

Fundamental Financial Failure: Why California's Kids Need to Learn About Money

Ryan Schaefer

The mitochondria is the powerhouse of the cell. For the equation of a circle, (h,k) is the center. The 3d orbital is higher in energy than the 4s orbital. The Declaration of Independence was signed in 1776. High school students can spend the majority of their days memorizing facts and dates that they might never reference again for the rest of their lives. School curriculum focuses on preparing students for standardized testing or college applications, overlooking practical skills. Students are given little to no guidance on a topic that adults face every single day: personal finance. Young adults are entering the workforce with no idea how to handle money, and the consequences have been dire. Compared to the late 20th century, modern-day US households are taking out far more loans, while saving less money.¹ Young adults in the US are in billions of dollars of student loan debt, failing to pay their credit card bills, and are not investing and growing their money. Their financial futures are being destroyed by decisions they make at age 18 due to their lack of education in personal finance. California, known as progressive and egalitarian, has lagged behind other states when it comes to implementing financial education into public schools, causing students to suffer. Although politicians, technocrats, and certain scholars argue that implementing financial education in California public schools would be costly and a burden on teachers, mixing financial literacy into current math and history courses would give students essential life skills without being a major disruption to the California education system.

The lack of government action on financial education in California public schools is part of a larger discussion of political inefficiency, preparing students for life after school, and income inequality. California has zero laws or requirements for financial education in public schools. Former California governor Arnold Schwarzenegger vetoed several financial education bills while in office, and little progress has been made from current governor Gavin Newsom.² In other states, financial education has been on the rise for decades. Georgia, Idaho, and Texas have enacted legislation that requires financial education at the high school level, even if it is just contracting out private organizations to run programs.³ In a modern society with a rise of “financially complex products” such as “student loans, mortgages, credit cards, pension accounts, and annuities,” these states are aiming to help students create future financial success.⁴ However, the California school curriculum remains focused on core subjects such as English, Math, and Science, with students having limited choices for electives to further their personal needs. Additionally, California low-income students are disproportionately affected by this lack of opportunity to learn about money. According to a study by Min Zhan, a scholar at the University of Illinois, low-income people “are much less likely to have bank accounts, less likely

¹ Annamaria Lusardi and Olivia S. Mitchell, "The Economic Importance of Financial Literacy: Theory and Evidence," *Journal of Economic Literature* 52, no. 1 (March 2014): 6, JSTOR.

² California Financial Literacy Fund, A. 2457, 2010 Leg. (Cal., as failed passage, May 28, 2010). Accessed May 19, 2021. <https://legiscan.com/CA/text/AB2457/2009>.

³ Alexandra Brown et al., *State Mandated Financial Education and the Credit Behavior of Young Adults*, Finance and Economics Discussion Series (Washington D.C., District of Columbia: Federal Reserve Board, 2014), 4.

⁴ Lusardi and Mitchell, "The Economic," 6.

to save or invest, and more susceptible to predatory lending practices.”⁵ These financial failures lead to a constant cycle of living without stable finances, worsening the wealth gap we see today. Income inequality is a major issue in California, as rising rent levels have led to gentrification in major cities as well as increased levels of homelessness. These low-income students usually go to public schools, so they don’t have access to the financial education that students at private or charter schools may have. Financial education has stagnated in the California government, and students, especially those in low-income areas, are suffering the consequences of low financial literacy.

The debate about financial literacy has sparked controversy between educators, scholars, and economists, as each believes that financial education should be handled differently. BYU head librarian Andy Spackman and Middle County librarian Elizabeth Malafi believe that libraries and private organizations must take charge of financial literacy. They argue that libraries are the “ideal community institution” for teaching finance to the adults and children of an area.⁶ Since libraries have access to many of the low-income kids who don’t have public school financial education, Malafi and Spackman advocate for libraries increasing their partnerships with outside organizations.⁷ They believe that it is better to bypass the bureaucracy of the public school system and take charge of a worsening situation by raising money to fund financial education programs and fill the role of “information intermediaries.”⁸ Lauren Willis, a law professor at Harvard and Loyola Marymount University, believes that the legal route is the best way to approach the financial illiteracy epidemic. She argues that “regulatory interventions” need to take place, so the best way to eliminate financial mistakes is to monitor the companies exploiting consumers.⁹ She believes that regulation on banks should be increased to look out for the long-term interests of their customers, as that would prevent adults from getting themselves into debts they cannot pay off. Additionally, Willis wants laws that require workers to put money into a 401k and buy health insurance.¹⁰ Lastly, some economists such as Roman Zytek, the chief economist for the Central Bank of Brunei, believe that financial education in any form is just too expensive and that it is the duty of the consumer to make personal decisions.¹¹ Zytek argues that there are “direct, indirect, and opportunity costs” that come with financial education.¹² He believes that the costs outweigh the potential benefits, so financial education should not be explored in public school systems. The varying viewpoints when it comes to financial education have led to stagnation within governments to make policy changes, so a consensus needs to be reached before young adults continue to struggle financially.

⁵ Min Zhan, "Financial Knowledge of the Low-income Population: Effects of a Financial Education Program," *The Journal of Sociology and Social Welfare* 33, no. 1 (2006): 6.

⁶ Kit Keller et al., "Meeting the Need for Library-based Financial Literacy Education," *Reference & User Services Quarterly* 54, no. 3 (Spring 2015): 48.

⁷ Keller et al., "Meeting the Need," 48.

⁸ Keller et al., "Meeting the Need," 1.

⁹ Lauren E. Willis, "The Financial Education Fallacy," *The American Economic Review* 101, no. 3 (May 2011): 432, JSTOR.

¹⁰ Willis, "The Financial," 432.

¹¹ Roman Zytek, "The Cost of Financial Education," in *The Financial Literacy Challenge* (2013), 2, last modified November 27, 2013, accessed May 9, 2021, https://www.researchgate.net/publication/334398625_The_Cost_of_Financial_Education.

¹² Zytek, "The Cost," 1.

Politicians, scholars, and the “elite” believe that the cost of financial education is too high, as the training necessary would be expensive and students would have to forego other classes and skills to pursue it. Zytek insists that training teachers will be costly because they do not possess the “deep interdisciplinary knowledge” that financial experts do.¹³ He warns that curriculum will only be effective if the teachers are well-informed on the subject and that high-quality finance gurus will be out of the budget range for public schools.¹⁴ Moreover, he argues that for financial education to be effective, extensive research into “teacher pedagogy” and its effects on students needs to take place.¹⁵ No major change to a school’s curriculum can take place without proof to back up that the change works, and Zytek believes that the costs will just add up over time. Additionally, he argues that financial education will take class time away from valuable skills such as reading and writing. Alexandra Brown from the Monetary Affairs Federal Reserve Board agrees, stating that financial education “comes at the expense of other valuable education topics.”¹⁶ Even the Secretary of the Treasury under George Bush, Paul O’Neill, argued that financial education is a low priority issue due to the expenses.¹⁷ The cost of implementing a full financial education curriculum can be very high, and many members of US society believe that saving money would be the smartest path.

Zytek argues that financial education is too costly, but putting financial literacy into courses that already exist would lessen the economic downsides of many defaulted loans and would eliminate costly training as teachers would still be using the same skills. Financial education helps students manage their money in order to avoid government aid and loans, which saves the US government money— exactly what Zytek wants. Jamie Dimon and Jeff Courtney, executives at JPMorgan & Chase & Co., have been researching federal student loans over the past two years. Shockingly, they realized that over a third of borrowers are defaulting on their loans consistently, costing the federal government a potential 500 billion dollars.¹⁸ Zytek claims that adding in financial education will be too expensive, but the proposed plans are nowhere near a half a trillion-dollar budget. Critics need to realize that teaching students about student loans may cause them to avoid risky debt, which conserves government money. If the government continues to hand out loans like Santa gives away presents, Courtney warns that the US government will have to “recognize the losses, deepening deficits, and adding billions to the national debt.”¹⁹ Zytek’s argument that the government needs to save money is completely true, which is why young adults need to know about how to handle money for their own and our country’s sake. Since the government is inept at making major changes quickly, states need to make mandated changes to teach people how to make smart decisions regarding these high-interest loans.²⁰ While Zytek argues that these changes will be expensive to implement, in reality, curriculum has already been developed. The University of Cincinnati Economics Center developed SmartPath, a

¹³ Zytek, "The Cost," 1.

¹⁴ Zytek, "The Cost," 1.

¹⁵ Zytek, "The Cost," 1.

¹⁶ Brown et al., *State Mandated*, 4.

¹⁷ *The State of Financial Literacy in California*, 107th Cong., 2d Sess. (2002). Accessed May 19, 2021. <https://www.govinfo.gov/content/pkg/CHRG-107shrg88644/html/CHRG-107shrg88644.htm>.

¹⁸ Josh Mitchell, "Inside the Fight over Student Loan Losses," *The Wall Street Journal*, April 29, 2021.

¹⁹ Mitchell, "Inside the Fight."

²⁰ Mitchell, "Inside the Fight."

free-of-charge program that can be integrated with mathematics curriculum.²¹ According to Julie Heath, the director of the center and leader of the SmartPath project, SmartPath is great for teachers who “recognizes a critical need for the dual curriculum” but “feel unqualified to teach it.”²² A major quip by opponents to financial education is that teachers are unqualified, but programs that connect it with math allow teachers to continue to use their well-developed skills without sacrificing other essential skills. Nonprofits and universities across the US are itching to help students learn about money and train teachers, so it is no excuse to say that it would be too expensive to add into schools.

California’s young adults know very little about money and personal finance and want to learn more, so they need to be given that knowledge through financial education. The purpose of school is to educate children on subjects they need to improve upon, and when a gaping hole is noticed, it must be filled. Lack of knowledge about money starts at a very young age, which is why money needs to be incorporated into early math courses. Take, for example, a sixth-grade classroom in Redwood City, California, which consists of mostly low-income students on free or reduced lunch. For a math class assignment, when asked to identify the total money in a picture with a few quarters, dimes, nickels, and dollar bills, the Garfield School class performed miserably. A mere 15/41 students were able to identify that the picture showed \$6.05.²³ Answers ranged from Litzey Gonzalez saying that “the value of the money is \$1.10” to Darlene Bautista guessing “\$5.105.”²⁴ When students can’t identify dollars and cents, they aren’t going to be able to open a bank account, buy a house, or invest in the stock market. Chris Schaefer, the teacher of this middle school class, says that his students are “creative and enthusiastic learners,” but have not been taught “basic knowledge that every 6th grader should know.”²⁵ His use of the words “creative” and “optimistic” demonstrate that the kids are excited to learn about important topics, but just haven’t had the access or teaching to make that happen. The fact that middle school students can’t add up coins is shocking, and further evidence that students need to be given financial education without sacrificing other needed skills. Financial education needs to start early, as the public school system in California is failing kids who want to learn.

The consequences of low financial literacy start while students are still in high school, as many kids take on student loans or credit cards and suffer in lifelong debt. Millennials, or people between the ages of 20 and 30, are doing a poor job of handling debt. According to a 2016 study conducted by Bank of America, 50% of millennials don’t pay their credit card bill in full each month.²⁶ These millennials are putting their credit scores at risk, which can limit their financial freedom as they attempt to get a mortgage or buy a car in the future. In a time where credit cards can be arranged at the local grocery store, millennials are at increased risk of taking on debt. These kids need to be taught the risks of using a credit card to pay for things one can’t afford. Olivia Mitchell, economist and professor at the University of Pennsylvania, agrees, saying that

²¹ Rachel Richardson, "Teaching Outside the Lines," *University of Cincinnati Magazine*, 2012, 1, accessed May 13, 2021, https://magazine.uc.edu/editors_picks/recent_features/smartpath.html.

²² Richardson, "Teaching Outside," 1.

²³ "Garfield School 6th Grade Math Assignment Results," January 21, 2021.

²⁴ "Garfield School."

²⁵ Chris Schaefer, interview by Ryan Schaefer, Burlingame, CA, May 1, 2021.

²⁶ Plepler, *Better Money*, 3. Andrew Plepler, *Better Money Habits Millennial Report*, comp. Bank Of America, 3, accessed May 9, 2021, <https://about.bankofamerica.com/assets/pdf/bmh-millennial-report.pdf>.

“financial ignorance can be expensive and even ruinous.”²⁷ When people have limited knowledge of money, they are more prone to make careless errors that can be costly in the long run. Simple lessons on compound interest, for example, will teach students the essential skills needed to make informed decisions on using a credit card. Moreover, 53% of millennials have taken out a loan to pay for college.²⁸ With the price of tuition rising, students are making life-changing decisions with little guidance. Students need to learn about how loans work and the specifics of taking out a major loan for college before they are stuck in a constant cycle of debt. Instead of wiping out student loans as some politicians have advocated for, the US needs to come up with a permanent solution that will prevent young adults from entering a risky debt: teaching them about the drawbacks involved.

Learning about money in school causes kids to save and invest for the future, allowing themselves to become financially free and progress up the socioeconomic ladder. While teaching kids about finance may help some avoid debt, it will help all students grow their net worth instead of living paycheck to paycheck in the future. A report published by the Federal Reserve Board states that students “exposed to financial education mandates had higher credit scores and lower delinquency rates” when compared to states without those mandates.²⁹ Students are raising their credit scores, which is essential when buying a house, and that house allows a family to start generational wealth through real estate. Not only that, but these kids are eventually having “higher rates of savings and net worth,” two extremely positive attributes to future financial success.³⁰ Students aren’t just avoiding financial mistakes, they are taking targeted actions to better their financial situation, proof that financial education curriculum works. Concrete data backs up these ideas as well: a study by a group of scholars at Stanford University for the National Bureau of Economic Research revealed that young adult groups that receive financial education “increase their pension contributions by 0.17%.”³¹ If a few presentations can increase savings rates, full-blown curriculum throughout high school can allow students to reach new socioeconomic classes by being smart with their finances. California preaches being a state of opportunity, especially in Los Angeles, San Francisco, and Silicon Valley, so providing their students the opportunity to succeed financially should be of great urgency.

Teachers believe financial education is an important part of learning, and they are able to effectively teach kids about money in the context of core classes. A survey for the National Endowment for Financial Education revealed that 89% of teachers believe students should be required to take a financial literacy course or test to graduate.³² Teachers know the learning capacities of their students, and they should have the autonomy to teach what they think will help their students succeed. Trapping teachers in the curriculum due to a focus on test scores and funding is a fundamental failure by the California government, as the adults who know our

²⁷ Olivia Mitchell and Annamaria Lusardi, "Financial Literacy and Economic Outcomes: Evidence and Policy Implications," *PMC* 3, no. 1 (May 26, 2017): 107, accessed May 20, 2021, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5445906/>.

²⁸ Plepler, *Better Money*, 3.

²⁹ Brown et al., *State Mandated*, 4.

³⁰ Brown et al., *State Mandated*, 6.

³¹ Lusardi and Mitchell, "The Economic," 33.

³² Wendy Way and Karen Holden, "Teachers' Background and Capacity to Teach Personal Finance: Results of a National Study," National Endowment for Financial Education, last modified 2010, accessed May 13, 2021, <https://www.ngpf.org/wp-content/uploads/2015/10/Mar3.pdf>.

students should be able to evaluate the skills they need to provide. Chris Schaefer states that kids should have financial education “as early as possible” and even “starting in elementary school.”³³ His everyday interactions with students make it evident that a gap in knowledge about money is present, and he wants to change that. He concedes that it is difficult to teach about money when the kids cannot read or write, so all skills need to be taught in a more engaging way to build foundational skills.³⁴ Moreover, financial education works for these teachers, and especially when taught in conjunction with mathematics. An expansive study by researchers at the Financial Education Lifestyle Corporation explored the effectiveness of a curriculum that combines finance with math, and the results were encouraging. In three New York City high schools, a financial literacy math elective was offered, and the students who completed the course improved their financial knowledge tremendously. Students improved their performance on finance quizzes that they took before and after the test by over 30% and became more confident that they could engage in financial tasks by 35-45% as well.³⁵ These students will have the lifelong skills needed to be functional adults, and they were able to do it while also learning about math.

Financial education would make the struggling California public school system more attractive, as families may choose to move to states where it is mandated that students learn about finance. Katie Roberts, a reading specialist in the Lafayette Public School District in California, says that “if financial education was offered at one of the four schools in our district, it would make that school more desirable.”³⁶ Since Katie is a mother with kids in the public school system, her saying that financial education would make a school attractive has merit. Other parents most likely feel the same way and may need to reconsider living in an expensive area when California schools are undesirable. The once highly regarded public school system has faltered, as students can move to areas where real-world skills are taught. In Lafayette School District, there is a single economics class offered in high school, and that only has one unit on personal finance. Katie took that class as a student in Lafayette and encountered it as being “pretty useless.”³⁷ Schools that can’t teach their kids useful classes will become unattractive and unwanted. California is becoming an unsustainable place to live for thousands of families, so if students can get a better education for less money, eventually they will make the jump. Moving to a state like Georgia, Texas, or Idaho (states with a high influx of Californians), families can set up their kids for success because the personal finance education increases credit scores by 29, 13, and 7 points respectively.³⁸ Unfortunately, without a major change to implement personal finance classes, California’s school districts may lose bright students who can improve the state for future generations.

Lack of financial literacy disproportionately affects minorities, and in a time where America is struggling with racial equality, a clear policy to level the playing field would be vital to limiting the effects of systemic racism in California public schools. An article published by Giliian White from *The Atlantic* highlights that Black families are “significantly less likely” to own a home

³³ Schaefer, interview.

³⁴ Schaefer, interview.

³⁵ Philip Dituri, Andrew Davidson, and Jack Marley-Payne, "Combining Financial Education with Mathematics Coursework: Findings from a Pilot Study," *Journal of Financial Counseling and Planning* 30, no. 2 (2019): 319.

³⁶ Katie Roberts, interview by Ryan Schaefer, Burlingame, CA, May 8, 2021.

³⁷ Roberts, interview.

³⁸ Brown et al., *State Mandated*, 25.

than white families, and the majority of a family's wealth is tied down in homeownership.³⁹ Renting slowly drains away money, but owning a home makes money as the house value appreciates. While changes such as raising the minimum wage and providing stable housing for low-income people still need to take place, teaching them about the aspects of a mortgage may allow them to save money to eventually buy a home. Studies conducted by the Teachers Insurance and Annuity Association reveal that “at higher levels of financial literacy, financial resilience among African Americans and whites is equal.”⁴⁰ When given the knowledge about savings and investing, blacks are able to level the playing field and save at least \$2,000 at the same rate as whites. California claims to be a state that protects human rights, strives for equality, and fights against racial injustice, but its lack of action to change systemic barriers in public schools suggests otherwise. The citizens of California need to rally and push California legislation to invest in financial education for minority communities in order to lessen the effects of slavery, voter suppression, and redlining. Moreover, Blacks who do own a home still suffer. According to economics professors Annamaria Lusardi of The George Washington University School of Business, and Olivia Mitchell of The Wharton School of the University of Pennsylvania, “suboptimal refinancing” leads to a loss of “0.5-1%” annually when it comes to mortgage payments.⁴¹ 1% is a lot when Black families are spending a majority of their income on housing, so a few high school classes on refinancing may allow Black families to save thousands of dollars per year and move up the social ladder. While it may be difficult to implement federal reparations to the Black community, California can easily make a solid dent in the socioeconomic caste system we see today.

California public school students need financial education because they don't know enough about it. The consequences for low financial literacy are dire, and young adults are suffering financially because of it. The implementation of financial education into math curriculum would cause kids to save for the future without sacrificing other classes. It would also satisfy a growing concern among teachers that their students are lacking key life skills. If California decides to combine financial education with math curriculum, it will make its public school system more desirable and lift struggling low-income minority students out of a cycle of living paycheck to paycheck. After COVID-19 ravaged California communities, the need for financial education has heightened. Annamaria Lusardi observes that “the long lines at food banks stand as a painful reminder of how little financial resilience” American citizens have.⁴² We need to help our students become financially resilient through savings and investments so that they can withstand an unexpected shock such as a pandemic. Financial education must become “part of the toolkit” to help citizens stay economically safe during a crisis.⁴³ As Lusardi says, “it is during a storm

³⁹ Gillian B. White, "Not All Money Troubles Are Created Equal," *The Atlantic*, April 21, 2016, 1, accessed May 18, 2021, <https://www.theatlantic.com/business/archive/2016/04/racial-inequality-money-problems/479349/>.

⁴⁰ Paul Yakosobi, Annamaria Lusardi, and Andrea Hasler, "Financial Literacy, Wellness and Resilience among African Americans," TIAA Institute, last modified 2019, <https://www.tiaainstitute.org/about/news/financial-literacy-wellness-and-resilience-among-african-americans>.

⁴¹ Lusardi and Mitchell, "The Economic," 24.

⁴² Annamaria Lusardi, "Financial Education Should Be Part of the Recovery from the Covid-19 Recession. This Is Why.," *Forbes*, last modified October 2, 2020, accessed May 13, 2021, <https://www.forbes.com/sites/annamarialusardi/2020/10/02/financial-education-should-be-part-of-the-recovery-from-the-covid-19-recession-this-is-why/?sh=58caa44d6f07>.

⁴³ Lusardi, "Financial Education," *Forbes*.

that sailing lessons show their worth,” and a current storm has made it evident that California students need some lessons on financial education.⁴⁴

⁴⁴ Lusardi, "Financial Education," Forbes.

Bibliography

- Brown, Alexandra, Michael Collins, Maximilian Schmeiser, and Carly Urban. *State Mandated Financial Education and the Credit Behavior of Young Adults*. Finance and Economics Discussion Series. Washington D.C., District of Columbia: Federal Reserve Board, 2014.
- California Financial Literacy Fund, A. 2457, 2010 Leg. (Cal., as failed passage, May 28, 2010). Accessed May 19, 2021. <https://legiscan.com/CA/text/AB2457/2009>.
- Dituri, Philip, Andrew Davidson, and Jack Marley-Payne. "Combining Financial Education with Mathematics Coursework: Findings from a Pilot Study." *Journal of Financial Counseling and Planning* 30, no. 2 (2019): 313-22.
- "Garfield School 6th Grade Math Assignment Results." January 21, 2021.
- Keller, Kit, Chris LeBeau, Elizabeth Malafi, and Andy Spackman. "Meeting the Need for Library-based Financial Literacy Education." *Reference & User Services Quarterly* 54, no. 3 (Spring 2015): 47-51.
- Lusardi, Annamaria. "Financial Education Should Be Part of the Recovery from the Covid-19 Recession. This Is Why." *Forbes*. Last modified October 2, 2020. Accessed May 13, 2021. <https://www.forbes.com/sites/annamarialusardi/2020/10/02/financial-education-should-be-part-of-the-recovery-from-the-covid-19-recession-this-is-why/?sh=58caa44d6f07>.
- Lusardi, Annamaria, and Olivia S. Mitchell. "The Economic Importance of Financial Literacy: Theory and Evidence." *Journal of Economic Literature* 52, no. 1 (March 2014): 6-33. JSTOR.
- Mitchell, Josh. "Inside the Fight over Student Loan Losses." *The Wall Street Journal*, April 29, 2021.
- Mitchell, Olivia, and Annamaria Lusardi. "Financial Literacy and Economic Outcomes: Evidence and Policy Implications." *PMC* 3, no. 1 (May 26, 2017): 107-14. Accessed May 20, 2021. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5445906/>.
- Plepler, Andrew. *Better Money Habits Millennial Report*. Compiled by Bank Of America. Accessed May 9, 2021. <https://about.bankofamerica.com/assets/pdf/bmh-millennial-report.pdf>.
- Richardson, Rachel. "Teaching Outside the Lines." *University of Cincinnati Magazine*, 2012. Accessed May 13, 2021. https://magazine.uc.edu/editors_picks/recent_features/smartpath.html.
- Roberts, Katie. Interview by Ryan Schaefer. Burlingame, CA. May 8, 2021.

Schaefer, Chris. Interview by Ryan Schaefer. Burlingame, CA. May 1, 2021.

The State of Financial Literacy in California, 107th Cong., 2d Sess. (2002). Accessed May 19, 2021.
<https://www.govinfo.gov/content/pkg/CHRG-107shrg88644/html/CHRG-107shrg88644.htm>.

Way, Wendy, and Karen Holden. "Teachers' Background and Capacity to Teach Personal Finance: Results of a National Study." National Endowment for Financial Education. Last modified 2010. Accessed May 13, 2021.
<https://www.ngpf.org/wp-content/uploads/2015/10/Mar3.pdf>.

White, Gillian B. "Not All Money Troubles Are Created Equal." *The Atlantic*, April 21, 2016. Accessed May 18, 2021.
<https://www.theatlantic.com/business/archive/2016/04/racial-inequality-money-problems/479349/>.

Willis, Lauren E. "The Financial Education Fallacy." *The American Economic Review* 101, no. 3 (May 2011): 429-34. JSTOR.

Yakosobi, Paul, Annamaria Lusardi, and Andrea Hasler. "Financial Literacy, Wellness and Resilience among African Americans." TIAA Institute. Last modified 2019.
<https://www.tiaainstitute.org/about/news/financial-literacy-wellness-and-resilience-among-african-americans>.

Zhan, Min. "Financial Knowledge of the Low-income Population: Effects of a Financial Education Program." *The Journal of Sociology and Social Welfare* 33, no. 1 (2006): 53-74.

Zytek, Roman. "The Cost of Financial Education." In *The Financial Literacy Challenge*, 1-2. 2013. Last modified November 27, 2013. Accessed May 9, 2021.
https://www.researchgate.net/publication/334398625_The_Cost_of_Financial_Education.