Spring 2021

The Impact of Financial Literacy Education in a Secondary Education Setting by Assessing College Students' Knowledge and Understanding of Financial Literacy Concepts

DeLayne Havlovic
University of Nebraska at Omaha

THE IMPACT OF FINANCIAL LITERACY EDUCATION IN A SECONDARY EDUCATION SETTING BY ASSESSING COLLEGE STUDENTS' KNOWLEDGE AND UNDERSTANDING OF FINANCIAL LITERACY CONCEPTS

By

DeLayne Havlovic

A DISSERTATION

Presented to the Faculty of

The Graduate College at the University of Nebraska

In Partial Fulfillment of Requirements

For the Degree of Doctor of Education

Major: Education Leadership

Under the Supervision of Dr. Elliott Ostler

Omaha, Nebraska

March, 2021

Supervisory Committee:

Dr. Sheryl McGlamery

Dr. Jeanne Surface

Dr. Tamara Williams

University of Nebraska at Omaha

Abstract

THE IMPACT OF FINANCIAL LITERACY EDUCATION IN A SECONDARY EDUCATION SETTING BY ASSESSING COLLEGE STUDENTS' KNOWLEDGE AND UNDERSTANDING OF FINANCIAL LITERACY CONCEPTS

DeLayne Havlovic, Ed.D.

University of Nebraska at Omaha, 2021

Advisor: Dr. Elliott Ostler

A problem has been identified within the area of secondary education in determining what the role of school systems is in providing a guaranteed and viable level of financial literacy education to students before they graduate, preparing them for college, career, and civic readiness. Financial Literacy Education is a set of requisite skills that a person should have upon completion of a comprehensive course and program of study. Because the conditions of financial illiteracy or instability exist, researching the impact of secondary financial literacy courses and how they are perceived at the postsecondary level is worth investigating to contribute to research in for what in many states, would be an emerging area of study and to better prepare our future workforce for the typical ups and downs of the global economy.

Keywords:

Financial Literacy, Financial Literacy Stability, Personal Finance, Economic Education, College, Career, and Civic Readiness, Earning Income, Buying, Goods and Services, Credit, Investing, Protecting, Insuring, Risk Management.

Acknowledgements

The dissertation is a journey, a marathon, and true test of dedication, leadership, and reflection on the accomplishments of a life-long career.

First and foremost, I must thank the most important people in my life – my family that includes my wife Jeana who pushed me into this and will be the first to celebrate this across the finish line. Jeana told me to just get in there and get this done – she knew I had this before I did. I also owe so much to our two sons, Zach and Josh. There is no good time to put your family on hold for a dissertation. They took it in stride as I missed or worked through baseball games and family nights out.

I also owe a tremendous amount of credit to the Education Leadership faculty at the University of Nebraska at Omaha. My Chair, Dr. Elliott Ostler provided me constant feedback, support, and encouragement. My committee, Dr. Sheryl McGlamery, Dr. Jeanne Surface, Dr. Tamara Williams, and Department Chair, Dr. Kay Keiser. Their critical feedback was always student centered on my own improvement. I also owe a special thanks to Dr. Janice Garnett, an instructor with a true love for education and her community and Dr. Kevin Riley, a tremendous mentor that I will always look up to as a true model of leadership.

To my professional colleagues at Omaha Public Schools, it’s hard to begin. To all of the teachers and leaders who I support, thank you for your dedication to our schools and Career and Technical Education. Thank you to the many models of leadership that have and currently do support me. I owe a special thank you to Susan Christopherson as Melissa Comine as collaborative leaders that see the best in all they work with and for their encouragement and patience as I navigated this and the regular duties of my career. I would be remiss to mention former leaders like Ken Spellman who always led with and respected professionalism, Dr. ReNae Kehrberg who was constantly an icon of knowledge and respect, and Jerry Bexten – one of many great principals that I had the opportunity to work for. Jerry entrusted me to take my first step towards leadership while teaching Business courses at Omaha Central High School.

I owe a special thank you to my professional network of Business and Career and Technical Education colleagues from across the country. Dr. Patricia Arneson, my Wayne State undergraduate advisor and teacher educator encouraged me from well before the first day of my career through the completion of this dissertation. Sue Sydow, Mona Schoenrock, and Dennis Krejci, professional icons of Business Education collectively encouraged me to make this dissertation reality. Also, to my entire network professional peers and colleagues for the content inspiration to make this dissertation happen and to focus on research around financial literacy. Dr. Jennifer Davidson and Dr. Jamie Wagner, you are both leaders in economic and financial literacy education that not only support teachers across our state but encouraged this topic in many ways. Dr. Rebecca Murray, you have a special love for data and statistics that kept me alive in the eleventh hour of this dissertation.

Finally, thank you to all of my friends, family, and colleagues that continue to support me in my constant quest for personal growth, achievement, and leadership. Thank you for joining me on this journey.

Table of Contents

List of Tables and Figures

Chapter 1

Introduction

A problem has been identified within the area of secondary education in determining what the role of school systems is in providing a guaranteed and viable level of financial literacy education to students before they graduate, preparing them for college, career, and civic readiness. The problem of personal financial stability potentially has long term implications as evidenced by spending and saving habits of secondary level students, which is often shaped by financial education and dialogue, and poverty and family opinion and understanding of the ability to exit financial struggle. Historically economic problems have been manifested in cycles of economic instability and is partially attributed to large scale misperceptions among financial knowledge of individual consumers. For example, in the most recent financial crisis periods, specifically those beginning in 2008 and again in 2011, personal financial habits around borrowing and homeownership brought many to overbuy homes and finance more than they could carry on through low, adjustable interest rates and loan patterns offered by many lenders that were risky to some. This resulted in a great number of foreclosures when the overall market softened and it created a bursting bubble of over-inflated home prices. Some questioned where the school's role was in potentially preventing devastating financial impacts. In both instances, the economy was fueled by an economic housing bubble where home prices were inflated through increased purchasing power caused by a strong economy and low interest rates, which is precisely the kind of economic environment that is dangerous to those without adequate financial background. Gerald

Lauber, a former superintendent of schools testified to Congress on the need for better secondary financial literacy education.

> *Literacy in schools often refers to reading, writing, and arithmetic. However, real-life learning, as demonstrated by our current economic crisis, reinforces our belief that the teaching of financial literacy should no longer be an option for the children in our nation's schools* (Lauber, 2010).

Financial Literacy Education is a set of requisite skills that a person should have upon completion of a comprehensive course and program of study. Research indicates that basic skills are learned from the following concepts: Consumer protection and fraud detection, credit and credit cards, debt management, financial institutions, investments, money management and savings, postsecondary funding plans, retirement and estate planning, risk management and insurance, and taxes (Policy Commission for Business and Economic Education, 2011).

At the secondary level, students can set the stage for positive savings, financial planning for college and beyond. At the postsecondary level, we can set the same stage plus consider wise use of credit that includes but is not limited to student loans and credit cards or other high interest lending alternatives. Students transitioning from secondary and/or postsecondary education need a financial strategy that prepares them for career and civic success.

Such economic research as it impacts both large scale business operational components as well as the personal day-to-day impacts of consumers leads to discussion and questions as to how much the average citizens need to know about Economics and Personal Finance. While Economics is a broad consideration of how the finances of our entire nation impact us, Personal Financial Literacy is a knowledge of how large world-level impacts filter into a microlevel of understanding financial self-sufficiency. A well-designed Financial Literacy course maps to standards that create consistency and a guaranteed and viable experience for all students enrolled in such course content.

Economic research demonstrates that business cycles occur in a regular fashion. These cycles bring about sudden changes in unemployment and economic productivity which leads to personal economic impacts that are centered around inflation, interest rates, and differing levels of stability in local and state economic systems (Monthly Labor Review, 1999).

Because the conditions of financial illiteracy or instability exist, researching the impact of secondary financial literacy courses and how they are perceived at the postsecondary level is worth investigating to contribute to research in for what in many states, would be an emerging area of study and to better prepare our future workforce for the typical ups and downs of the global economy.

The terms and concepts of financial literacy, personal finance, economic education, and guaranteed and viable curriculum experiences in financial literacy all need better definitions within this process.

Understanding that there has been a push for students to learn about financial literacy at an earlier age, the Council for Economic Education (CEE) facilitated collaboration with some of the nation's leading financial educators and financial professionals to develop a set of standards. The standards create benchmarks around six basic financial literacy topics. Those six topics or standards are: Earning income; Buying goods and services; Saving, Using credit; Financial investing; and Protecting and insuring. Within the six topics, benchmarks have been developed for students at the end of grades four, six, and twelve.

Low-income families are often seen as high risk in financial and credit environments and one consideration of improving this factor is financial literacy education. The low-income demographic is often seen as lacking financial literacy skills and is considered more at risk or venerable to swings in financial markets. Access to and creating a reserve savings account that many middle-class Americans have the luxury of is not possible. When an individual or family in poverty does not have the access to provide both food and health insurance can be a challenge. Those in poverty may not have the consistent employment or the employer's financial access match to and contribute to long-term or retirement savings, thus only allowing earnings to be current and not part of future, financial stability (Tuominen, et. al., 2015).

The standards are presented and are scaffolded by grade levels as to what should be taught to students before they achieve the benchmarked grade levels.

School impact and delivery

The Council for Economic Education believes that personal financial literacy education will change student behavior and that students will learn how their personal situations and preferences impact their later current and later financial decision making. While many of these decisions are personal and impact us at the individual level, the greater study of Economics indicates how we as a society make personal financial decisions can have a drastic impact on how our overall economy functions, thrives, or declines (CEE, 2013).

Recent economic events in the United States like the sudden financial recessions of 2008 and again in 2011 have stimulated many school districts to enact policy or even states to enact legislation requiring every high school student to have an element of financial literacy as part of their graduation requirements (Gill & Bhattacharya, 2015).

The financial crisis periods of 2008 and 2011 have impacted many people in extreme and unfortunate ways. Recession has brought about unemployment, home foreclosure, and bankruptcy. This has become a reality of concern for a generation of students and young adults. As a result, textbooks, teaching tools, curriculum, and the volume of financial literacy courses has increased or has become more relevant to current the current needs of our ever-changing financial society (Suiter & Wolla, 2015).

Research Questions

Research question 1

The essential research question related to this study is: How does taking a high school financial literacy course impact personal financial stability of college students after their freshman year?

What is the impact of a school's program on student Personal Finance Literacy? Evidence will be provided through survey instrument items: Part 1 (Demographic and High School Information), questions 1-7 and Part 2 (Financial Application Question), questions 1-7.

Research demonstrates that personal financial stability is building a financial system that can function in good and bad economic times. It is creating conditions where the system keeps working effectively in and around financial events (Federal Reserve Bank 2018).

Understanding application and importance of financial literacy with knowing how to manage a budget, personal wealth, and risk for the long-term create financial stability. Financial stability is personal economic viability in both weak and strong financial scenarios (Soskic, 2011).

Sub question A. What are student perceptions around long-term savings planning and earning? How do such experiences apply to understanding taxes, jobs, career exploration, and labor markets? Study participants will be asked to identify the costs and benefits of a college education.

This question addresses student perceptions around buying goods and services. Such as how do such experiences frame consumer decision-making around consumer satisfaction, choice of product, consideration of product durability, and role of government in purchasing. Study participants will be asked to identify best choices around making positive consumer decisions.

Sub question B. What are student perceptions around saving money? This question addresses how such experiences frame understanding of interest rates and calculations, future value of money, financial regulations, and savings for special purchases and events, such as retirement. Study participants will be asked to identify the purpose and advantages of long-term savings plans.

Sub question C. What are student perceptions around using credit? This question addresses how such experiences create understanding of credit reporting and scores, consumer protection laws, and the impact of credit on consumerism. Study participants will be asked to identify credit terms, credit scoring, and credit reporting.

What are student perceptions around financial investing? This question addresses how such experiences create understanding on how markets rise and fall, investments and taxation, and investment risk and maturity. Study participants will be asked to identify investment diversification and how investments change in value.

Sub question D. What are student perceptions around risk management (protecting and insuring)? This question addresses how such experiences address financial vulnerabilities, understanding of identity theft, and an overall understanding of risk management (Council for Economic Education, 2013). Study participants will be asked to identify differing types of tools to mitigate risk.

Research question 2

What is the guaranteed and viable curriculum fidelity of financial literacy content, retained and applied by post-high school students, currently enrolled in a college environment and does this content link to better understanding of personal financial literacy and college, career, and civic readiness? This content will be analyzed through high school national financial literacy assessment questions identified in Part 3 of survey instrument (questions 1-26). Questions 1-26 were selected based on educator practitioner feedback based on surveys and focus group conversations during the development of this instrument.

Research question 2, sub question A. What does the analysis of part 3, financial assessment (Test for Financial Literacy) questions demonstrate guaranteed and viable education to national standards between those who have had and those who have not had a financial literacy course?

Research question 2, sub question B. What does taking a financial literacy course in high school demonstrate as preparedness based on College and Career Readiness Standards (specifically, Nebraska College and Career Readiness Standards, Financial Literacy Standard 11 – Attends to personal and financial well-being)? This will be evidenced by comparing survey instrument demographic questions (survey instrument, part 1) with overall TFL assessment item analysis (survey instrument, part 3).

Research question 2, sub question C. What are related impacts of students attaining a financial literacy education component while in high school? This will be evidenced by comparing survey instrument application questions (survey instrument, part 2) with overall TFL assessment item analysis (survey instrument, part 3, items 5-7).

Research question 3, sub question D. What are the related community impacts of attaining a financial literacy education component while in high school? This will be evidence by comparing survey instrument application questions (survey instrument, part 2) with overall TFL assessment item analysis (survey instrument, part 3, items 1-4, with reflection on community impact and managing personal finances).

Extending the thinking of the questions will provide students a greater opportunity to consider deeper thinking around financial literacy topics by asking a series of questions related to the Council for Economic Education (CEE) Financial Literacy Standards. CEE identified six standards of financial literacy (earning income, buying goods and services, saving, using credit, financial investing, and protecting and insuring). On the survey instrument for this study, each of the six standards will be presented with a perception statement that students should reflect on what aligns most closely to their personal belief and understanding of financial literacy educational topics (CEE, 2013).

Additional sub-questions that seek responses on financial literacy application will also be presented in this study's survey tool.

A question related to this study would be: How do school districts with a financial literacy graduation requirement prepare students for college, career, and civic readiness?

A second question related to this study would be: How do financial literacy curriculum standards contribute to a guaranteed and viable experience across school districts and states?

A third question relate to this study would be: What are related impacts of a postsecondary educational experience that contribute to financial stability or instability beyond the college experience, especially included but not limited to student loan debt?

Participant responses analyzed within the sub-questions will provide an indication of financial understanding. The questions within the survey tool simulate actual questions that would be part of a high school financial literacy assessment. All of these previously noted sub-questions can be cross-walked to one of the six Council for Economic Education standards and can be assessed for student understanding through noting a correct or incorrect multiple choice response. Having those participants that are included in this study complete the assessment while enrolled in a higher education setting will imply that the study participants utilized a combination of high school knowledge or practical life application to better understand financial literacy.

Considering there are many impacts in and around financial literacy education that warrant additional study and research around its impact, it is important to consider the economic past as well as the future. History shows us that business cycles swing up and down every several years, meaning someone will witness economic highs and lows during their entire life. We teach financial literacy concepts to better prepare citizens for financial ups and downs that we predict during our lifetimes. Educating our youth around these concepts also better engages society potentially prepare for retirement and mitigate financial risk along the way.

Operational Definitions

The following is a summary of operational definitions designed to address the variables used in questions researched within this study.

Financial Literacy

Educating others how personal situations and preferences affect financial decisions (CEE, 2013). Financially informed individuals are better able to take control of their circumstances, improve their quality of life, and ensure a more stable future for themselves and their families (NEFE, 2019). Financial literacy is also the ability to understand financial application and economic systems. The Council for Economic Education partnered with economic educators to test and measure achievement of students, specifically high school students, through the Test for Financial Literacy (Walstad & Rebeck, 2016). The definition of financial literacy will be measured and defined for the purpose of this study through the survey instrument from questions within parts 1 (Demographic and High School Information) and 2 (Financial Application Questions).

Financial Literacy Stability

Building a financial system that can function in good and bad economic times. It is creating conditions where the system keeps working effectively in and around financial events (Federal Reserve Bank 2018). Personal savings is one measure of financial stability. According to the National Council for Economic Education, people choose between immediate spending and saving for future consumption and some people have an immediate tendency to be impatient, choosing spending over savings for the future. (CEE, 2013 – item #14).

Understanding application and importance of financial literacy with knowing how to manage a budget, personal wealth, and risk for the long-term create financial stability. Financial stability is personal economic viability in both weak and strong financial scenarios (Soskic, 2011). The definition of financial literacy stability will be defined for the purpose of this study by the survey instrument by comparing and contrasting responses in parts 1 and 2 with assessment question item analysis in part 3 (national financial assessment questions).

Personal Finance

The growing emphasis on financial literacy has highlighted the need for students to learn how to navigate the financial decisions they must make and how to make informed decisions related to managing finances and budgeting, saving and investing, living independently, earning and reporting income, buying goods and services, using credit, banking, and protecting against risk (NBEA, 2013).

Economic Education

Economic education is vital to the future of our nation's economy. It empowers consumers by giving them the knowledge and tools to improve their economic well-being. Economic education can also be considered an investment in strengthening a global economy (CEE, 2013).

Guaranteed and Viable Curriculum

Primarily a combination of my factors that include an opportunity to learn and time. Both have strong correlations with academic achievement, yet they are so interdependent that they constitute one factor (Marzano, 2003).

College, Career, and Civic Readiness

A career ready person capitalizes on personal strengths, talents, education, and experiences to bring value to the workplace and the community through his/her performance, skill, diligence, ethics, and responsible behavior. Attending to personal and financial well-being is one of the eleven College, Career, and Civic Ready standards (Nebraska State Board of Education, 2010).

Financial Literacy Course

The goal of a financial literacy course (Personal Finance) is to help students become financially responsible, conscientious members of society. The course develops student understanding and skills in money management; budgeting; financial goal attainment; use of credit; insurance; investments; and consumer rights and responsibilities. Application of academic concepts, technology, and career planning are integrated throughout the curriculum (Nebraska Department of Education, 2016). The Council for Economic Education developed an assessment tool that builds course components around the following measurable constructs: 1. Earning income; 2. Buying goods and services; 3. Saving; 4. Using credit; 5. Financial investing, and; 6. Protecting and insuring financial assets (CEE, 2013).

Financial Literacy Graduation Requirements

A course mandated by a governing body (federal, state legislature, or local school board), requiring a specific course to be taught in financial literacy. North Carolina defines their state required Personal Finance course to be one that includes: Paying for college, home mortgages, credit scores, car loans, managing credit cards, and the true cost of credit (Hui, 2019).

Student Loan Debt

A type of financial assistance designed to help students pay for school-related fees, such as tuition, school supplies, books, and living expenses. Many student loans are offered at low interest rates and do not require repayment until after the completion of education (Bankrate, 2019).

An expansive study of financial literacy education and its impact on young people beyond the classroom should be composed of multiple factors. First, a focus of already existing requirements will be reviewed. There is not consistency around the United States as to what states and school districts require or even offer a financial literacy course and those that do not. Second, a review of curriculum standards will be included in this study. There are national standards for Financial Literacy across the country, however adoption of those standards is contingent of what each individual state selects to be part of that content.

Third, financial literacy teaching methodology should be explored as part of a study on the impact of financial literacy education. While the traditional classroom teaching approach of financial literacy is very common, online modules as well as blended courses, combining face-to-face and online content. In some cases, financial literacy content is delivered in conjunction with another curricular area, such as general business, mathematics, economics, or family and consumer sciences. In other cases, the content is delivered as a stand-alone as part of a single, expressed course.

Finally, exploration of how financial literacy education impacts the community overall is a sub-topic of this research. Several statements of theory can result from a study on financial literacy. Some questions that could be answered include: Does financial literacy education foster a lower-level of long-term debt for young adults, including but not limited to student loan and college-related debt? Does financial literacy education provide young adults the necessary tools to better plan for retirement? Finally, does financial literacy education provide young adults with the necessary vocabulary to assess their needs around budgeting, risk management, and level of financial services needed.

The National Council for Economic Education collaboratively built a series of six curriculum content standards around financial literacy. Those standards are the scaffolding for a body of knowledge and skills that are contained within a personal finance course.

The financial literacy standards were developed around the following conceptual areas of focus: Earning Income: Buying Goods and Services; Saving; Using Credit; Financial Investing; Protecting and Insuring (CEE, 2013).

State and local curriculum leaders need evidence and research-based data to demonstrate how to best schedule requirements for high school graduation. Some states have enacted a financial literacy requirement; other states have embedded financial literacy standards that have to be taught somewhere in context; some states have done little or nothing to require financial literacy.

For school districts that are within a local-control state, they are provided more flexibility in how and what they offer as graduation requirements. While flexibility provides great advantages for district personnel to achieve a goal of student success with flexibility, it makes providing a guaranteed and viable curriculum sometimes challenging. Research demonstrating how financial literacy education can impact current and future college and career readiness could be a great support tool for school district personnel and state education leadership.

As part of a 2015 study, Utah was ranked the top state in the nation for providing a classroom experience in financial literacy. Students going through that course are led through a standards-based approach and strong procedures and routines. Other states rank below Utah. Those states ranked at a C rating have strong standards and guidelines for teaching financial literacy but no set curriculum model for a guaranteed and viable experience. Those in the D and F range have little or no state oversight and any curriculum taught is up to individual schools and/or districts (Heiten, 2015).

As demonstrated by example in Heiten's study, there is a lot of range in what and how financial literacy is taught in schools across the United States. A study at this level could provide oversight and research-based information to policy leaders in and around the importance of high school financial literacy programs, specifically the state of Nebraska where financial literacy standards are fully developed but whether local school districts offer a stand-alone Personal Finance courses and integrated financial literacy concepts course, or no course at all is completely up to the local school district entity.

A Federal Reserve Bank of Atlanta report in 2010 shared thoughts about the lack of financial awareness around mortgage products and how this could have impacted the overall 2008 financial crisis. While there was not a direct correlation to financial education and foreclosures, it was determined that many low income, minority, and financial instable individuals were entering into mortgage loan contracts that they did not fully understand. There was correlation between an understanding of financial mathematics and missed mortgage payments. It was correlated that borrowers that had lower financial mathematical aptitudes were connected to missed payments and risky mortgage repayment behavior.

The study raised questions about a greater need for financial literacy in the secondary school environment. There were correlations that related to successes for those that better understood financial methodology, however it was shared that additional research would truly be needed before determining the overall impact on financial literacy education and mortgage solvency (Gerardi, 2010).

Significance of the Study

The relevance of this research emerges as that over a decade later, the United States does not provide a national model for financial literacy education. Experts interpret that a lack of financial literacy education may be impacting the next generation of contributors to the business cycle through the impacts of student loan debt. As college costs are increasing, as is student loan debt. Data from a 2014 study demonstrates that students are taking on more debt for college than ever before. This is leading to longer re-payment periods for new workers entering into their first careers and higher levels of student loan default (Eilser & Garrison, 2014).

The relevance of this research emerges from another report demonstrated that more college students are making decisions about their student loan borrowing habits without understanding the full extent of repayment and understanding how this may impact their future (Darolia & Harper, 2018).