effective financial decision making;" and financial activities like financial planning and budgeting.[64]

While these programs vary in their approach, they all have a common goal: to improve consumers' abilities to make beneficial decisions for their financial well-being.[65] As mentioned above, we can assess whether a program is successful or not by measuring financial knowledge, usually by administering a pre and post knowledge test or survey[66] or by measuring financial outcomes and ultimately financial capability, that is, the ability to make economic and financial decisions that positively affect their financial well-being. However, we have not found evidence that financial services providers are measuring financial knowledge or capability, meaning we can't currently see evidence that their programs are effective or not.

Partnerships

Since financial education is such a complex issue, many financial services providers have partnered with non-profit organizations and other educational program providers to guide their efforts and reach specific demographics, including Jump$tart, the CEE, Junior Achievement USA, and Everfi. This is proven in Figure 5, which shows a rough estimate of amounts that 11 different financial service providers have donated to Junior Achievement USA. While the figure doesn't show the full support financial services providers are committing to financial education, it does create a picture of their level of commitment towards these efforts by showing how several providers have decided to partner with a non-profit organization to build effective financial education programs.

Figure 5: How Much Firms Have Pledged to Junior Achievement USA

Source: Data gathered from https://jausa.ja.org/donor/our-supporters.

Through these partnerships, financial service providers also gain access to studies like the CEE's Survey of the States that analyzes the disparities of financial education levels among different demographics.[67] For instance, at lower income high schools nationwide where over 75% of students were eligible for free and reduced lunch (FRL), only 3.9% of students were required to go through financial education training, although 52.4% were given the option of a finance class.[68] See Figure 6 below to understand the gap between lower income and higher income communities. In response to data such as these, financial service providers are targeting specific groups, such as Black and African Americans, Hispanic and Latino Americans, Native Americans, and women, to provide free financial education classes in hopes of narrowing that access gap. Financial service providers know that making decisions about money can be a challenge for anyone, no matter what age, ethnicity, gender, or socioeconomic status, so firms have partnered with these nonprofit organizations to make sure communities have equal access to securing their financial wellbeing and becoming more financially educated.

Figure 6: Gap Between High- and Low-Income Groups in Financial Education Programs

	% ACCESS		
	REQUIRED	OFFERED	TOTAL
Low FRL	10.5	61.6	72.1
High FRL	3.9	52.4	56.3
		Access gap	15.8

Source: Data from CEE 2020 Survey of the States https://www.councilforeconed.org/wp-content/uploads/2020/02/2020-Survey-of-the-States.pdf.

Fidelity Investments

Fidelity Investments is one firm that has taken advantage of partnerships with these financial education groups to create Fidelity Financial Forward. Their goal is to "fast-[track] financial literacy education by providing support to K–12 students and teachers in underserved communities."[69] Fidelity Financial Forward offers free seminars that anyone can register for on their website as well as specific programs that run in partnership with the CEE, Jump$tart, and the Securities Industry and Financial Markets Association (SIMFA). Jump$tart has partnered with Fidelity to create workshops that cater specifically to increasing "teacher confidence and knowledge of financial concepts."[70] By focusing on teachers, Fidelity makes it possible for the students to not only learn financial education but be taught by someone who has become an expert themselves.

Two other specific initiatives Fidelity sponsors in partnership with SIFMA are "Invest Write" and "Invest it Forward."[71] These additional initiatives connect "financial industry volunteers with classrooms participating in The Stock Market Game with in-person and virtual learning experiences."[72] Both initiatives use experiential learning, which, as discussed previously, has proven to be highly effective in teaching financial education, although we were unable to find the results of these programs on Fidelity's website.

Wells Fargo

Wells Fargo offers The Hands-on Banking Program, advertised as providing "free, non-commercial financial education tools and resources." The Hands-on Banking Program is geared towards financially educating individuals from all walks of life especially high school and beyond. The program starts with a survey that asks individuals to select answers from a list about different areas of their financial lives, including their credit history, spending habits, and retirement plans.[73] Once that survey is completed, the algorithm suggests articles and podcasts for participants to follow up with to learn more about how to protect their financial wellbeing.[74] According to the Hands-on Banking website, the program has reached over 12 million people (about twice the population of Arizona) since it started in 2003, but we were unable to find on the bank's website evidence of its success.[75]

PNC Bank

PNC Bank offers a similar program, My Finance Academy, which is also a webpage that supplies easy access to articles on financial information on how to make informed financial decisions and build "healthy financial habits for high school students, college students and beyond."[76] As previously mentioned, this specific program is geared towards high school students, college students and beyond, so it focuses on teaching budgeting techniques, how to save, and information on banking. The program also uses podcasts, including a webcast with a virtual instructor who offers financial information that fosters financial sustainability.[77]

In addition to My Finance Academy, PNC also offers "Grow Up Great" which focuses on inspiring great futures for young children, particularly underserved children from all social classes.[78] This program takes a unique approach which provides innovative opportunities that help families, educators, and community partners to enhance children's learning and development. This 500-million-dollar, multi-year, bilingual initiative was started in 2004 to help prepare children from birth to age five for successful future practices in school and in life.[79] So far, the program has been able to offer support to over seven million children (about twice the population of Oklahoma).[80]

PNC has also partnered with more than 50 colleges and universities nationwide to provide Virtual Wallet Student®, a phone app that helps students stay on track with their checking and savings accounts.[81] We have not found any evidence of the effectiveness of these programs on PNC's website, like the other financial services providers.

Bank of America

Teaming up with Khan Academy, Bank of America offers Better Money Habits, a program that provides "a free financial education platform for people from all walks of life to get practical, easy-to-understand knowledge about money."[82] Like Wells Fargo's program, Better Money Habits starts by having participants take a survey assessing their financial situation and then pairs them with resources it thinks will best fit individual financial goals.[83] However, the program doesn't stop there. Directly underneath the online resources, there is a link that provides access to a free, one-on-one consultation with a specialist.[84] Better Money Habits also delivers in-person guidance provided by the bank's "more than 4,000 employees" nationwide.[85] Now in socially distant times, Better Money Habits, as have other financial services provider programs, has employed remote education tools offering hands-on learning in the home and podcasts that persuade audio learners to become more engaged in their financial learning.

Before the Covid-19 pandemic in 2019, Bank of America also partnered with Buzzfeed for a "financial wellness retreat" that brought together young adults from all over the country to learn about financial education in an experiential way.[86]

We have not identified any information on Bank of America's website speaking to the effectiveness of Better Money Habits or the wellness retreat.

Morgan Stanley

Morgan Stanley's approach to financial education is quite different from that of the previously mentioned firms. Morgan Stanley provides two specific programs: Women Without Limits and Financially Fit. Women Without Limits was announced on August 26, 2020 by Morgan Stanley's Wealth Management division to emphasize "the success of women and girls in communities across the country, provide guidance and advice to help address the unique financial needs of female clients and support female employees within the Firm."[87] As part of this program, the firm has partnered with the Girl Scouts of America to provide online seminars on financial education starting at an early age to young girls.[88] Unlike the other programs, Women Without Limits is aimed at very specific groups: Morgan Stanley's individual clients, the Girl Scouts, and Morgan Stanley female employees.

The second program, Morgan Stanley Financially Fit, was announced on May 14, 2015, in partnership with the education technology company EverFi.[89] This program provides interactive courses on topics such as money management, savings strategies, home ownership, college loans, identity theft, and investment portfolios.[90]

While these programs sound like they could be successful, we have not identified any findings on Morgan Stanley's website on their effectiveness. The firm has, however, published statistics as recent as 2019 on why employers should invest in the financial education of their employees.[91]

Additional Financial Services Providers and How Much They Spend

There are many other financial services providers who provide financial education training, including T Rowe Price, Truist, Ally, and Charles Schwab.[92] We have included a more comprehensive list of various firms and what they are doing about financial education in Appendix 1. While their approaches vary, they have at least one thing in common: their unknown success. Apart from Vanguard, we have not identified reports on financial services providers' financial education programs' level of effectiveness.

What we do know is that companies are spending millions of dollars on financial education efforts, which is a positive step.[93] What we don't know exactly is their return on investment. Before we fully commend these firms on their efforts, we would need to know the effectiveness of their efforts.

Our Recommendations for the Future of Financial Education

Additional Research

In the past 30 years, government entities, not-for-profit organizations, and academics have conducted surveys and tests to determine the extent to which our country is financially educated. Unfortunately, the results of those studies show that we are in the midst of a financial education crisis, and without a cure, this disease has the potential to have even more devastating impacts.

Researchers Need to Agree on What Financial Education Is

We urge researchers and academics to come to an agreement on the definition of financial education at least when it comes to creating studies. Institutions and individuals in both the public and private sectors are looking to the literature to determine what approach is most effective for their programs. If there is no consensus on what financial education is, different entities will approach their programs differently which means participants in one program may end up more financially educated than those in a different program even though they've all completed financial education training. We had to create our own definition of what financial education is because so many academics refer to the term as the way someone becomes financially literate, but we believe it is so much more than that. Financial education is "the knowledge of financial concepts and the development of decision-making skills that ensure lifetime financial stability," which means it combines both financial knowledge and financial capability. We believe that for programs to be effective at teaching financial education, they need to teach both.

Researchers Should Study How to Teach Financial Capability and Measure Financial Outcomes to Determine Effectiveness

We recommend that researchers study the most effective ways to teach someone how to have financial capability in addition to just having financial knowledge. Existing studies like Drexler et al. (2012) have shown that "how financial education [programs are] structured" has "meaningful effects at the end of the day" by measuring financial outcomes instead of just financial knowledge.[94] Research like Drexler's looks beyond financial knowledge and seeks to assess financial capability which we believe is a better way to measure financial education because it represents how participants will tackle financial issues in their own lives. Once studies begin to teach financial capability, we recommend that researchers use that measure as the factor that determines effectiveness. As we stated in our section on definitions, financial capability is "the ability to make economic and financial decisions that positively affect their financial well-being." We believe that ability is what needs to be taught to end the financial education crisis and put individuals on the path to positive financial well-being. If a program can successfully teach financial capability and the outcomes showing financial capability can be measured, we think that would be the most effective program possible.

Winning Play$ is one example of a program that focuses on financial behaviors and outcomes through a "cognitive behavior approach."[95] Using a psychological model of behavior change, Winning Play$ taps into the process of how individuals make decisions and how those decisions change.[96] With that approach, the program has seen remarkable success, and we believe will continue to do so.

National Standardized Curriculum

Government Should Institute a National Standardized Curriculum for Primary and Secondary Schools

The Federal government plays an integral role in the financial well-being of its citizens. Given the statistics we provided earlier, many U.S. citizens are financially ailing. To help to rectify this situation, we recommend that the Federal government develop a mandatory financial education curriculum for the elementary, middle, and high school levels.

For the curriculum itself, we recommend a standard nationwide curriculum that is both experiential and interactive. This type of curriculum would not only keep students engaged with the material but also allow students to learn from experience. Existing literature shows that learning from financial decisions is the most effective way for the lessons taught to have impact. This is shown in the results of both Vanguard's My Classroom Economy[97] and JA Finance Park[98] where students gain experience in making financial decisions. This type of learning also tends to resonate for several years after. Thus, students begin to learn key financial concepts at a young age; they are slowly accustomed to what are often seen as daunting financial decisions. After each year, the curriculum builds upon the information taught in the year prior. We believe that this cumulative curriculum should include the value of money, budgeting, saving, financial planning, compounding interest, inflation, and maybe even basic investment knowledge (bonds, stocks, etc.).

Financial Literacy and Education Commission Should Lead the Development of Curriculum

The Fair and Accurate Credit Transactions Act of 2003 established the Financial Literacy and Education Commission (FLEC), which is made up of the heads of 19 Federal government agencies, including financial services regulators, such as the Consumer Financial Protection Bureau and the Securities and Exchange Commission.[99] We recommend that FLEC lead the development of this experiential curriculum with input from other constituents, such as teachers, students, state and local government representatives, academics, and financial services providers.

States Should Tailor Standardized Curriculum

In line with one of FLEC's best practices for financial education, "Know the Individuals and Families to be Served," we recommend that each state tailor this standardized curriculum to meet the needs of its students. This way, we can ensure that each student has equal access to financial education, but with curriculum that is relevant and tailored to different target audiences. We have modeled this idea off the model statutes that national professional organizations draft to be tailored and enacted at the state level.

Public-Private Partnership

The Joint Trades Should Form a Committee to Develop Standardized Definitions, Measures of Effectiveness, and Reporting Standards Relevant to Financial Education Programs

We recommend that the Joint Trades, an organization made up of the largest financial services trade associations, form a committee composed of representatives from their member organizations, a diverse group of consumers, and academics to research innovations in financial education (e.g., gamification, online simulations), provide clear definitions relating to financial education, financial literacy, etc., develop standards for reporting on the effectiveness of financial education programs, and develop a standardized unit of measure for effectiveness. We also recommend the formation of a public-private partnership between FLEC and the Joint Trades to enhance financial education to those outside of grades K-12.

There has not been a more dire time for these efforts, and more specifically the curriculum, than right now. These efforts are necessary to people of all ages and demographics in the US. Generation Z has seen the development of modern technology, grew up during the worst financial crisis since the Great Depression, and has had their coming of age during a global pandemic. The latter part of this generation has lived their entire lives having every bit of information they could ever need at their fingertips. They have exponentially more access to financial information than any generation before while also living through multiple financial crises, but still the number of financially uneducated individuals has continued to grow, as shown in Figure 1. Boomers are now entering retirement; it is in the best interest of the Joint Trades to prepare them for budgeting in retirement and educate them about the reality of personal finances in their later years.[100] Additionally, Generation X, the generation who was in the middle of their career during the Great Recession, has often internalized their financial struggles as they were taught about self-sufficiency when growing up in the ‘70s. They are still recovering from the effects of the Great Recession; they are also financially assisting their parents who are entering retirement while financially supporting their children as they enter adulthood.[101] Lastly, Millennials are beginning to enter a stage in life in which they are buying homes, starting 401k plans, and paying down student debt; they too can benefit from personal finance curriculum. Overall, each generation has a stake in the benefits of our proposed financial curricula. The Joint Trades can help people of all generations and improve financial capability.

Currently, financial services providers offer a diverse range of financial education programs, most of which lack published results of their effectiveness. With a committee developing a standardized way of measuring success and mandating transparency about success, it will become easier to identify the variables causing programs to succeed and fail and bring a sense of coordination in these efforts. These efforts would work in conjunction with a standardized curriculum for those outside of grades K-12.

FLEC Should Help Market and Fund the Distribution of a Standardized Curriculum for Adults and College Students

We recommend a curriculum with college students and adults as the target audience. Lessons could include student debt payment, budgeting, saving, mortgage preparation and payment, preparing for rainy days and retirement, etc. The proposed standardized curriculum would ideally be mandated but this request is nearly impossible for a country with a population of 328.2 million people. Therefore, the public sector, more specifically FLEC, plays an integral role in this partnership. FLEC would head the funding and rollout of this financial education for adults and college students to expand outreach of the program. The resources of FLEC allow this curriculum to be communicated through public service announcements and widespread campaigning across different communities. The government’s involvement will allow this standardized curriculum to reach a large audience of diverse demographics. For instance, FLEC can assist in the distribution of the curriculum through local non-profit organizations, community organizations, and faith-based organizations.

Financial Service Providers’ Financial Education Programs

The recommendations we make for the financial services providers are based on what information is publicly available regarding their financial education programs. Some firms may already be taking these steps when they create their programs, and we applaud those efforts. These recommendations are what we believe every firm should be doing to create the most effective programs that they can to end the financial education crisis.

Financial Services Providers Should Monitor the Effectiveness of Their Financial Education Programs

We believe that financial services providers should track the progress of their programs. If they measure their success along the way, providers can see what specific aspects of their programs are successful and which aren’t. This will also keep them up to date on their participants’ needs and progress so that programs can be adjusted to educate participants as fully as possible. This can be made possible in part through mandates of the Joint Trades Committee we recommended in the earlier section. In addition, this aligns with FLEC’s 2020 strategy as the Commission also recommends that, “Financial education providers should evaluate their programs for impact and develop a culture of continuous improvement by establishing methodologies, procedures, reporting, and metrics for measuring program effectiveness."[102]

Financial Services Providers Should Empower Their Staff Managing Financial Education Programs

To help monitor their financial education programs, we recommend that financial services providers establish clear reporting lines to executives, quarterly reporting obligations to executive-level management, and performance metrics for their employees managing financial education programs. We believe these mechanisms will provide employees with the incentives to see the programs succeed. With the success of these programs comes effective financial education.

Financial Services Providers Should Focus on Just-In-Time Courses

Many of the programs created by financial services providers currently focus on students in primary, secondary, and higher education. Our research has shown that isolated programs at that stage of life are not as effective as longitudinal programs or just-in-time courses due to knowledge decay. With government entities focusing on student programs, we recommend that financial services providers shift their focus more to just-in-time courses. For instance, if someone wants to take out a loan to buy a car, financial services providers should offer a course in debt management and interest right before the individual buys a car so the individual can more accurately weigh the pros and cons of that decision before jumping in headfirst.

Financial Services Providers Should Consider Longitudinal Programs or Increased Partnerships

We don't believe, however, that financial services providers should just ignore students' financial education completely. As we discussed in our earlier section analyzing literature, programs that take place during primary and secondary education can be effective as long as they continually take place as opposed to an isolated semester or even year-long course. Financial services providers can make a significant impact on a student's financial education if their programs continue throughout the schooling process as opposed to a short-term course. We recommend that financial services providers also consider increasing their partnerships with financial education funds or nonprofit organizations who have the ability for longer-term programs. That way, financial services providers are still a part of financially educating younger generations, but they can direct the bulk of their energy and manpower towards just-in-time courses.

Financial Services Providers Should Create Experiential Programs

We recommend financial services providers capitalize on the effectiveness of experiential programs. As we discussed above, the literature has shown that this approach is extremely successful, especially when compared to simply reading articles, for example. We believe that financial services providers should shift their focus away from supplying written articles and engage their participants in a more interactive way. This can be done either online using some form of technology (i.e., Zoom or Microsoft teams) or in-person depending on the needs and circumstances of their participants. We recommend providers look to Vanguard's My Classroom Economy as a model of an effective, experiential program that has published data showing its success.

Financial Services Providers Will Benefit from Improving Financial Education

We make these recommendations to the financial services industry because we believe it is in their best interest to improve financial education nationwide. When more people are financially educated, they will seek out more financial products and services, including investment opportunities which would mean more business for wealth and asset management firms.[103] Financial education programs can also foster trust between consumers and financial institutions, prompting them to interact more with financial services providers. Additionally, more financially educated consumers mean consumers who make good financial decisions, including reducing their debts, and therefore increasing their overall wealth. They can then use this wealth for investment purposes, again providing more business for financial services providers.[104] After speaking with a professional at a prominent financial services provider about his experience with financial education, it's clear that even individuals at the highest management levels may not have adequate financial education. When CEOs and other management professionals have a solid financial education, they will be better equipped to make their companies successful which will improve the economy overall and therefore benefit financial services providers.

Conclusion

Financial education programs today have made significant changes since their financial literacy beginnings. There is unmistakable evidence that many of these programs are successful. Vanguard's My Classroom Economy, JA Finance Park, employer-sponsored programs, and "just-in-time" courses are all effective at increasing financial knowledge. Other programs such as Fidelity's Invest Write and Invest it Forward also appear to be heading in the right direction. Unfortunately, some financial services providers are currently providing programs that are not as effective as they could be or may possibly be ineffective. There is no way for us to make a judgement on that given the lack of published data tracking these programs' success.

In that vein, we hope our recommendations provide financial education program creators and instructors with some insights into what will make programs effective with a genuine impact on the individuals they teach. The bottom line is that this

financial education crisis is not something that is going to get fixed overnight. However, at some point, we strongly believe that if enough people take notice of this crisis, change will come. In a perfect world, our recommendations would be a small part of instituting programs in the public and private sectors that teach financial education to all members of society. Once they are financially educated, they can teach their children in their own homes. Learning to save using a piggy bank, paying a small amount for chores around the house, and being shown how to write a check are all simple activities that give children and young adults an understanding of saving and money management. Studies have shown that children as young as seven years old have cemented financial habits influenced by the financial choices of those around them, so being a positive example to our children is critical for Gen Z and future generations to achieve a passing level of financial capability.[105] The days of students not-so-sarcastically claiming upon graduation that all high school taught them was "the mitochondria is the powerhouse of the cell" need to be behind us. School systems cannot claim to produce knowledgeable students ready for the real world if they do not provide them with the most "basic knowledge that people need in order to survive in a modern society."[106]

Author's Note

We would like to acknowledge that the opinions expressed in this paper are based solely upon our own independent research and do not necessarily reflect those of Sapere Aude Consortium, Inc. or its founders. We would also like to point out that our recommendations are just that: recommendations. Our goal in creating this paper was to analyze the effectiveness and success of current efforts looking to address the financial education crisis to provide insight based on those findings, and we acknowledge that there are some cases where full information either wasn't available or disclosed to us. The recommendations we have made reflect what literature we were able to analyze, and our discussions center around our independent findings. We hope to offer a unique perspective from a generation of students who did not receive formal financial education training. While we have educated ourselves on the crisis at hand, we acknowledge that we are not fully financially educated ourselves. We also acknowledge that our recommendations alone are not enough to end the financial education crisis; if they were, someone would have already thought of them, and this crisis would be over. We recognize that there are many ways of approaching the situation, but we hope that this paper will provide some with insight to possible solutions going forward. We would also like to thank Kristen Jaconi and Ashley McManus for their mentorship and guidance throughout this process.

Appendix 1

Name of Organization	Target Audience	Curriculum	Resources	Year Launched	Partnership (if applicable)
Ally	Young Children	Adventures in Money: Saving CAMP Retail Store: Budgeting and Saving Stock Market Investing Challenge: Investing	Adventures in Money: Online interactive story telling CAMP Retail Store: Online simulation of owning toy store Stock Market Investing Challenge: Online mock stock exchange	2021	
American Express	People of All Ages	Credit Intel: How to Build and Manage Credit	Online articles	2019	Freelance Authors and Consultants: providing resources to expand outreach
Bank of America	"All Walks of Life"	Better Money Habits: Credit, Debt, Retirement, Taxes, College, Home Buying, Personal Banking	Online articles and modules	2013	Dschwen: Helped create a series of videos for Better Money Habits Vox: Partnered to create Money Talks: Home Habits Khan Academy: Partnered to make accessible and informational videos for Better Money Habits
BlackRock	Adults	Education Center: Planning for Retirement, Investing, Closed-End Funds, Open-End Funds	Online articles	Not available	
Charles Schwab	Elementary School Students, Middle School Students, High School Students College Students	Schwab Moneywise: Budgeting, Saving, Investing	Supports local nonprofits and provides in-person resources for college students	2006	Boys and Girls Club: Collaborate to make Money Matters, a nationally recognized Financial Education Program DonorsChoose.org: Financially supporting DonorsChoose to help supply schools with proper school resources SIFMA: Pairing members of Congress and their financial programming with public schools
Citi Bank	Adults	Financial Education Center: Personal Finance/investing, Kids/College, Retirement Planning, Preparing for Life Changes, Protecting Your Wealth	Online articles, videos, and planning tools	2004	
Citizens Bank	People of All Ages	Financial Empowerment: Supporting Community Programs about Credit, Home Buying, Student Loans, Auto Loans, Retirement, Investing, Budgeting	Virtual seminars, in-person activities, and programs	2011	Local non-profits and Junior Achievement
Fidelity	Grades K-12	Financial Forward: Budgeting, Saving, and Financial Planning	Monetary contributions to in-person simulations (JA Finance Park) and online programs	Not available	Junior Achievement: Fidelity is a sponsor of this program
Fifth Third Bank	Grade School Students, High School Students, and Adults	L.I.F.E.: Budgeting, Saving, Borrowing Money, Income, Investing, Insurance, Student Debt	In-classroom activities, online activities, in-person resources and online resources	2021	Local schools
Goldman Sachs	Employees of companies that decide to partake in the program	Aycho Group Education: Debt, Saving, Budgeting, Planning for Retirement, and Taxes	Seminars, speakers, and online resources	2020	
HSBC	Children Ages 3 to 11	The Money Heroes: A Financial Education Initiative Designed to Help Teachers and Parents Collaborate During the Covid-19 Pandemic	Online resources and programs provided by financial advisors	2020	Young Money
Invesco	People in "every stage of life"	Financial Literacy: Accumulating Wealth, Preparing for Retirement, Transferring Wealth, Debt, Spending Habits, Making Big Purchases	Online resources and programs provided by financial advisors	Not available	Invesco Financial Advisors

Name of Organization	Target Audience	Curriculum	Resources	Year Launched	Partnership (if applicable)
JP Morgan	Low Income Communities, Immigrants, People of Color, Women, and the Aging	Financial Solutions Lab: Increasing Funding for Technology to Promote Financial Health	Supports development of fintech companies and non-profit partners and provides in-person financial coaching	2015	Over 40 fintech companies, local organizations, non-profits
Mass Mutual	Grades 6-8	FutureSmart: Budgeting, Saving, Future Planning	FutureSmart: Online resources and activities	2014	Everfi: Partnered to create web-based learning tools
Morgan Stanley	Clients of Morgan Stanley Financial Advisors	Financially Fit: Budgeting, Saving, Investing, Credit, Managing Personal Finances	Online articles and in-person resources provided by financial advisors	2015	Everfi: Partnered to create web-based learning tools
PNC Bank	High School and College Students	My Finance Academy: Building Better Financial Behaviors, such as Budgeting, Saving, Building Credit etc.	Online articles and resources	Not available	
Progressive	Children	Education Initiative: The Importance of Being Financially Educated	In-person crash courses delivered by volunteers	2013	
State Street	Parents and Children	ABC's of Finance: Budgeting and Saving	Online resources provided by financial advisors	2009	State Street Advisors
T Rowe Price	Young Children and Elementary School Students	Money Confident Kids: Understanding "Time Horizons" on Financial Decisions	Online modules	2008	
TD Bank	Grades K-12	TD Bank Wow! Zone: Saving, Budgeting, Credit, Investing, Insurance	Online resources and Virtual Stock Simulation	1990	
Truist	Employees of Truist Momentum member companies	Truist Momentum: Personal Finance Management	Online modules	Not available	MX Technologies: Creating the online platform for modules
US Bancorp	Adults	Building Credit, Investing, Retirement, Homebuying etc.	Online resources	Not available	
Vanguard	Elementary School Students	My Classroom Economy: Budgeting and Saving	In-person curriculum provided by teachers	2011	Chris Salerno: Salerno is a 4th grade teacher who originally developed the curriculum
Wells Fargo	Elementary School Students, Middle School Students, High School Students, Adults	Hands on Banking: Budgeting, Saving, Building Wealth, Credit, Investing, Preparing for a Rainy Day	Online articles and activities for educators	2003	

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