Preparing Graduates for Life's Challenges – A Call for Mandatory Financial Literacy Education

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This research synthesis explores diverse aspects of financial literacy education, drawing insights from studies encompassing secondary schools, community-based programs, and higher education, with a focus on Hispanic populations. Comparative analysis reveals variations in financial literacy determinants, instructional strategies, and demographic influences. Recommendations include prioritizing comprehensive financial education legislation, refining curricula to address critical topics, and enhancing inclusive teaching approaches. Future research should explore tailored interventions for Management students attending Hispanic Serving Institutions (HSI), assess program effectiveness longitudinally, and delve into the nuanced sociocultural influences on financial literacy. These findings provide a foundation for developing targeted financial education initiatives and advancing the understanding of financial literacy dynamics, particularly within Hispanic communities. We conclude this research with a list of recommended financial literacy curricula based on Blooms Taxonomy.

Keywords: fixed mindset theory, growth mindset theory

INTRODUCTION

The level of financial literacy in both developed and developing economies is generally low. The National Financial Education Council (NFEC) notes that there is a "financial illiteracy epidemic" in the United States in its recent 2019 report (NFEC, 2019). Numerous surveys and studies have revealed a significant deficiency in financial literacy among a substantial portion of the U.S. population. Individuals commonly lack fundamental knowledge of budgeting, saving, investing, and debt management concepts. The repercussions of this low financial literacy extend directly to personal finances, resulting in suboptimal financial decision-making and prevalent issues such as high debt levels, insufficient retirement savings, and financial stress. Moreover, disparities in financial education further compound these challenges, as some individuals enjoy better access to resources and opportunities for financial literacy education than others, raising concerns about the accessibility of such education in schools and communities. Acknowledging the crucial role of early financial education, discussions have emerged regarding integrating financial literacy into school curricula, particularly at various levels, including high schools.

This paper examines current challenges and proposes solutions for improving financial literacy in high schools. Initially, we conduct a thorough literature review to gather insights from existing studies and research on financial literacy, education disparities, and interventions. This provides a foundation for understanding the current state of knowledge on the subject. Then we use a mixed-methods approach, to offer a well-rounded examination of the economic and financial literacy challenges highlighted in the premise.

LITERATURE REVIEW

Mandell and Klein (2009) examined 79 high school students who took a personal finance management course in high school and were no more financially literate than those who had not. This study was based on students who had taken a course in the preceding one to four years, it tested their application of the course material and also their personal feelings on financial management. The breakdown in this study is due to an impractical introduction. Finding a more effective way to engage students in the importance and practicality of wealth management is crucial.

In an opposing study, Kim and Chatterjee (2013), find that socialization of financial management of youth, at young ages may be more beneficial depending on the source of the education. It was shown that young adults, children, and adolescents performed all different life choices once they were of age to be financially independent. “Respondents who owned bank accounts and had their spending monitored by parents in childhood were more likely to own financial assets and had more positive attitudes toward personal finance as young adults.” (Kim and Chatterjee 2013). They go on to show that the factors (independent variables), such as mathematic capability, parents’ financial awareness, and if the child received an allowance all played into how the child would make financial decisions when they gained independence.

Junior Achievement used their programs to provide similar studies to Kim and Chatterjee. After interviewing Mike MacDonnell, the Chief Learning Officer of the Rocky Mountain Junior Achievement Division; he showed studies that their programs have had a strong positive impact on financially independent young adults. The 2016-2017 Alumni report shows a significant increase in the correlation to graduates of Junior Achievement: increased high school graduates, four-year college graduates, advanced college degrees, and management or above positions in their careers. According to Flynn (2023) research:

- Only 57% of American adults are financially literate.
- 73% of teens want a more personal finance education.
- Americans lose an average of $1,819 annually due to financial illiteracy.
- 77% of Americans are financially anxious.

Hite, et.al. (2011) assessed the status of personal financial education in Kansas secondary schools in the aftermath of the economic crisis, focusing on the perspectives of business teachers. Results indicate that 20% of schools in the state require a personal finance course before high school graduation, with an additional 12% considering such a requirement. Despite a state mandate to teach financial literacy, 20% of schools were not compliant. The study reveals a positive impact of the recession on financial literacy enrollments in Kansas, with a notable increase in personal finance course enrollments at the high school level. The findings suggest a potential nationwide trend in increased interest and enrollment in personal finance courses. However, further research is needed to confirm such trends in other states. The study emphasizes the need for legislation requiring personal finance courses in the remaining states, given the individual financial challenges experienced during the recession. Despite budget constraints in schools, 81% of surveyed schools in Kansas offer financial literacy instruction. At the high school level, financial literacy is predominantly taught in business departments by teachers with relevant coursework in personal or business finance. The study highlights appropriate emphasis on topics such as spending, credit, banking services, and savings in personal finance classes. However, it raises concerns about the inadequate coverage of crucial topics like retirement planning, consumer laws and rights, and investments, which are deemed essential for citizens facing uncertainties in Social Security and potential financial losses in retirement accounts. The study advocates for increased emphasis on these topics in personal finance classes at all education levels (Hite, et.al., 2011; Baker, 2024).

A nationwide online survey of financial educators in adult community-based financial education programs in the US was conducted to examine teaching beliefs, related curriculum, and teaching strategies used to reach underserved populations. Using a transformative learning theoretical framework Taylor, et.al. (2012) explored how financial education engages learners concerning their lives. Survey findings reveal that financial educators in community-based settings are predominantly White, female, college-educated, and experienced. They see their role as providing expert information for informed financial choices, often adapting materials to reflect learners' life circumstances. Learners are racially diverse, mostly having attended high school and recognizing their financial need for program participation. Programs are not specific to certain groups, often free, and held in various face-to-face settings. Implications suggest that best practices for financial educators should incorporate inclusive, culturally responsive pedagogies. This study contributes to knowledge about community-based financial literacy education for adults, offering insights into educators, class locations, student demographics, and hosting programs. Notably, it provides a unique perspective from the financial educator's viewpoint, exploring their beliefs about teaching financial literacy and the relationship between beliefs, practice, and contextual factors (e.g., setting, curriculum, technology). The transformative adult learning theoretical grounding offers a means to understand factors shaping practice and fostering positive changes in teaching, presenting a departure from non-educational frameworks commonly used in financial literacy studies. Taylor, et.al. (2012) underscored that becoming financially competent and changing behavior is a gradual process, requiring tailored curriculum, innovative pedagogical techniques, and authentic assessment throughout the financial literacy education program.

Brown, et.al. (2016) explored the impact of statewide mathematics, economics, and financial education reforms on the debt behavior of young U.S. consumers in the decade following high school. The study reveals that increased mathematics requirements generally enhance perceived creditworthiness, decrease reliance on various debt categories (excluding student loans), and reduce the likelihood of accounts in collections. Results align with prior research indicating that higher exposure to mathematics training correlates with higher average incomes and savings. Similarly, financial education requirements exhibit positive effects, leading to improvements in repayment behavior, reduced reliance on nonstudent debt, and increased prevalence of credit reports. However, these effects tend to diminish with age. In contrast, economic education is associated with adverse outcomes, such as increased likelihood of outstanding debt, higher rates of delinquency, and bankruptcy. These findings suggest potential complexities in the welfare implications of economic training, as increased reliance on debt may coincide with enhanced overall welfare indicators such as steeper income profiles and increased asset returns.

Erner (2016) conducted a survey among tenth-grade students to assess their financial literacy levels and associated factors. Results indicate a prevalent lack of financial knowledge among high school students, with approximately two-thirds answering basic financial literacy questions correctly, and even fewer answering sophisticated questions accurately. Comparing student and adult literacy levels revealed similarities but with distinct compositions. Sociodemographic factors, including gender, integration level, mathematical skills, cognitive aptitude, and foreign language skills, were found to influence financial literacy. These findings underscore the need for targeted financial literacy programs, especially for subpopulations exhibiting lower knowledge levels.

Gill and Bhattacharya (2019) conducted a study teaching financial concepts to 12th-grade economics students, with one treatment focusing on intensive money management (MM) topics and the other on financial investment (FI) topics. Two control groups, including 11th-grade students without exposure to economics and 12th-grade economics students with no treatment, were established. Both treatment groups demonstrated a significant 13 percentage point increase in test scores from pretest to posttest, while neither control group exhibited gains. The study did not find a significant difference in financial literacy test performance between the MM and FI treatment groups. The results suggest a need for continued financial education in high school, emphasizing the effectiveness of a short-duration financial literacy treatment. The study highlights the current integration of personal finance into existing courses in various states, with a specific focus on California, where financial literacy is typically taught within an economics class. However, the study does not assert that a traditional economics class can be entirely replaced by one heavily infused with financial literacy. They determined that further research using more differentiated curricula and a comprehensive assessment of treatment-specific and common content is deemed necessary to establish the overall effectiveness of one curriculum over the other.

Pesando (2018) utilized data from the 2012 Programme for International Student Assessment (PISA) for Italy to investigate the impact of financial literacy skills on the value high school students attribute to education. The author hypothesizes that higher financial literacy enhances students' awareness of the benefits and costs associated with education, affecting their perceived value of schooling. Analyzing time commitment to education and attitudes towards school as measures of students' valuation of schooling, the study finds that higher financial literacy increases the perceived value of schooling by boosting students' time commitment to education. However, no robust evidence is found regarding the influence of financial literacy on students' attitudes towards school. The discrepancy between financial literacy shaping time commitment, but not attitudes challenges the notion that attitude changes precede behavioral changes.

In addition, Pesando (2018) offers three hypotheses to reconcile this discrepancy, suggesting that attitude-related questions may not be a valid proxy for perceived value, objective measurement of behavior is more reliable, and the practical nature of financial literacy facilitates immediate behavioral changes. Regarding time commitment, instrumental variable estimates indicate a significant positive effect of financial literacy, with an increase in one financial literacy proficiency level associated with reduced school delays, absences, and increased out-of-school study time. The study emphasizes the role of financial literacy in human capital accumulation, particularly in decision-making, time management, and awareness of costs and benefits associated with education. It suggests that students with lower financial literacy may exert less effort and show less motivation in their educational pursuits. Pesando (2018) anticipated positive spillover effects on later-life outcomes such as occupation choice, wealth, earnings, savings, stock-market participation, and retirement preparedness.

Walstad & Rebeck (2017) developed the Test of Financial Literacy (TFL) to assess the financial knowledge of high school students based on the National Standards for Financial Literacy. The test underwent a meticulous development process, including extensive item writing and review. Evaluation of test data from 1,218 high schools indicated that the TFL is reliable and valid, and the test items contribute to its effectiveness. Further analysis using an item response theory (IRT) model demonstrated the TFL's efficacy in assessing financial literacy across a diverse range of student abilities. Content validity, a crucial aspect of educational achievement tests, was addressed by aligning the TFL with the content specified in the Financial Literacy Standards. The development process, guided by twelfth-grade benchmarks, resulted in a test covering personal finance concepts expected to be taught in high school. The test content was rigorously reviewed by five professionals in personal finance and economics, along with two project directors, to ensure validity and address potential bias or reading problems. Norming process results supported the construct validity of the TFL. Students reporting personal finance instruction scored higher than those without instruction across various group breakdowns and individual items. All items demonstrated discrimination between high- and lower-scoring students. From a classical test theory perspective, the TFL emerged as a valid and reliable instrument for assessing high school students' financial knowledge. Analysis using a four-parameter IRT model reinforced the TFL's ability to assess financial literacy across a broad spectrum of student abilities or achievements.

Walstad & Wagner (2023) investigated the impact of required and voluntary financial education on the saving behaviors of U.S. adults, comparing three groups with different financial education experiences. A statistical method called probit analysis was employed to estimate the effects on four saving behaviors: having a savings account, maintaining an emergency fund, saving for investing, and saving for retirement. Walstad & Wagner (2023) revealed positive outcomes for both required and voluntary financial education across all saving behaviors, with no apparent difference based on self-selection. Multiple exposures to financial education in various venues (high school, college, or employment) showed greater effects on saving behaviors compared to a single exposure. The findings support the positive influence of financial education on saving behaviors and emphasize the cumulative effects of multiple exposures, suggesting the need for more financial education in higher education and employment settings. This study underscores the importance of focusing on saving behaviors in financial education, acknowledging the heterogeneity of financial education experiences.

Phung, et.al. (2023) examined the relationship between learning motivation and financial literacy performance among 730 undergraduates. They found significant correlations between overall motivation and its components (especially self-efficacy, financial learning value, and achievement goals) with students' financial literacy scores. The study considered various student characteristics, such as academic seniority, university type, parents' education, and extra math study during high school, and identified that these factors moderated the motivation-financial literacy link. The results suggest that policymakers, researchers, and educators should recognize the importance of motivation in financial literacy education programs. Self-efficacy and financial learning value were highlighted as the most influential components of motivation, aligning with the expectancy-value theoretical model. The study also emphasized the enduring impact of motivation on learning, emphasizing the need for educational programs that trigger and sustain learners' motivational forces. This analysis revealed that academic seniority plays a moderating role, indicating a stronger relationship between financial literacy performance and motivation for students with higher academic seniority. Additionally, the type of university showed a significant moderation effect, with public university students generally achieving better financial literacy scores but exhibiting a weaker motivation-financial literacy link compared to private university students.

Angrisani et al. (2021) conducted a study to investigate the determinants of the racial/ethnic gap in financial literacy within the general population and across income classes, focusing on childhood family circumstances and neighborhood socioeconomic characteristics. The study examines Whites, Blacks, and Hispanics in the United States, finding that individual characteristics and neighborhood socioeconomic status contribute the most to the explained gap for Blacks and Hispanics, explaining 48% and 57% of the observed gap, respectively. The gap narrows in higher income classes, but the model's ability to explain it decreases monotonically. Within income classes, demographic characteristics (gender, age, education) are primarily responsible for the explained part of the gap. Notably, contributions of these variables vary across racial/ethnic and income groups, especially in the middle-income class. For instance, adjusting the gender composition could significantly reduce the White–Black gap, while age and education differences play a larger role in the White–Hispanic gap. Angrisani, et.al (2021) highlights the contribution of neighborhood socioeconomic characteristics, accounting for 9%–11% of the gap within low-income classes and becoming more substantial as income increases. Differences in the number of banks in the neighborhood also impact the financial literacy gap, particularly in the middle-income class. Analyzing financial literacy scores by income level, the study observes that the gap between racial/ethnic groups and Whites diminishes as income increases. However, a notable unexplained gap remains, with variations across income classes. The middle-income class shows stronger correlations between adverse family financial circumstances, neighborhood socioeconomic status, and financial literacy, indicating a higher likelihood of investing in financial sophistication and improving financial literacy in response to past financial strain. In summary, this study suggests that while individual and environmental factors explain a significant portion of the racial/ethnic gap in financial literacy, a considerable part remains unexplained, varying significantly across income classes.

González-Corzo (2015) offers a comprehensive overview of the asset ownership characteristics of U.S. Hispanic households. The study reveals that, overall, Hispanic households display lower levels of financial asset ownership across all asset classes compared to the general population. Various socioeconomic factors, such as social networks, collective belief systems, and cultural barriers, directly contribute to these disparities. The paper suggests strategies for financial institutions and intermediaries to enhance financial asset ownership among Hispanics. Financial planners can play a crucial role by increasing financial education and literacy, supporting initiatives for greater Hispanic inclusion in the formal financial system, and providing personalized financial planning strategies tailored to the unique needs of Hispanics in the United States.

Baker's (2023) research emphasizes recurring themes among individuals of all races and ethnicities facing poverty, unemployment, drug addiction, and suicide. Complex factors contributing to systemic poverty include limited access to education, healthcare, housing, and employment. Poverty is acknowledged as a significant factor in disparities across racial and ethnic groups in education, healthcare, housing, and criminal justice. The critique of attributing poverty to racism centers on the need for clearer evidence, avoiding oversimplification, divisiveness, and potential disempowerment. The author suggests adopting a poverty-focused lens to address economic dimensions of inequality rather than solely racial perspectives. In exploring systemic poverty, the grounded theory model identifies out-of-wedlock births as a critical factor. Statistics on out-of-wedlock births provide insights into poverty rates among various racial and ethnic groups, emphasizing the connection between single-parent homes, poverty, and limited access to quality education. So, teaching financial literacy is not enough – the research underscores the importance of informing students about the root causes of poverty, highlighting the role of out-of-wedlock births over racism (Baker, 2023).

In summary, a comprehensive overview of financial literacy education emerges, offering insights into varied dimensions and populations. Hite et al. (2011) investigate the status of personal financial education in Kansas secondary schools post-economic crisis, revealing positive impacts on enrollments and advocating for nationwide legislation. Taylor et al. (2012) delve into financial educators' perspectives, emphasizing the need for inclusive, culturally responsive pedagogies. Brown et al. (2016) explore the impacts of statewide reforms, with mathematics requirements positively influencing creditworthiness, financial education improving repayment behavior, and economic education leading to adverse outcomes. Erner (2016) assesses financial literacy among high school students, highlighting a prevalent lack of knowledge and sociodemographic influences, calling for targeted programs. Gill and Bhattacharya's study (2019) demonstrates the effectiveness of short-duration financial literacy treatments, emphasizing the need for continued high school financial education. Pesando (2018) explores financial literacy's impact on students' valuation of education, revealing potential positive spillover effects on later-life outcomes.

Walstad and Rebeck (2017) develop the Test of Financial Literacy (TFL), a reliable and valid tool for assessing financial knowledge in high school students. Walstad and Wagner (2023) investigate the impact of financial education on saving behaviors, highlighting positive outcomes and the cumulative effects of multiple exposures. Phung et al. (2023) reveal significant correlations between learning motivation and financial literacy, with self-efficacy and financial learning value playing key roles. Angrisani et al.'s (2021) study focuses on the determinants of the racial/ethnic gap in financial literacy, emphasizing individual characteristics and neighborhood socioeconomic status. González-Corzo (2015) provides a comprehensive overview of asset ownership among U.S. Hispanic households, citing socioeconomic factors as contributors to lower financial asset ownership. Finally, Baker (2023) identifies a need for a more holistic view of poverty, behavior, and financial success. Collectively, this literature review underscores the multifaceted nature of financial literacy education, emphasizing the importance of targeted programs, inclusive pedagogies, and the need for ongoing research to address evolving challenges and disparities.

DISCUSSION

In our 2024 survey of students who recently completed high school, we confirmed that financial literacy is not universally taught throughout Denver Public Schools. The data were collected using a self-administered questionnaire of the online variant; and the self-selected student demographics follow:

FIGURE 1
STUDENT DEMOGRAPHICS

	Asian	Back	Hispanic	White	Native
Male	5	8	23	17	0
Female	3	4	15	10	1

These survey respondents were asked about five topics focused on economics and finance to better understand the degree that these topics are taught in local Denver-area high schools. As shown below 71% of respondents' first introduction to federal debt was during a first-year college 'Introduction to Business' course. The positive nature of compounding interest for investments as well as the negative impact of compounding interest of credit cards was rated 71% and 50% respectively. Finally, the growth of real estate wealth through appreciation as well as investing in stocks through an S+P 500 stock fund were rated 84% and 85% respectively as a first-time introduction in college.

To enhance financial literacy among students attending a Hispanic Serving Institution (HSI), a multifaceted approach is recommended based on insights from a comprehensive review of relevant studies. The university should develop tailored financial literacy programs that specifically address the unique challenges faced by Hispanic students, ensuring cultural relevance in curricula and materials. Educators should receive training on cultural sensitivity to deliver financial literacy content effectively. Collaboration with Hispanic financial planners and engagement with local communities can provide valuable insights and real-world exposure.

Longitudinal financial literacy programs, as suggested by Phung et al. (2023), should be implemented to ensure lasting impacts on learning. Additionally, the university should advocate for nationwide legislation mandating personal finance courses in high schools, as proposed by Hite et al. (2011), to ensure broader access and compliance. Regular assessments of program effectiveness, as recommended by Walstad and Rebeck (2017), should inform continuous refinement and improvement. Such actions collectively aim to bridge the financial literacy gap and empower Hispanic students with essential financial knowledge and skills.

FIGURE 2
STUDENT RESPONSES

		A little in High School	A lot in High School	Learned on my own	College Business Intro
TOPIC # 1:	Federal Debt is over $34 trillion (impact on inflation and taxes)	13%	2%	15%	71%
TOPIC # 2:	Positive Interest, compounded can make you rich (investments)	10%	3%	16%	71%
TOPIC # 3:	Negative Interests, compounded can make you poor (credit cards)	11%	4%	35%	50%
TOPIC # 4:	Getting Rich in Real Estate is dependent upon appreciation	4%	0%	12%	84%
TOPIC # 5:	A safer investment in stocks is a diversified index fund	2%	1%	12%	85%

Introducing mandatory financial literacy courses alongside diversity classes can provide a more holistic education, equipping students not only with cultural competence, but also with essential life skills, to manage their finances effectively. Integrating financial education into the curriculum aligns with the university's responsibility to prepare students for the challenges they will face beyond academia. The following recommendations should be considered by every Hispanic Serving Institution (HSI) to improve Hispanic students' financial literacy:

1. Tailored Financial Literacy Programs: Develop targeted financial literacy programs specifically designed to address the unique needs and challenges faced by our Hispanic students, considering insights from González-Corzo (2015) and Angrisani et al. (2021).

2. Incorporate Cultural Relevance: Ensure that financial literacy curricula and materials are culturally relevant and responsive to the backgrounds and experiences of Hispanic students, aligning with the inclusive pedagogies recommended by Taylor et al. (2012).
3. Engage Hispanic Financial Planners: Collaborate with Hispanic financial planners who can provide insights into the cultural and financial contexts of the community, contributing to the development of effective financial education curricula (*see Tab for recommendations*).
4. Teacher Training on Cultural Sensitivity: Provide training for educators to enhance cultural sensitivity in delivering financial literacy content, acknowledging the impact of cultural and experiential barriers identified by González-Corzo (2015).
5. Community-Based Financial Education: Extend financial literacy programs beyond the university setting by engaging with local Hispanic communities, leveraging community-based financial education strategies as suggested by Taylor et al. (2012).
6. Partnerships with Financial Institutions: Establish partnerships with financial institutions to facilitate real-world exposure and experiences for Hispanic students, enhancing their understanding of financial systems, as recommended by González-Corzo (2015).
7. Research on Motivational Factors: Conduct research on motivational factors influencing Hispanic students' financial literacy, considering the insights from Phung et al. (2023), to tailor interventions that resonate with their specific motivations.
8. Longitudinal Financial Literacy Programs: Implement longitudinal financial literacy programs that extend over an extended period, aligning with the findings of Phung et al. (2023) to ensure lasting impacts on learning.
9. Assessment and Improvement: Regularly assess the effectiveness of financial literacy programs through reliable assessments, as suggested by Walstad and Rebeck (2017), and use the findings to continually refine and improve educational strategies.
10. Advocacy for Nationwide Legislation: Advocate for nationwide legislation mandating personal finance courses in high schools, emphasizing the need for such requirements nationwide, as proposed by Hite et al. (2011), to ensure broader access and compliance.

The widespread presence of mandatory diversity classes in universities, while lacking mandatory financial literacy or personal finance courses, reflects the evolving priorities in higher education. Diversity classes are typically instituted to foster inclusivity, cultural understanding, and awareness of societal differences, aligning with the broader goals of promoting social equity and tolerance. These courses address issues related to race, ethnicity, gender, and other dimensions of diversity, contributing to a more inclusive campus environment.

On the other hand, the absence of mandatory financial literacy or personal finance courses highlights a potential oversight in preparing students for practical life skills. Financial literacy is integral to navigating the complex landscape of personal finance, making informed decisions, and achieving long-term economic well-being. Despite its critical importance, financial education often takes a backseat in traditional academic curricula. Based on our combined 30 years of teaching, we recommend the following topics for all high school students, which should be reinforced during the first year of college:

Budgeting and Personal Financial Management:

- Creating a Budget: Teach the basics of income and expenses, and how to create a simple budget.
- Tracking Spending: Discuss the importance of tracking spending and differentiating between needs and wants.
- Saving Strategies: Introduce the concept of saving, setting financial goals, and the benefits of having an emergency fund.

Basic Banking:

- Types of Bank Accounts: Explain the differences between checking and savings accounts.
- Managing Accounts: Cover how to use bank accounts effectively, including online banking and avoiding fees.

Credit and Debt:

- Understanding Credit: Explain what credit is, how credit scores work, and why they matter.
- Responsible Borrowing: Discuss the basics of loans, interest rates, and the importance of repaying debts on time.

Saving and Investing:

- Importance of Saving: Highlight the benefits of saving early and regularly.
- Introduction to Investing: Provide a basic overview of investment options like stocks, bonds, and mutual funds, emphasizing the concept of compound interest.

Financial Decision-Making:

- Making Informed Decisions: Teach students how to evaluate financial products and services.
- Consumer Rights and Protection: Briefly cover the basics of consumer rights and how to protect against fraud.

Economic Status of US Government:

- Difference between debt and deficit
- Expenditures by federal department

CONCLUSION

The literature on financial education's impact on financial behaviors reveals nuanced findings. While it generally suggests positive effects on financial product usage, the magnitude of change is lesser compared to improvements in financial literacy. Effectiveness varies based on intervention types, timing, and targeted behaviors (Jonker & Kosse, 2022). Studies demonstrate that financial education can positively influence savings rates, attitudes toward personal finance, and borrowing behaviors among school children and adults (Kalwij, et.al., 2019; Batty et.al., 2015). However, uncertainties persist regarding the long-term impact of such education, with mixed results on savings rates (Bernheim, et.al., 2001; Lusardi, et.al., 2011). Non-traditional education methods, like media integration and simplified training programs, show promise in altering financial behaviors(Berg & Zia, 2017; Drexler, et.al., 2014; Carpena, et.al., 2019). Heterogeneous treatment effects are evident, with education effectiveness differing among demographic groups and targeted behaviors. Targeted programs tailored to specific audiences and financial topics tend to yield better outcomes, particularly when delivered before relevant financial events (Agarwal, et.al., 2010; Drexler, et.al., 2014; Field, et.al., 2016). However, the efficacy of financial education in preventing negative outcomes, such as loan defaults, varies due to consumers' immediate control over decisions. Overall, the impact of financial education depends on factors such as target group, behavior type, program intensity, and timing, necessitating careful consideration in designing effective interventions (Miller, et.al., 2014; Kaiser & Menkhoff, 2017; Jonker, & Kosse, 2022).

A balanced approach that combines diversity education with mandatory financial literacy courses for all students of every major ensures that students graduate with a well-rounded skill set, ready to navigate both the cultural complexities of a diverse world and the practical challenges of personal finance. This dual focus empowers students to make informed decisions, fostering a more financially savvy and socially conscious citizenry. As universities adapt to the evolving needs of their student bodies and society at large, considering the inclusion of mandatory financial literacy courses becomes imperative for a comprehensive and relevant educational experience without regard to the major selected. Furthermore, early introduction of economic and financial topics to high school students is imperative since less than 30% of Denver high school graduates attend college, and even fewer attend business schools.

FUTURE RESEARCH

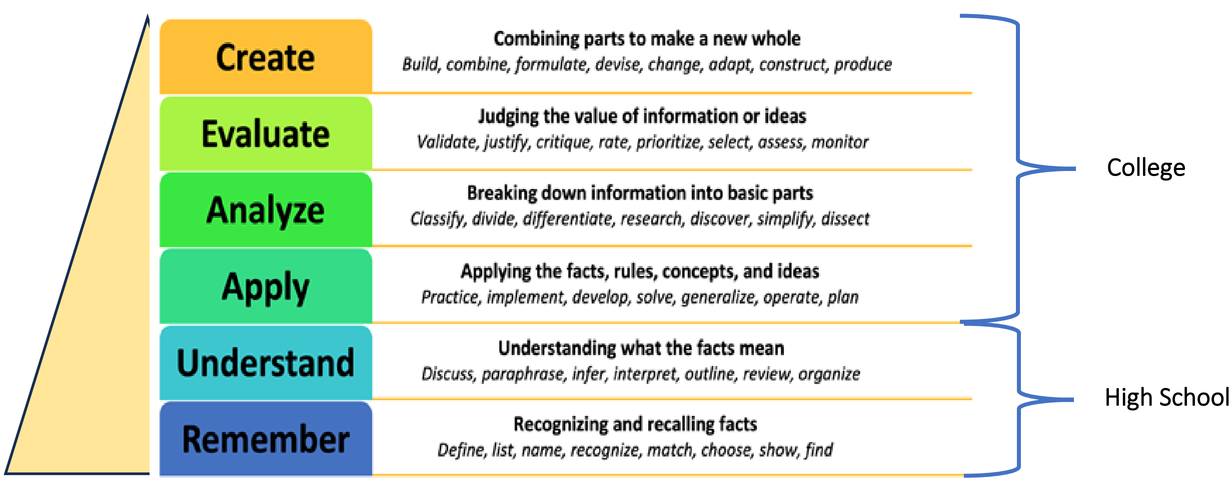
Our research findings suggest three key areas for further exploration through quantitative and/or qualitative research at Hispanic Serving Institutions (HSI):

- *Assessment of Financial Literacy Programs.* Conduct comprehensive evaluations of existing financial literacy programs at HSI to assess their effectiveness in enhancing students' financial knowledge, skills, and behaviors. Utilize both quantitative measures, such as pre-and post-program assessments, and qualitative methods, including focus group discussions, to gain insights into the program's impact and areas for improvement. Understanding the specific needs and preferences of the Hispanic student population can inform the design and refinement of financial literacy interventions tailored to their unique context.
- *Exploration of Socioeconomic Factors.* Investigate the influence of socioeconomic factors, including family background, cultural beliefs, and community characteristics, on financial literacy outcomes among Hispanic students at an HSI. Employ qualitative research methods, such as in-depth interviews and case studies, to uncover nuanced insights into how these factors shape financial behaviors and decision-making. A deeper understanding of the socio-cultural context can inform the development of culturally sensitive financial education initiatives that resonate with the experiences and values of Hispanic students.
- *Longitudinal Studies on Financial Behavior.* Undertake longitudinal studies to track the financial behaviors and decision-making patterns of Hispanic students over an extended period. This research could involve both quantitative surveys and qualitative interviews conducted at multiple points in a student's academic journey. By examining changes in financial literacy levels, attitudes, and behaviors over time, researchers can identify critical milestones, challenges, and factors influencing the financial trajectories of Hispanic students. Longitudinal insights can contribute to the refinement of financial education strategies and support services offered at HSIs.

CURRICULA RECOMMENDATIONS

Bloom's Taxonomy describes types of learning. It is best represented as a pyramid where the foundation of learning is shown at the bottom, with increasingly more complex types of learning as students move upward. High school should be responsible for acquiring basic knowledge of facts and figures, the foundational knowledge. Next, college students should display more complex levels of learning, such as applying what one knows to solve a problem or describe a situation, analyzing something to understand how it works, evaluating something, or creating something new.

FIGURE 3
BLOOMS TAXONOMY



Using Bloom's Taxonomy, we can create a hierarchy of learning objectives that range from basic recall to complex creation for each concept. Here's how we can structure these concepts and teaching objectives:

Budgeting and Personal Financial Management

- *Creating a Budget:*
    - Remember: Define income, expenses, and budget.
    - Understand: Explain the purpose of budgeting.
    - Apply: Create a simple budget using given income and expense data.
    - Analyze: Compare different budgeting methods and their effectiveness.
    - Evaluate: Assess a given budget and recommend improvements.
    - Create: Develop a comprehensive budget for a specific financial goal.
- *Tracking Spending*
    - Remember: Identify different types of expenses (needs vs. wants).
    - Understand: Discuss the importance of tracking spending.
    - Apply: Track personal spending for a week and categorize expenses.
    - Analyze: Analyze spending patterns to identify unnecessary expenses.
    - Evaluate: Evaluate the effectiveness of different tracking tools or methods.
    - Create: Design a personalized spending tracker.
- *Saving Strategies*
    - Remember: Define saving and financial goals.
    - Understand: Explain the benefits of having an emergency fund.
    - Apply: Set personal financial goals and a saving plan to achieve them.
    - Analyze: Analyze different saving strategies and their outcomes.
    - Evaluate: Evaluate the success of a saving plan over a set period.
    - Create: Create a detailed saving strategy for a long-term goal.

Basic Banking

- *Types of Bank Accounts*
    - Remember: Identify checking and savings accounts.
    - Understand: Explain the differences between checking and savings accounts.
    - Apply: Choose the appropriate type of account for different financial needs.
    - Analyze: Compare the features and benefits of various bank accounts.
    - Evaluate: Evaluate the pros and cons of different bank accounts for specific scenarios.
    - Create: Design a banking plan that incorporates multiple account types for different purposes.
- *Managing Accounts*
    - Remember: List the basic functions of bank accounts.
    - Understand: Explain how to use online banking.
    - Apply: Demonstrate how to avoid common banking fees.
    - Analyze: Analyze bank statements to understand account activity.
    - Evaluate: Evaluate different banking tools for managing accounts effectively.
    - Create: Develop a guide for managing bank accounts efficiently.

Credit and Debt

- *Understanding Credit*
    - Remember: Define credit and credit scores.
    - Understand: Explain how credit scores are calculated and their importance.
    - Apply: Calculate a sample credit score using given data.
    - Analyze: Analyze the impact of various financial behaviors on credit scores.
    - Evaluate: Evaluate the benefits and risks associated with different credit types.

- Create: Create a plan to improve or maintain a high credit score.

- *Responsible Borrowing*
  - Remember: Identify different types of loans and interest rates.
  - Understand: Explain the importance of timely debt repayment.
  - Apply: Demonstrate how to calculate loan interest and monthly payments.
  - Analyze: Compare different loan options and their terms.
  - Evaluate: Assess the impact of borrowing on personal finances.
  - Create: Develop a borrowing strategy for a major purchase.

Saving and Investing

- *Importance of Saving*
  - Remember: Identify reasons for saving.
  - Understand: Explain the benefits of starting to save early.
  - Apply: Calculate potential savings over time with regular contributions.
  - Analyze: Analyze different saving accounts and their interest rates.
  - Evaluate: Evaluate the effectiveness of different saving strategies.
  - Create: Create a long-term savings plan with specific milestones.
- *Introduction to Investing*
  - Remember: Define stocks, bonds, and mutual funds.
  - Understand: Explain the concept of compound interest.
  - Apply: Demonstrate how to calculate compound interest.
  - Analyze: Analyze the risk and return of various investment options.
  - Evaluate: Assess the suitability of different investments for different financial goals.
  - Create: Develop an investment portfolio for a hypothetical client.

Financial Decision-Making

- *Making Informed Decisions*
  - Remember: Identify key factors in evaluating financial products.
  - Understand: Explain how to compare financial products and services.
  - Apply: Use decision-making tools to select a financial product.
  - Analyze: Analyze different financial products to determine the best choice.
  - Evaluate: Evaluate the pros and cons of various financial products.
  - Create: Design a decision-making framework for financial product selection.
- *Consumer Rights and Protection*
  - Remember: List basic consumer rights.
  - Understand: Explain the importance of protecting against fraud.
  - Apply: Demonstrate steps to protect personal financial information.
  - Analyze: Analyze cases of consumer fraud to understand prevention strategies.
  - Evaluate: Evaluate the effectiveness of different consumer protection measures.
  - Create: Develop a consumer protection plan for individuals.

Economic Status of the U.S. Government

- *Federal Debt and Deficit*
  - Remember: Define debt and deficit.
  - Understand: Explain the difference between national debt and budget deficit.
  - Apply: Use historical data to illustrate the difference between debt and deficit.
  - Analyze: Analyze the impact of debt and deficit on the economy.
  - Evaluate: Evaluate government policies related to debt and deficit management.
  - Create: Propose policy measures to address national debt and budget deficit.

- *Expenditures by Federal Department*
    - Remember: Identify major federal departments and their functions.
    - Understand: Explain the purpose of federal department expenditures.
    - Apply: Illustrate how federal funds are allocated across departments.
    - Analyze: Analyze the budget of a specific federal department.
    - Evaluate: Assess the effectiveness of federal department spending.
    - Create: Develop a budget proposal for a federal department based on priority needs.

All these objectives use Bloom's Taxonomy to create a structured approach, moving from basic knowledge acquisition to higher-order thinking skills like analysis, evaluation, and creation.

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