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LONGER-TERM IMPACT AND EFFICACY OF NEBRASKA'S IN-SCHOOL
ELEMENTARY GRADES SAVINGS PROGRAMS

by

Jennifer A. Davidson

A DISSERTATION

Presented to the Faculty of

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In Partial Fulfillment of Requirements

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Teaching, Curriculum, and Learning

Under the Supervision of Professor Guy Trainin

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LONGER-TERM IMPACT AND EFFICACY OF NEBRASKA'S IN-SCHOOL
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Jennifer A Davidson, Ph.D.

University of Nebraska, 2020

Adviser: Guy Trainin

The prevalence of in-school savings programs is widespread. Research on program efficacy is not. This mixed-methods case study contributes to the gap in the research literature. The study examined the in-school savings program, conducted in the elementary grades, from multiple perspectives. The first perspective was a longitudinal one that assessed high school student financial behaviors and evaluated if there were any lasting effects from participation in the program when they were in elementary school. The second perspective was an educational one that assessed what elementary school teachers and administrators who implemented the programs thought about the benefits of the program. The third perspective was an institutional one that assessed financial institution partner expectations in terms of program success and the costs and benefits of their in-school savings branch.

Results of the high school survey showed a correlation between participation in the elementary savings program and “good” financial behaviors later in high school. Most notably, students who participated in the elementary savings program were statistically more likely to be banked once in high school.

Education partners reported that the program was having a broadly positive impact on students and was worth implementing. Education partners also reported a desire to increase participation; a significant difference in participation of student tellers with more female than male; and a growing model of partnering with the school's Future Business Leaders of America program.

Financial institution partners unanimously agreed that the program was well worth the minimal costs and their primary motivation in supporting the program was to help the local community and provide a financial education opportunity for students. Partners reported average start-up costs of \$2300 and average annual costs of \$1023. They also reported that the elementary in-school savings programs provided an experience that established and reinforced a savings habit and provided introductory job skills for students that were hired as tellers. Students that participated in the elementary program saved an average of \$55 per school year.

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CHAPTER 1 – INTRODUCTION

Financial products and transactions have become increasingly complex. Adults are now more responsible than in the past for making financial decisions that affect their future. One example of this is funding for retirement savings. Gone are the days where adults could work at a company for 30 years and know that after retiring they had a pension to rely on for financial stability in their golden years. Compounding this changing financial environment is evidence that there is a lack of financial literacy among adults. For example, only 34 percent of adults 50 years or older could correctly answer three basic financial literacy questions (Lusardi and Mitchell, 2014).

The *Test of Financial Literacy*, a national standardized 45 question high school personal finance assessment, has been shown to be a valid and reliable measure for achievement in personal finance (Walstad and Rebek, 2016; Walstad and Rebek, 2017). In the national norming of the *Test of Financial literacy* students with previous instruction scored a mean of 23.47(8.31) and students without instruction scored a mean of 20.35(7.63) (Walstad and Rebek, 2016; Walstad and Rebek, 2017). These low scores indicate a general lack of personal finance knowledge.

Lusardi, Mitchell, and Curto (2010) found that financial literacy was severely lacking among young adults. This may be because personal finance is not systematically taught in high school. The 2020 Survey of the States (CEE, 2020) reported that only 21 states required high school students to take a personal finance course, of those, 15 integrate personal finance into another course and only six states require high school students to take a full semester length personal finance course (CEE, 2020). According to a 2019 study, only 16% of high school students were required to take a personal finance

course to graduate high school (Next Gen Personal Finance, 2019). A 2016 study stated that only 31% of young Americans said their high school education did a good job teaching them strong financial habits (Bank of America/USA Today, 2016). There is a mismatch between the necessary financial knowledge, skills, and behaviors that people have and the ones they need to be able to make important financial decisions later in life.

While financial literacy is lacking at all age levels, it does differ by gender. There is robust evidence of a knowledge gap between males and females in favor of males. The literature is quite comprehensive and spans the life cycle from youth ages 12-17 to those in retirement (Lusardi and Mitchell, 2014; Bucher-Koene, Lusardi, Alessie, and Van Rooij, 2017). With high divorce rates and increasing numbers of female heads of households, women will likely be making more financial decisions than in the past. A lack of financial literacy could have expensive future consequences in terms of financial decision making.

One potential way to mitigate the lack of financial literacy is to start early. A 2017 review of the effectiveness of financial education programs by Walstad, et.al. (2017), stated that, “it is clear that when empirical structures are carefully created and applied, financial education in the elementary grades is successful in increasing student knowledge and – at least – short-term behavior” (pg. 96). Acquiring financial education early in life may help students build a foundation for later financial well-being. Nevertheless, more research is needed to better understand longer term impacts of early financial education.

Starting financial education early, as part of an elementary education, shows promise though time in the education day is limited and we have to make choices on what

gets taught. A 2019 Consumer Financial Protection Bureau report states, “Time in the education day is precious, and the relative absence of rigorous program evaluation and research to measure the effectiveness of youth financial education makes it difficult for policy makers and others to determine which strategies to embrace and implement” (pg. 4). In order to make informed decisions on how and what to teach, we need to better understand what programs and educational strategies are effective in transmitting financial education. Knowing what programs are effective will allow for more efficient delivery with as little displacement of other subjects and activities as possible.

Nebraska’s in-school savings programs may be an efficient way to provide a financial education opportunity with low time commitment. The program has seen tremendous growth and support, growing from one location in 2002 to 30 locations at the time of this writing. The program establishes a branch of a financial institution inside an elementary school. Select students work at the bank as tellers and students can make weekly deposits into their savings account. The idea is that students would be exposed to financial education and establish a savings habit at an early age. The program takes little time out of the school day, about 30 minutes to an hour a week, depending on the number of student depositors.

Despite the longevity and expansion of the program, no evaluation of program effectiveness has been conducted. This dissertation fills this gap by providing an in depth, mixed-methods assessment of the Nebraska in-school savings program conducted in the elementary grades. The study examined the in-school savings program from multiple perspectives. The first perspective was a longitudinal one that assessed high school student financial behaviors and assessed if there were any lasting effects from

participation in the program when they were in elementary school. The second perspective was an educational one that assessed what elementary school teachers and administrators who implemented the programs thought in terms of program efficacy. The third perspective was an institutional one that assessed what the financial institution partners perceived as the costs and benefits of their in-school savings branch.

This dissertation adds to the literature and offers evidence of a positive relationship between participation in an in-school savings program during elementary school and improved financial outcomes later in life during high school. This likely lasting effect from the in-school savings program may be due to its hands on and experiential qualities. A Brookings report on improving youth financial literacy put it this way, “Many experts agree that financial education that includes opportunities for student participation, discovery, and exploration ...can have a strong, positive impact on financial literacy (Kasman, Heuberger, and Hammond, 2018, pg. 3). An additional encouraging attribute of in-school savings programs is the limited time required in the education day to implement such a program. In-school savings programs may be an efficient financial literacy training strategy as educators work to address the mismatch of financial knowledge, skills, and behaviors.

History of the Nebraska In-Schools Savings Programs

Nebraska has an 18-year history of in-school savings programs. Early in 2001, the University of Nebraska at Omaha’s Center for Economic Education, Conestoga Magnet School in Omaha, and Wells Fargo Bank began meeting to create a real-world experience for students that supported the school’s theme of economics and financial literacy and its

saving curriculum. The outcome of these meetings was Nebraska's first elementary in-school savings program.

Since the first branch opened in Omaha in 2002, Nebraska has enjoyed sustained growth of the in-school savings program. The second branch opened in Lincoln in 2006 with an average of two to three branches opening each year since then. As of this writing, Nebraska has 30 operating in-school savings program. A listing of all of Nebraska's operating locations, including year of opening, partner school, and partner financial institution, can be seen in Table 1. Included in the list are three Iowa locations. These locations were opened as part of Nebraska Council on Economic Education programming and are included in the Nebraska programs.

Table 1. Currently operating in-school savings programs in Nebraska

Founding Date	Elementary School	Financial Institution
2002	Conestoga Economics and Mathematics Magnet Center Omaha	Well Fargo, 2002-09 Centris Federal Credit Union 2010-11 US Bank 2011
2006	Clinton Elementary School Lincoln	US Bank, 233 S. 13th St.
2007	Thayer County Public School Hebron	Thayer County Bank
2009	Linden Elementary School Fremont	First State Bank
2010	Skinner Magnet Center Omaha	US Bank, 1700 Farnam St.
2010	Treynor Elementary School Treynor, IA	Treynor State Bank
2010	Archbishop Bergen Elementary School Fremont	First State Bank

2011	Bloomer Elementary Council Bluffs, IA	US Bank
2011	Hartley Elementary Lincoln	Liberty First Credit Union
2012	Elliott Elementary Lincoln	LincOne Federal Credit Union
2012	Huntington Elementary Lincoln	Liberty First Credit Union
2013	Hoover Elementary Council Bluffs, IA	US Bank
2013	Belmont Elementary Lincoln	Liberty First Credit Union
2014	Cavett Elementary Lincoln	Liberty First Credit Union
2014	Emerson Elementary Kearney	Trius Federal Credit Union
2015	Lakeview Elementary Lincoln	West Gate Bank
2016	Arlington Elementary Arlington	Two Rivers Bank
2017	Arnold Elementary Lincoln	Cattle National Bank & Trust
2017	Centennial Elementary Utica	Jones Bank
2017	St. John Lutheran School Seward	Jones Bank
2017	High Plains Elementary Polk	First State Bank of Hordville
2018	Freeman Elementary Adams	Adams State Bank
2018	Chase County Schools Imperial	Adams Bank & Trust
2019	Creek Valley Elementary Chappell	Adams Bank & Trust

2019	Holy Name School Omaha	Dundee Bank
2019	All Saints School Omaha	Dundee Bank
2019	North Bend Central North Bend	Platte Valley Bank
2019	Wayne Elementary Wayne	State Nebraska Bank & Trust
2020	Wysong Elementary Lincoln	West Gate Bank
2020	Roper Elementary Lincoln	Cattle National Bank & Trust

As indicated by the sustained growth, the Nebraska in-school savings programs have been well received. They are a signature program of the Nebraska Council on Economic Education, a non-profit organization whose mission is to advance economic and financial literacy. The Nebraska Council on Economic Education has purposely worked to expand the program by matching financial institutions with elementary schools and leading the organizations through the six months to year-long implementation process. Each new branch opening brings accolades and positive press coverages.

In-school savings programs are not unique to Nebraska. The FDIC Youth Banking Resource Center lists banks working to connect financial education to savings accounts for school-aged children in 32 states, including Nebraska (FDIC, n.d.). In order to be included as part of the FDIC Youth Banking Network, banks must meet three criteria: (1) be an FDIC-insured institution that is working, or planning to work, with a school, school district, or nonprofit organization that serves youth under age 18 to carry out a program that allows the young people to open a savings account at the FDIC-

insured institution; (2) provide the youth financial education, either directly or in collaboration with a partner school, school district, or nonprofit organization; and (3) be in operation for three or more years (FDIC, n.d.).

Nebraska In-School Savings Program – How It Works

An in-school savings program is a partnership between a local financial institution and an elementary school. A special operating branch of the financial institution is set up inside the school. A representative of the financial institution visits weekly to oversee operating hours, generally one day a week for an about an hour depending on the number of student depositors. The goal of the program is to provide a real-life educational experience for students that would help establish the important habit of saving regularly.

The bank account itself is a non-interest bearing custodial account opened in the name of the school. The principal and other key individuals are signers on the account. Individual student balances are kept via a weekly excel spreadsheet. Student “account numbers” are typically their school identification, lunch account number, or something similar. The financial institution audits the school account biannually. At least six weeks prior to opening a new in-school savings program branch, notice must be provided to the Nebraska Department of Banking and Finance.

In-school savings program accounts are deposit only accounts. Students are not allowed to make withdrawals. The account is only available within the school at the school branch, meaning the student could not make a deposit at the local branch of partner financial institution. Students receive their accumulated savings when they graduate from the elementary school or when they move from the school or district.

Each year, selected upper elementary students are selected to work at the school branch as tellers. Students wishing to work at the branch submit an application. The application requires students to show math competencies and to submit a written paragraph on why they should be selected as a teller. Often times, finalists undergo a final oral interview with members of the partner financial institution. Depending on the size of the school, branches generally hire 12-24 tellers, which allows the students to work one day a month. Once tellers are hired, the financial institution conducts training sessions for the new “employees.” Training is similar to what regular bank tellers would undergo. Students are taught how to fill out and check deposit slips for accurate math. There is also discussion of customer service skills and the importance of privacy issues and not discussing student balances.

The branch is open one day a week for students to make deposits into their savings accounts. Three to six tellers work each banking day. To minimize out of class time for students who wish to make a deposit, one of the student tellers acts as a runner to let each classroom know it’s their turn for any students who have a deposit that day. This avoids wasting classroom time to waiting in line. Other tellers work to assist younger depositors in completing deposit slips and helping at the incentive table. Students receive different incentives for habitual saving and/or for reaching savings levels.

A signed parent permission letter that outlines the in-school savings program is required for students to open their account. Once a signed parent permission letter is received, an individual student savings register is created and the student can begin making deposits. A student’s first deposit, up to \$5, is matched by the partnering financial institution. With each deposit made a sticker is placed on the outside of the

students savings register. In lieu of interest, students earn trinket incentives, such as pencils, chapsticks, or coin pouches, that become larger as students reach higher savings levels; for example, lunch with bank personnel from the student's restaurant of choice when a student reaches savings of \$750. All earned rewards are designed to encourage the habit of saving.

As a way to create additional excitement around the program, many school branches include additional program incentives. For example, several schools have a travelling trophy that moves weekly to the classroom with the highest percentage number of savers to classroom enrollment for the week. To keep focus on the habit of savings, many programs offer monthly incentives. For example, if a student makes a deposit three of the four savings opportunities in a month, they will receive various coupons such as a free ice cream cone at a local fast food establishment, or other special prize. This incentive is a great way to include additional community partners in the savings program.

It is important to note that all in-school savings programs run slightly differently. For example, they operate on different days of the week at different times of the day in different locations in each school and have different incentive structures. This section has provided a general overview of the commonalities.

Organization of the Dissertation

This dissertation is divided into seven chapters that includes this introductory first chapter. Chapter Two is a literature review of pertinent topics. Chapter Three discusses the research methodology. Chapter Four describes a survey and quantitative findings of research on banking, employment, and savings habits of high school students. Chapter

Five describes the perceptions and points of view of the program's education partners using a qualitative analysis of interviews. Chapter Six extends the program evaluation to include a qualitative analysis of interviews with financial institution program partners. Chapter Seven completes the dissertation with a discussion of its implications and conclusions.

CHAPTER 2 - LITERATURE REVIEW

This literature review focuses on four topics relevant to in-school savings programs: teaching financial education at an early age; a connection between financial knowledge and financial behavior; studies of hands-on, experiential learning; and studies of in-school savings programs. Additionally, this literature review addresses differences in financial literacy by gender.

Teaching Financial Education at an Early Age

Beginning financial education in elementary school is important. Youth have interactions with money and the financial world through allowances, payment for chores, and watching their family. Several studies provide support for beginning financial education at an early age and show increases in financial knowledge from exposure to financial education.

Harter and Harter (2009) found increases in student financial knowledge when taught the *Financial Fitness for Life* curriculum. The authors recruited and trained elementary, middle, and high school teachers on delivering the Financial Fitness for Life curriculum. Teachers tested their students before and after the intervention using the *Financial Fitness for Life* grade level assessments. The examiner's manuals for the assessments report satisfactory validity and reliability results. Twenty seven teachers completed all aspects of the project – 9 elementary, 7 middle school, and 11 high school teachers. All grade levels showed improvement from pretest to posttest. For the elementary classes, the age group common to the in-school savings programs, the pretest mean was 12.79 (4.47) and the posttest mean was 18.06 (6.19). This was a statistically

significant difference in means with a t-statistic of 17.01 with a p-value of 0.000 (Harter and Harter, 2009).

In agreement with Harter and Harter (2009) and using the same *Financial Fitness for Life* curriculum, Chen and Heath (2012) found gains in financial literacy knowledge from a statewide program, *Smart Tennessee*. In a three year study, beginning with the 2006-2007 school year, select upper elementary and middle school teachers received professional development on teaching financial literacy. Participating teachers were appointed by their school districts. Following the procedure in Harter and Harter (2009), students completed tests using the *Financial Fitness for Life* assessment instruments. With a sample of 917 students, results were statistically significant and showed an improvement from pre to post scores. The average pre-test score was 44.2 (.15) with an average post-test score of 61.2 (.21) making the average improvement 17 percentage points or 38 percent. (Chen and Heath, 2012).

Banking is generally seen as an adult activity; however, studies show children are capable of understanding savings and banking concepts at an early age. In third grade Italian children, Berti and Monaci (1998) found that children between the ages of 6 and 10 understood the concepts of deposits and withdrawals. Their treatment group of 25 students received 20 hours of instruction on banking concepts. The information was retained by the treatment group four months later. The control group of 33 students did not show any progress in learning banking content. Although the sample for this study is relatively small, it does indicate that with purposeful instruction and intervention, these concepts can be learned at an early age.

In a book chapter in *Children's understanding of society*, Webley (2001), in agreement with the findings of Berti and Monaci, reviewed several studies on children's understanding of economics. Webley described one study by Siegler and Thompson (1998) who found that economic understanding improves dramatically between ages 4 and 10. Webley also described a series of studies he carried out with his colleagues (Webley, Levine, & Lewis, 1993; Sonuga-Barke & Webley, 1993; Otto & Webley, 2001). They studied children and issues of savings and delayed gratification. Children played games that presented them with a range of problems similar to those faced in everyday life. The problems posed to children included an external threat, a robber that would take some of their money, and temptation, by passing a candy shop where they could spend money. If the students lost or spent their money they could not purchase a toy at the end of the game. Webley and his colleagues found that "by age 6, children know that saving is a 'good thing': They have learnt that self-control, patience, and thrift are virtuous. But although 6-year-olds know that saving is valued, they do not like it very much; nor do they save very well" (pg. 57). Importantly for elementary grades in-school savings programs, Webley found that "major improvements in savings performance occurred between the ages of 6 and 9" (pg. 58).

Other research also considers the timing of financial education. For example, Schug and Walstad (1991) made a resource saving argument that reaching children early with positive financial education is preferable to later education. Reaching children early facilitates the initial formation of positive attitudes and behaviors, where later interventions often require participants to unlearn negative behaviors before they can

acquire positive ones. Furthermore, Collins and Odders-White (2015) agreed with this argument,

“teaching younger children has the added benefits of beginning with a ‘blank slate’ rather than trying to correct negative habits or misconceptions already acquired or observed at home. Launching financial education earlier could also support cumulative learning throughout subsequent grade levels and economic experiences” (pg. 72).

While students likely do not come in with a true ‘blank slate’ as they are always observing and learning from their environment, the point remains that positive and earlier financial education is preferable.

Teaching personal finance topics early allows for scaffolding of knowledge, skills, and behaviors over time. For example starting with simpler skills such as identifying money and counting money scaffolds learning about trade-offs or opportunity costs. When you choose to buy something you necessarily give up something else. When the purchase is made a choice is made not to save. Eventually personal finance education builds to abstract concepts like compound interest and how savings and debt grow over time. These insights eventually lead to learning personal finance topics of investing and insurance. Personal finance education is analogous to math education. In math students start very early and scaffold each concept building from year to year. We start with counting and arithmetic and build the complexity to geometry, algebra, and calculus. Children are capable of understanding financial topics at an early age and personal finance, increasing in complexity, would be best learned as a multi-year sequence similar to math.

The National Standards for Financial Literacy include standards “that should be contained in a personal finance curriculum” (Council for Economic Education, 2013, pg. v). There are six overarching standards: earning income, buying goods and services, saving, using credit, financial investing, and protecting and insuring. Each of the national standards include age-appropriate benchmarks (grades 4, 8, and 12) as a means of evaluating students’ mastery. The National Financial Literacy Standards include 144 benchmarks, 32 of which are the 4th grade level. These standards provide a description of what experts in personal finance and economics consider to be core content in personal finance that should be taught by the fourth grade.

The Basic Finance Test, a 35 question standardized test for measuring the achievement of upper elementary school shows that elementary students can be assessed on these national standards. The Basic Finance Test’s alignment to the national standards provides content validity and its coefficient alpha of .90 provides statistical evidence of its reliability (Walstad and Rebek, 2016). The national norming of the assessment was conducted in 2015. The mean score achieved by the 294 students from 10 schools districts was 17.82 (8.10). (Walstad and Rebek, 2016).

Financial Knowledge and Financial Behaviors

An important question for research is whether financial knowledge translates to improved financial behaviors. Ultimately the goal is to understand how to improve financial behaviors. The literature on financial education and knowledge ultimately impacting financial behaviors is just emerging and shows mixed results.

In a 2003 study, Hilgert, Hogarth, and Beverly explored the connection between knowledge and behavior. The study utilized two sources of data: Michigan’s monthly

Survey of Consumers, a phone survey of adults, and for comparison, the Survey of Consumer Finances, a triennial survey of adult households. The authors focused on four financial management activities: cash-flow management, credit management, savings, and investment. They found evidence that knowledge was linked to behavior and found that households with low credit management indexes had lower overall financial knowledge scores. Further indicating the relationship between knowledge and financial behavior, they found that households with low scores on the savings index also had lower overall financial knowledge and lower scores on the savings subsection of the quiz. Hilgert, Hogarth, and Beverly made the point that we need to better understand sources of financial knowledge and that often it comes from experience, friends and family, the media, and formal education high school and college classes.

Using surveys to measure household financial literacy and demand for financial services, supplemented by a randomized field experiment, Cole, Sampson, and Zia (2011), tested the role and relative importance of financial literacy and prices in determining demand for banking services in Indonesia and India. They found that financial literacy education alone did not lead to greater demand for financial services in the general population. However, financial literacy education did have an impact among those with low initial levels of education and financial literacy. They also found that modest financial subsidies had large effects in increasing the share of households that open a bank savings account and these bank accounts were still open and being utilized two-years later.

A 2012 study Collins found that a relatively modest intervention with an economically distressed population showed at least modest effects on behavior. The field

study was randomized across 144 clients enrolled in the Federal Housing Choice Voucher program who were required to complete a five-course sequence of basic personal finance concepts such as budgeting, credit reports and credit management, banking, and financial planning. The course included 12 hours of classroom time over two months. Data was collected at baseline and 12 months after baseline for each client, including credit reports, bank account records and self-reported surveys. There was no evidence educated clients had problems managing their expanded use of debt, and the effects of treatment on the treated suggested an increase in credit scores. Self-reported behaviors among clients assigned to the education courses showed improvements in financial planning activities such as forecasting expenses, budgeting and paying bills.

Brunh, De Souza Leao, Legovini, Marchetti, and Zia (2016) studied the impact of a comprehensive high school financial education program through a randomized control trial of 25,000 students in Brazil. Financial knowledge increased, but the effect on short-term financial behavior, defined as one year later, was split. There were significant improvements in students' savings and budgeting, but also an increase in students' use of expensive credit to make consumer purchases. The explanation for expanded credit use is the possibility that the financial education made students aware of the availability of credit and conveyed perhaps a too complex message of making an individual informed decision as to whether using installment plans, credit cards or loans was appropriate in their situation.

Wagner and Walstad (2019) made the case that benefits to financial education may differ based on the time horizon for the financial behaviors. Using the 2015 National Financial Capability Study data the authors found that financial education appeared to

have generally insignificant effects on short-term behaviors for which there is likely regular feedback and penalties, and thus great opportunity for learning by doing. For example, when consumers do not pay off their credit card bill, or pay it late, they get a monthly statement showing interest charges and fees. Wager and Walstad found financial education appears to have more positive and stronger effects on long-term behaviors where there is less timely feedback, and for which negative consequences are not realized until later in life. For example, saving for retirement; you don't often get, if at all, automatic feedback on how much you will need to sustain your retirement years and the lack of savings is not something that can quickly or easily be corrected.

If we are to change financial knowledge into “good” financial behaviors, we must first understand the psychological progression. The movement from acquisition of knowledge to a change in behavior is a multi-step process. Hamann (in press) provides a useful explanation of psychological anthropologist Roy D'Andrade's (1992) four-part taxonomy to implementing behavior change. At the first level, D'Andrade proposed a learner can gain a vague consciousness of something they previously knew nothing about. At the second level, the learner understands a task and knows what they are supposed to do, but does not yet feel compelled to act. At the third level, new understandings are clear and understood and found sufficiently compelling to incite action. At level four, the acquired knowledge has not only been embraced and implemented, but it is so compelling that the learner is eager to share their new ways of doing and seeing with other people.

Studies on Experiential Learning

Experiential learning, also referred to as hands-on or participatory learning, is a process in which students learn through experiencing something rather than simply reading about something. The justification for this type of learning goes back as far as Confucius who is believed to have said, “I do and I understand,” thus alluding to the benefits of hands on or experiential learning. In modern times, John Dewey, arguably one of the most significant educational thinkers of the 20th century, had a strong and tested belief in the benefits of learning by active participation rather than by passively receiving. In his 1938 book, *Experience and education*, Dewey stated, “...there is an intimate and necessary relation between the proves of experience and actual education” (pg. 20). He goes on to say, “...there is one permanent frame of reference: namely, the organic connection between education and personal experience” (pg. 25).

The need for active or experiential learning also applies to financial education. Johnson and Sherraden (2007) advocated for an expansion from practitioners striving to impart financial education, where students score better on financial exams and show they have increased financial knowledge, to striving for what they are calling financial capability, a situation where young children have access to financial education accompanied by participation in meaningful financial services. They purported that “financial capability results when individuals develop financial knowledge and skills, but also gain access to financial policies, instruments, and services” (pg. 119). Similarly, in a study of the impact of the MyPath Savings Initiative on 275 economically disadvantaged youth participating in a development and employment program, Loke, Choi, and Libby (2015) agreed, “Activities that develop financial capability, which includes both financial

knowledge and access to financial services, at an early stage in life, may be an important intervention for promoting long-term financial stability, particularly among underserved youth” (pg.97). A 2018 publication by Kasman, Heuberger, and Hammond, stated that, “many experts agree that financial education that includes opportunities for student participation, discovery, and exploration – in other words, ‘participatory learning’ – can have a strong, positive impact on financial literacy.” (pg. 3) The report’s final finding was that more should be done to enhance the classroom with supplementary participatory learning.

A year-long evaluation of the *My Classroom Economy* (MCE) by Batty, Collins, O’Rourke, and Odders-White (2016) provided support for an experiential approach to increasing financial capability in elementary school students. With *My Classroom Economy*, a teacher establishes a classroom-based economy that integrates into the school day as a classroom management system. Students practice budgeting and savings through core activities including: earning classroom currency for performing assigned tasks; managing expenses, including paying rent for or purchasing their desks; earning bonuses or incurring fines for particular behaviors; and making spending decisions at classroom auctions and stores. The field study was conducted during the 2015-2015 school year with 1,972 4th and 5th graders from 115 classrooms in 24 schools across the school district of Palm Beach County, Florida. Schools were randomly assigned to a treatment or control group. Students in both groups completed surveys about their financial knowledge, attitudes, and behaviors at the beginning and end of the experience. Results showed that *My Classroom Economy* produces statistically significant changes in students’ financial knowledge. The knowledge gains, which were .13 of a standard

deviation in size, are notable given that *My Classroom Economy* does not teach direct lessons on financial topics, but instead exposes students to a financial situation. These findings suggest that experiential financial learning can have positive, albeit small, effect on financial literacy efforts (Batty, Collins, O'Rourke, Odders-White, 2016).

Another example of positive outcomes from students participating in an experiential financial education program comes from the 2012 *Money Savvy Youth* study conducted by the Federal Reserve Bank of San Francisco. Authors Go, Pho, and Choi (2012) recruited participants from 11 public schools in the Oakland Unified School District. Twenty-five teachers were willing to host the *Money Savvy Youth* program. The program is a five week financial education course that takes place during the school day, for one hour a week. Lessons covered topics such as income, spending and credit, savings, and goal-setting. Each lesson encouraged students to engage in open dialogue and incorporated fun, interactive components, including group skits, guest speakers, group projects along with grade-specific math work. Classrooms were divided into control and treatment groups with pre, post, and three month follow up assessments. Assessments included measures of financial knowledge and attitudes that borrowed from the *Financial Fitness for Life* program. The financial knowledge questions had a possible range of 0 to 15. The treatment group had a pre-test mean of 5.2 (2.2), posttest mean of 9.47 (2.86) and a follow-up mean of 8.96 (2.67). In comparison, the control group had a pre-test mean of 5.58 (2.36), posttest mean of 6.34 (2.38), and a follow-up mean of 6.81 (2.74). The youth involved in the Money Savvy Youth program had an average increase of 4.27 points on the post-test, while the control group had an average increase of .76 points (Go, Pho, and Choi, 2012).

A 2009 study from Hinojosa, Miller, Swanlund, Hallberg, Brown and O'Brien showed promising returns from participation in The Stock Market Game. The program teaches the importance of savings and investing through a real-life, hands on experience trading on the stock market. Teams of students research, manage, and track a \$100,000 virtual portfolio for 10-15 weeks. Hinojosa and her colleagues (2009) randomly assigned interested teachers to treatment and control groups. There were 269 treatment and 244 control group teachers who provided pre and post testing data. The survey instrument included age appropriate math questions made up of publicly available National Assessment of Educational Progress questions and related to the Stock Market Game program. The survey instrument also included investor knowledge tests developed with the help of experts in the area of testing financial literacy and aligned to the curriculum content of The Stock Market Game. The study included nearly 1,000 students for each grade level. The Stock Market Game improved investor knowledge for all treated students. The treatment group also improved their math scores, with the largest effects for 4th and 5th grade classrooms.

Carlin and Robinson (2012) evaluated the efficacy of financial education by studying a group of 13-19 year olds who participated in a simulated all-day financial experience at the Junior Achievement Finance Park of Southern California in which students received hands-on practice in personal budgeting. The pre-visit curriculum included 19 hours of classroom study of financial institutions, taxes, credit, and personal budgeting. Some of participants had received financial education prior to the park experience, while others had not. Once at Finance Park, participants were randomly assigned a fictitious identity and began by calculating their net monthly income. They

were then asked to create a monthly budget and travel to each kiosk where they entered their choices with the specific goal of creating a balanced budget that is responsible and represented their preferences. The findings represented students from two different schools and compared students who received and did not receive financial literacy training. The findings show that students who received training were 35 percent more likely to turn in a completed, balanced budget within the timeframe allotted to them compared to the untreated group. Students in the treatment group were more attuned to making choices that can be described as investments in the future and delaying gratification; for example, students in the treatment group spent more to pay-off their debt obligations on home improvement, and thus incurred lower interest charges on their loans. Treatment students also spent less on clothing and chose to dine out less.

The literature indicates that experiential learning is an effective way to impart financial education. The studies of in-schools savings programs described in the next section are also positive examples stemming from experiential learning.

Studies of In-School Savings Programs

Nationwide, in-school savings programs are quite popular. The Federal Deposit Insurance Corporation (FDIC) Youth Banking Resource Center website lists youth banking programs in 27 states (FDIC, n.d.). The site advocates for youth in-school savings program and states, “School-based experiential financial education is among the most promising frontiers in the field of financial capability. This method of teaching can support students’ independent decision-making, take advantage of teachable moments, provide opportunities for repeated practice, and incorporate planning and goal-setting—all of which help build important skills and positive financial habits. Participants not only

learn key financial concepts, but also form positive attitudes and behaviors that can help them become financially capable adults. Moreover, students who participate in financial education that includes a hands-on saving component are more likely to demonstrate financial knowledge than their peers.”

During the 2015-2016 academic year, the FDIC conducted a non-empirical pilot aimed at identifying approaches that help school-aged children develop strong financial knowledge and good financial habits and attitudes. Twenty-one banks from 17 states participated and reported anecdotal benefits including: improving a child’s financial future (with no data or longitudinal follow up), fulfilling a banking mission to give back to their community, building trust with their community, earning community reinvestment act (CRA) credit, and building a pipeline of future customers.

The prevalence of in-school savings programs and youth banking seems to be widespread; however, the prevalence of empirical research on program effectiveness is not. In fact, in a thorough review of the literature only three published empirical studies surfaced: a 2010 paper on the elementary in-school *I Can Save* program in Missouri, a 2015 paper on elementary in-school savings programs in Wisconsin and Texas, and a 2019 study on a junior high school savings program in Ghana. An overview of each of these studies follows.

Missouri I Can Save Program

In a multi-year study of *the I Can Save* program Sherraden, Johnson, Gao, and Elliott (2010) partnered with a Missouri urban elementary school. The student population of the school was 85 percent African American and over 50 percent of the students received free and reduced lunch. All 75 kindergarteners were invited to participate in *I*

Can Save and 74 enrolled. Children in the same school in 2nd and 3rd grades were utilized as the control group, n=23. Children in the *I Can Save* treatment group received financial education, a savings account, and incentives for savings, including a \$500 “seed” deposit and a one-to-one savings match for all deposits into the account up to a total of \$1,500.

The financial education component consisted of classroom based curricula from *Financial Fitness for Life* and a once a week voluntary after-school club during the academic year. In year 1, teachers handled all classroom financial education lessons. Teachers received one day of training and ongoing support from *I Can Save* staff. In subsequent years, however, as children advanced to higher grades, teachers preferred not to teach financial concepts and responsibility for lessons shifted to *I Can Save* staff. By year 4, *I Can Save* staff conducted all in-class sessions. The after school club activities included games, refreshments, and beginning in year 2, monthly field trips to deposit savings in the bank.

Data collection included a *Financial Fitness for Life* (FFFL) assessment at the end of the students’ 4th grade year. In total, 108 students took the FFFL test. This number includes three different groups: (1) *I Can Save* students in the treatment group (n=35), (2) students in the comparison group (n=18), and (3) students not in the study (n=55). Data collection also included in-depth interviews with students at grade 2 and grade 4, and teacher focus groups.

The authors found that young children increase financial capability when they have access to financial education when it is accompanied by participation in meaningful financial services. The students in *I Can Save* did significantly better than the control and non-treatment groups, even when controlling for parents’ education and income levels.

Feedback from the teacher focus groups underscored the positive difference in the treatment group. Teachers observed that students in the *I Can Save* club overall have a larger economic vocabulary, talked more about spending and savings, and appeared to have more confidence in and ability to apply economic concepts, especially in their interactions with the bank. The interviews with *I Can Save* students provide evidence that having a savings account motivated students to learn about financial matters.

In-School Savings Programs in Wisconsin and Texas

Batty, Collins, and Odders-White (2015) report the results from an in-school savings program that first began in Wisconsin and then was expanded to Texas. The study was conducted for the first year (2011) in an elementary school in Eau Claire, Wisconsin. It was extended for a second year to increase the sample size. In the third year, an elementary school in Texas was added to the study. In both districts, the entire 4th and 5th grades were involved in the study and half of the schools in each district had an in-school savings program. The study was conducted as a random, staggered design. Classrooms were randomly selected to receive financial education. Teachers received training on the *Financial Fitness for Life* curriculum and lessons and received all the materials to teach.

To enroll in the study, each student was required to sign an assent form and their parent was required to sign and return a mailed consent form. Those not selected, received the financial education after the pilot. All students were given an assessment and survey prior to the start of the program and again after it ended. Implementing the program for a second year in Eau Claire created the opportunity to follow up and re-survey those that had participated the previous year. This provided an assessment of the

persistence of any effects observed the first year. The questionnaire included 13 financial literacy questions and questions on attitudes, beliefs and experiences with financial issues. After parental permission to share had been granted, data also included administrative information, such as amounts and frequencies of deposits obtained from the in-school savings program financial partners. The survey at follow up included 710 students from Eau Claire and 723 students at Amarillo for a total of 1,433. Bank data included 166 students from Amarillo and 270 students in Eau Claire for a total of 436.

The results indicate that financial education produced a large improvement in financial knowledge. After receiving 5-6 hours of classroom based financial education, students demonstrated greater knowledge of financial concepts. The average baseline financial knowledge score increased from 6.15 to 8.25 for students who received the financial education, while the average score increased from 6.27 to 6.91 for the control group. Given the modest intensity of the intervention, the increase is quite promising. Also promising are results indicating these knowledge gains persisted one year later.

An additional and important finding, especially for schools with high rates of low income, immigrant families, and high mobility rates, is that having a bank or credit union located in the school was found to increase not only the likelihood a student is banked, but also the degree to which students felt it was easy to save and that banks were useful.

Youth Save Ghana Experiment

Youth savings accounts are being explored and researched internationally. A 2019 study by Amsong, Chowa, Masa, Despard, Sherraden, Wu, and Osei-Akoto found that students in Ghana who participated in a youth savings account program showed increased attendance effects when compared to students in the control group without youth savings

accounts. The study examined a cohort of 2,000 junior high school students exposed to a 1-year program of youth savings accounts. Participants, by school, were randomly selected to a treatment or control group. Students accessed their accounts through either in-school banking and local branches (Treatment group 1) or local bank branches only (Treatment group 2). Youth assigned to the control group were not offered a savings account. Results show that young people who are offered savings accounts will engage more with their schooling by attending school more often compared with those who are not offered a savings account. The team of researchers suggested behavioral shifts occur in young people who become financially empowered. “Among the young people who opened a savings account and were active savers, even though their balances might have been minimal, the ability to own a savings account and begin a savings culture in their early adolescence might have led to an elevated sense of responsibility” (pg. 276).

Financial Literacy and Gender

Several studies found differences in gender in terms of financial literacy knowledge and good financial behaviors. The literature is quite comprehensive and clear, women, both young and more mature tend to have lower financial literacy than men. Lusardi and Mitchell (2014) found “a striking feature of the empirical data on financial literacy is the large and persistent gender differences...Not only are older men generally more financially knowledgeable than older women, but similar patterns also show up among younger respondents as well...these gaps persist across both the basic and the more sophisticated literacy questions (pg. 17).”

In a study spanning three countries, the United States, the Netherlands, and Germany, Bucher-Koene, Lusardi, Alessie, and Van Rooij (2017) confirmed findings of a

persistent gender gap in financial literacy independent of socioeconomic background and cultural and institutional context. Female respondents were less likely to answer financial literacy questions correctly and they were also more likely to state they do not know the answers to questions. The objective measure of financial literacy came from three basic financial literacy questions, one each on interest rates, inflation, and risk diversification.

In a 2008 study, Lusardi and Mitchell showed that women in the United States had very low levels of financial literacy, and the majority of women have undertaken no retirement planning, an important financial literacy behavior. Of the sample of 785 women aged 50+, fewer than one-third indicated that they had ever attempted to undertake a retirement savings calculation. They further showed that financial knowledge and planning are clearly interrelated: women who displayed higher financial literacy are more likely to plan. In a 2009 study of debt literacy, Lusardi and Tufano find “sharp differences between males and females” (pg. 8). In each of the debt literacy questions, women were much less likely to respond correctly than were men, sometimes by as much as 20 percentage points. Women were also more likely to respond “I don’t know.” Fonseca, Mullen, Zamarro, and Zissimopoulous (2012) also found differences in financial literacy by gender. Using the data collected from the RAND American Life Panel, a national survey of adults aged 18 and up, which includes 23 questions related to financial literacy, the authors found a financial literacy index for women about .7 standard deviations lower than that for men.

Research has shown a financial literacy gender gap in college. In a national survey, Chen and Volpe (2002) found that college aged women have less knowledge about personal financial topics. Gender differences remain statistically significant after

controlling for other factors such as major, class rank, work experience, and age. Gutter and Copur (2011) also surveyed college students and explored the relationship between financial behaviors and financial well-being. They found that positive financial behaviors were positively related to financial well-being. Means comparisons found male students had significantly higher financial well-being scores compared to females.

The research literature shows financial illiteracy and a financial gender knowledge starts early with a gap already appearing in youth. Lusardi, Mitchell, and Curto, (2010) analyzed data from the National Longitudinal Survey of Youth (ages 12-17), which in 2007-2008 included a set of three basic financial literacy questions. The results indicated large differences in financial literacy between the genders. Females were less likely to respond correctly to each of the three financial literacy questions, and there was an 11-12% gap for the questions relating to inflation and risk diversification.

There is robust evidence of a gender gap in financial literacy. The literature spans the life cycle from youth ages 12-17 to those in retirement and the findings remain conclusive. In general, women display lower financial literacy than men. What is not clear in the research literature are reasons to explain the gap. Goldsmith and Goldsmith (1997b) suggested that women have lower scores than men because women in general are less interested in the topics of investments and personal finances and find that people's financial literacy is related to their self-perception of their knowledge in personal finance (as reported in Chen and Volpe, 2002, pg. 300). Fonseca, Mullen, Zamarro, and Zissimopoulos (2012) purport that a possible mechanism through which gender financial literacy differences are produced is through household specialization: men specialize in making household financial decisions thereby acquiring financial knowledge and women

specialize in other household functions; however, they found little support for this supposition. Instead, they found that decision making within couples depends on the relative education of spouses and women. Men with similar education relative to their partner on average take on the same number of financial responsibilities and both men and women are responsible for more financial activities as their education increases relative to their spouse. Tang, Baker, and Peter (2015) investigated the disconnect between financial knowledge and behavior and demonstrated there were important differences between men and women in terms of how knowledge, socialization, and psychological characteristics were ultimately associated with financial behaviors. They found that women appear to benefit more from financial knowledge and parental influence.

Understanding the differences in financial literacy between genders has important education implications given the increasing complexity of financial markets and the need for individuals to save for their own retirements. The importance of understanding the financial literacy gender gap is compounded when you consider high divorce rates resulting in single female heads of households and that women tend to outlive men and will not only need retirement savings to last longer, but very likely will be making financial decisions alone. There are future financial consequences, particularly for single women, who do not have a grasp on financial literacy.

CHAPTER 3 – METHODOLOGY

This mixed-methods dissertation is a program evaluation of an early financial education intervention, Nebraska’s in-school savings programs conducted in elementary schools. The study examined the in-school savings program from multiple perspectives. The first perspective was a longitudinal one that assessed high school student financial behaviors and evaluated if there were any lasting effects from participation in the program when they were in elementary school. The second perspective was an educational one that assessed what elementary school teachers and administrators who implemented the programs thought about the benefits of the program. The third perspective was an institutional one that assessed financial institution partner expectations in terms of program success and the costs and benefits of their in-school savings branch.

Rationale for Mixed Methods Design

This dissertation is a mixed-methods case study of Nebraska’s in school savings programs conducted in the elementary grades. A case study is an in-depth look at a real-life situation or setting within a bounded system. A bounded system is something you can “fence in” (Merriam & Tisdell, 2016). There is a clear distinction of what is to be studied, the unit of analysis. A case study is distinct from other methodologies in that the study and analysis includes multiple sources of information including, but not limited to observations, interviews, documents, reports, etc. (Merriam & Tisdell, 2016).

The focus of this study is one of understanding a single program – the in-school savings program. The inquiry involved multiple sources of information and perspectives: survey results from high school students, interviews with education program partners at

the schools, records on student participation and average savings amounts, and interviews with financial institution partners. Given the multifaceted nature of the program evaluation, this study is accomplished by a mixed-methods design that includes both quantitative and qualitative research methods.

Mixed methods research is a type of research in which a researcher combines elements of both quantitative and qualitative research approaches for the broad purpose of breadth and depth of understanding and corroboration (Johnson, Onwuegbuzie & Turner, 2007). Creswell and Plano-Clark define mixed methods as a research design in which the researcher collects, analyzes, and mixes both quantitative and qualitative data in a single study, or multiphase program of inquiry (Creswell and Plano-Clark, 2018). Rossman and Wilson (1985) identified three reasons for combining quantitative and qualitative research. First, combinations are used to enable confirmation or corroboration of each other through triangulation. Second, combinations are used to enable or to develop analysis in order to provide richer data. Third, combinations are used to initiate new modes of thinking by attending to paradoxes that emerge from the two data sources.

The Nebraska in-school saving programs have enjoyed much expansion, particularly in the last 10 years; however, no evaluation of program effectiveness has ever been conducted. While program partners, both education and financial institution, appreciate the real life nature of the program, what they often ask is, “Does the program work?” The honest answer is complex, uncertain, and partially depends on what partner expectations are. All of these are unknown and are the basis for this mixed methods, multiphase inquiry into and evaluation of Nebraska’s in-school savings programs. In order to answer the question “does it work” a better understanding of the expectations of

the partners, both education and financial institution, is needed. A better understanding of why they participate in the program and what they perceive as program goals and success is also needed.

This chapter contains an overview of the overarching research design and methodology. Additional specifics of research design including location, sample, and protocols are described in each individual chapter. As a writer and researcher, I made a decision to organize the research this way to make sure that each piece was contextualized in ways that would be most helpful for the reader. The decision might look fragmented, but each piece is part of a very deliberate, mixed methods whole. Chapters Four, Five, and Six, all examine a different aspect and perspective of Nebraska's in-school savings program. Chapter Four is a quantitative chapter addressing lasting effects from participation in an in-school savings program. Chapter Five is a qualitative chapter addressing the perspectives of the in-school savings programs education partners. Chapter Six is a qualitative chapter addressing the perspectives of the in-school savings financial institution partners. Chapter six also includes a quantitative component addressing the statewide impact in terms of student participation and aggregate savings. The information is then combined and discussed holistically in terms of implications and conclusions in Chapter Seven.

Quantitative Analysis

Examining program effectiveness in terms of lasting changes in financial behavior is addressed quantitatively. A survey of high school students was conducted at Thayer Central Community Schools, a rural public school in Hebron, Nebraska. The survey investigated any lasting effects that may be attributed to past participation in the in-

school savings program when students were in elementary school. The questionnaire included demographic questions, a question to inquire about program participation, and questions about students' current financial behaviors. Behavior questions related to banking, employment, and savings habits. A quantitative analysis of the responses was conducted comparing two groups of students, those who did and those who did not participate in the elementary savings program. The results were analyzed by a cross tabulation of the data to see what patterns emerged. Regression analysis was conducted to determine how different the two groups of students were. In addition to a query on differences between students who did and did not participate in the savings program, the survey results were analyzed to explore differences in financial behaviors between genders. Lastly, a power analysis was conducted to determine the minimum sample size to show an effect.

Qualitative Analysis

To answer the question “does the program work” requires an understanding of partner expectations and their experiences with day to day operation of the program, both in the school and at the financial institution. In addition to the quantitative analysis conducted via the survey of high school students, a qualitative study with its focus on meaning, observation, experience, interviews, and rich description provided an opportunity to evaluate the in-schools savings programs more holistically. I examined the education perspective to better understand program intricacies and experiences by interviewing educators running the day to day programs at each school location. I explored the financial institution perspective, their expectations and why they made such a commitment to the program in a qualitative manner by interviewing the financial

institution employees that lead and coordinate the in-school savings program. An interview is where “knowledge is constructed in the interaction between the interviewer and the interviewee” (Brinkman and Kvale, 2015, pg.4).

The interviews were semi-structured in format. Semi-structured interviews allowed for some open dialog on any issues specific to each financial institution, elementary school and program. This allowed for specific individual probing questions based on responses of the specific interviewee.

Once interviews began, a process of synthesizing took place to uncover themes that emerged. Data analysis in qualitative research consists of comparing and organizing data, then reducing the data into themes through a process of coding, then representing the data in figures, tables, or a discussion (Creswell & Poth, 2018). It is important to note that data collection and data analysis occurred simultaneously. Written notes and Zoom recordings were transcribed into an excel spreadsheet which was organized by interview question and interviewee response. Themes that emerged were coded via color and by highlighting keywords. This process was completed immediately following interviews and ensured capture of any thoughts, hunches, ideas, tentative themes, things to pursue, or additional questions that I might want to address in successive interviews (Merriam & Tisdell, 2016).

The process of coding is central to qualitative research and involves making sense of the information collected from interviews (Creswell & Poth, 2018), essentially creating categories of themes emerging from the participants stories or responses. Merriam and Tisdell (2016, pg. 199) take the mystery out of coding by explaining that coding is “nothing more than assigning some sort of shorthand

designation to various aspects of your data so that you can easily retrieve specific pieces of data” when desired and necessary. As part of the writing process, each theme is described, discussed, and supported with noteworthy participant quotes.

The assessment of the statewide impact the in-school savings program has had on Nebraska in terms of student participation numbers and aggregate student savings is addressed both qualitatively and quantitatively. Data collection was completed as part of a qualitative process by asking the financial institution partners for summary data after which a quantitative analysis was completed to provide a statewide estimated program savings impact.

IRB and Ethical Considerations

As is true for any research working with human subjects, this project was submitted to the Institutional Review Board (IRB). In fact, this study includes three distinct IRB applications in that there are three different groups of human subjects: high school students, education partners, and financial institution partners. The purpose of the IRB process is to insure proper informed consent and safety for both researcher and research participants and other ethical considerations. Each IRB application included the purpose of that portion of the study, a description of the data collection procedures, a description of how participants would be approached and the benefits they would receive including any payment, a description of how consent would be obtained and a description of how confidentiality of participants would be maintained (Creswell, 2016).

Minors are a special category of human subjects. Their young age makes them more susceptible to coercion and therefore IRB applications with research that includes minors receives a higher level of scrutiny. The subject of Chapter Four of this dissertation

is a survey of high school students who are minors. Approval from the Institutional Review Board (IRB) of the University of Nebraska Lincoln concluded that while the project did include human subjects who were minors, the partner school, Thayer Central Public Schools, was conducting the survey and providing the researcher with non-individually identifiable information. Consequently, IRB approval received on January 4, 2019 determined the research study was considered a program evaluation and no further IRB oversight was required. Attached in the appendix (Appendix A) are the IRB findings marked “not human subject research.”

Qualitative research includes special ethical considerations. Researchers must be cognizant of and thoughtfully consider any potential power dynamics. Bogden and Biklen (2007) provide a useful list to help avoid ethical concerns: avoid research sites where informants may feel coerced to participate; honor participants’ privacy and unless otherwise agreed to, protect their identities; honor participants’ time commitment, which may include reciprocity via token payments; treat participants with respect and seek their cooperation in the research; be clear on terms of agreement and abide by contracts; and finally, tell the truth when you write up and report your findings.

Chapter Five inquired into the perspective of education partners to the in-school savings programs. Interviews of school program coordinators were conducted. Approval from the Institutional Review Board (IRB) of the University of Nebraska Lincoln was received on January 30, 2020. The project was deemed exempt and in compliance with research regulations. The IRB exemption letter can be found in Appendix B.

Chapter Six inquired into the perspective of financial institution partners to the in-school savings program. Data on aggregate annual student participation and savings was

collected from each participating financial institution. Interviews of bank employees who coordinate the in-schools savings programs were conducted. Approval from the Institutional Review Board (IRB) of the University of Nebraska Lincoln was received on January 30, 2020. The project was deemed exempt and in compliance with research regulations. The IRB exemption letter can be found in Appendix C.

Researcher Positionality

In research, especially in a study such as this that includes both quantitative and qualitative research, positionality and reflexivity are essential considerations. Positionality refers to my role and any perceived power dynamics that I may bring to the research process. Reflexivity is my self-understanding about the background I bring to the research study and how it shapes my interpretation, how participants may be experiencing the study, and how readers may react to the study (Creswell, 2016). In essence, the assumption is that power relations are everywhere, including in the research study itself (Merriam & Tisdell, 2016). The researcher comes with their own history, perspective, place and role in the study. The issue is one of the researcher-participant relationship and how one effects the other in the research process (Merriam & Tisdell, 2016).

The above methodological issues relate to my role as the researcher in this study. Keeping in mind the importance of positionality and reflexivity in qualitative research, I acknowledge my overarching role in this study as one of a researcher seeking to explain a phenomenon, particularly from the participants' perspective. I also acknowledge that this study has been influenced by my worldview, prior experience, and professional background.

In terms of my familiarity with the focus of the study, I have fairly extensive knowledge and background with the in-schools savings programs. Since 2008, I have been employed by the University of Nebraska-Lincoln and the Nebraska Council on Economic Education. From 2008 to 2014 I worked as the Council Coordinator and was tasked with community development and growing programs. From 2014 to the present I have served as president of the Nebraska Council on Economic Education and have been tasked with primarily fundraising to ensure growth of programming and sustainability of staffing levels. The Nebraska Council on Economic Education is a separate non-profit entity housed the University of Nebraska-Lincoln College of Business whose mission is to lead a statewide initiative to advance economic and financial literacy. Throughout five centers for economic education the Council provides resources for teacher professional development, graduate education, consulting expertise on curriculum and education standards, workshops, and classroom activities and academic competitions for teachers and students in K-12 and post-secondary institutions.

When I began my tenure at the Nebraska Council on Economic Education there were only three existing in-school savings program in Nebraska. As of this writing, there are 30. My involvement in program expansion varies depending on the program. For a small number of the programs, I have been the main point of contact and have worked directly with the school and financial institution to facilitate the six month to year-long planning process and opening of the program. For the majority of the programs I have been an initial point of contact for either the school or the financial institution, for entities to learn more about the program, and then have passed the parties on to one of the

Nebraska Council on Economic Education center directors to facilitate the program planning and opening process.

The Nebraska Council on Economic Education has five centers for economic education. Each center is run by a center director who is also a faculty member at the partner state college or university where the center is housed. Centers are located at University of Nebraska-Lincoln, University of Nebraska-Omaha, University of Nebraska-Kearney, Wayne State College, and Chadron State College. The vast majority of the in-school savings programs have been facilitated by our center directors at Lincoln and Omaha. Once a program is established and opened the role of the Nebraska Council on Economic Education and its center directors is one of consultant should any additional questions or issues arise and perhaps an annual check in with school and/or financial institution program coordinators to ensure things are running smoothly and to remind them of our availability and support. Once a program is opened, staff of the Nebraska Council on Economic Education are no longer part of the day to day operations.

My dual role of establishing a small number of in-school savings programs and leading the Nebraska Council on Economic Education provide a degree of separation that allowed me to operate as a researcher with a mix of insider and outsider status (Merriam & Tisdell, 2016). My insider status provided me with access to both education and financial institution partners. My outsider status provided me with enough distance from the interviewees so as to help me ensure objectivity.

Further work to ensure objectivity in the study involved the creation of the interview protocols. To ensure clarity of the interview protocols, prior to interviews a pilot test was conducted of both the education partner and financial institution partner

protocols. Details surrounding each pilot have been addressed in each partners corresponding chapters of this dissertation. Once the protocols were finalized, all interviewees were asked to respond to the same questions. This provided a starting script for interviews as a way to ensure all interviews covered the same content and flow. Interviews were semi-structured in format to allow for additional discussion on issues that arose that may have been specific to each individual interview.

Lastly, all interviewees participated voluntarily in the research process. They were emailed an overview of the study (Appendix D and E) with an attached adult informed consent form (Appendix F and G). The emails included an overview of the research and researcher, including my status as president of the Nebraska Council on Economic Education. Participants were not provided any monetary incentives to participate. It was explained that the research sought to understand the impact of the in-school savings programs, that there may be benefits to society and the information obtained may help improve the program and increase the programs in Nebraska.

CHAPTER 4 – SURVEY OF HIGH SCHOOL STUDENTS

This chapter examines lasting effects of financial behaviors that may be attributed to participation in an elementary savings program. I conducted a survey of high school students. I asked students if they had participated in the in-school savings program while attending elementary school and asked about their current financial behaviors. This study primarily compares the responses of the students after being sorted into two groups: those that participated in the elementary savings program and those that did not participate in the elementary savings program.

This chapter also analyzes differences in financial behaviors in terms of gender and irrespective of participation in an elementary savings program. This study looks at gender differences between high school students' financial behaviors including having a bank account, working, and saving.

Quantitative Research Design

This section provides an overview of the research questions, location, survey instrument, and research sample utilized for this quantitative chapter of the dissertation.

Research Questions Addressed in this Chapter

1. Once in high school, do students who participated in in-school savings programs exhibit “good” financial habits?
 - a. Are students who participated in the elementary program more likely to be banked?
 - b. Are students who participated in the elementary program more likely to have a job?

- c. Do students who participated in the elementary program save more later when in high school?
2. In high school, do males and females exhibit different financial behaviors?
 - a. Are males and females banked at different rates?
 - b. Do males and females exhibit different work patterns?
 - c. Do males and females exhibit different savings patterns?

Location

The survey of high school students was conducted at Thayer Central Community Schools in Hebron, Nebraska. Hebron is a rural town in southeast Nebraska. As of 2017, Hebron had a population of 1,511 (City Data, n.d.). Its population had decreased by 3.5% since 2000. City Data also reports the 2017 median age was 54.4 and the 2017 median household income was \$49,153 (City Data, n.d.). The median age in Hebron is higher than in the state of Nebraska, which was 36.5 years, and the median household income is lower than that of the state, which was \$59,970 (City Data, n.d.).

Thayer Central Community Schools is comprised of three buildings at the same site: an elementary school for grades K-6, an intermediate school for grades 7-8, and a high school for grades 9-12. The entire district is comprised of just over 400 students with 113 full time students at the high school. Thayer Central is a Class 3 school district, which is the most common size district in the state of Nebraska (NDE, 2019-2020). A designated class three school is defined as any school district with territory having a population of more than one thousand and less than one hundred fifty thousand inhabitants that maintains both elementary and high school grades (NDE, n.d.).

Thayer Central has a long-standing working relationship with the Nebraska Council on Economic Education (NCEE). NCEE partnered with Thayer Central to open their in-school savings program in 2007. Thayer Central was selected as a good potential research site because of the long history of the in-school savings program and because of the long standing relationship between the researcher and the school administration. After meetings to describe the desired program evaluation and research plan, the school superintendent agreed that Thayer Central would collaborate and participate in the study. A letter of support from the school superintendent, which lays out the nature of the relationship between the school and researcher, was received and submitted as part of the IRB process (Appendix H).

Survey Instrument and Data Collection

The high school student survey protocol was constructed in consultation with Thayer Central district administrators. The survey included a maximum of 17 questions. Questions were grouped in four general categories: (1) demographics, including a question to determine if the student participated in the elementary savings program; (2) banking topics, including questions on whether students had their own bank account, when they opened it and where they banked; (3) earning income, including questions on participation in the workforce and how many hours a week the student worked; and (4) savings, including questions asking if they saved, how much and how often. Questions were delivered via Qualtrics survey software and in a conditional manner such that students received additional questions based on their previous response. For example, if a student responded that they had a job, they were then delivered additional questions

asking about the number of hours they worked on a weekly basis. If they responded that they did not have a job, no additional job-related questions were delivered.

A field test of the survey instrument was conducted in early November 2018 at a similarly-sized private high school, Archbishop Bergen located in Fremont, Nebraska. Like Thayer Central this high school is matriculated by students who attended an elementary school with an in-school savings program. After successful completion of the field test, the proposed survey instrument was presented to the research site's school board at their November 12, 2018 meeting. With some minor edits, the school board approved the survey for use along with passive parent permission for students to participate in the program evaluation research study. Attached in the appendix (Appendix I) is the full survey instrument.

Thayer Central teachers administered the survey in December of 2018. The survey was administered again in January 2019 for students who had not completed the survey in the previous administration. After completion of the survey, the school district matched individual student information on free and reduced lunch status and gifted status, removed individually identifiable student information and turned the data over to the researcher for analysis.

Descriptive Statistics for the Survey Sample

The student population of Thayer Central consists of 113 full-time students. A total of 102 students completed the survey (a 90.2 percent response rate) Data from the 102 students were analyzed question-by-question and a cross-tabulation of the data was constructed in Excel. This work was followed by an analysis of z-score proportional difference tests to statistically compare group differences in students who had

participated in the in-school savings program to those who did not participate in the in-school savings program. Regression analyses were then conducted to quantify the difference between the groups and students' later financial behaviors.

Table 2 describes the grade level breakdown of the survey sample compared with the student population. Three reasons account for why 11 of the 113 students in the school population were not included in the analysis: (1) they did not answer any of the questions (three students); (2) they were absent on the days the survey was administered; or (3) their parents disallowed their participation. It is unlikely, however, that this minor attrition had an unusual or adverse influence on the survey results because of the high response rate overall and as indicated by the similarity in response rate across grades.

Table 2. School population and survey respondents

Grade	2019 School Population	Survey Respondents	Response Rate
9	25	23	92.00
10	30	28	93.33
11	23	18	78.26
12	35	33	94.29
Total	113	102	90.20

As seen in Table 3, the breakdown of respondents by gender is relatively equal. Of the 102 survey respondents, 48 are male and 54 are females. A two-tailed z -test of sample proportions indicates there is no significant difference between the two groups (95% confident interval, $z=1.39$, $p=0.163$).

Also found in Table 3 are counts of respondents with a free and/or reduced lunch designation which is true for 29% of sample. Additionally, Table 3 reports counts for students with a gifted designation which is true for 20% of sample.

Table 3. Sample by gender, free/reduced lunch, gifted, and participation

Gender	Count	% of Respondents	Gender and FRL	Gender and Gifted	Participated in Savings Program	% Participated by Gender
Male	48	47.06	15	11	28	43.08
Female	54	52.94	14	10	37	56.92
Total	102	100	29	21	65	100

Participation in the in-school savings program in the elementary school is voluntary. Students must return a signed parent permission slip to participate in the program. As seen in Table 4, of the 102 high school survey respondents, 65 participated in the in-school savings program during their elementary school years. This accounts for 64% of the sample. The other 37 survey respondents, or 36%, did not participate in the program.

Table 4. Percent of sample that participated in the savings program

Participate in program	Count	% of Respondents
Yes	65	63.73*
No	37	36.27*
Total	102	100

*Significant difference at 95% confidence interval (2-tailed); $z=2.74$; $p=.001$

As shown in Table 5, eleven students, or 11% of the sample, did not have an opportunity to participate in the program as they did not attend Thayer Central during their elementary years. A cross tabulation of those 11 students with the 37 students in Table 4 who did not participate in the elementary school program, shows that 26 (37-11) of the 102 survey respondents who attended elementary school in the Thayer district

chose not to participate in the program. This means that the survey sample from Thayer Central had a 75% participation rate in its elementary savings program.

Of the 13 students who attended Thayer Central for at least one year, but did not attend for their entire elementary schooling, 8 participated in the program and 5 did not. I do not have data on when they moved into the district or how many years they attended Thayer Central.

Table 5. Student attendance at research site during elementary years

Did you attend Thayer Central Elementary?	Count	% of Respondents	Participated	Did Not Participate
Yes, all years K-6	78	76.47	57	21
At least one year	13	12.75	8	5
No	11	10.78	0	11
Total	102	100	65	37

Results

The data analysis focuses on a comparison of high school students who did and did not participate in the Thayer Central in-school savings program while attending elementary school. The question to understand is whether high school students who participated in an in-school savings program while attending elementary school exhibit different and better financial behaviors, once in high school, when compared to high school students who did not participate in the savings program. The comparison specifically focus on three financial behaviors: having a bank account, having a job, and savings habits. I would expect the banking behavior to be most influenced because of its direct connection to the program, students who are participating get experience with banking and having their own account at school. I also expect savings behavior to be different between for those students who participated in the program as a purpose of the

program is to instill the habit of saving. Working is a prerequisite for savings and thus it may be a behavior that is influenced by participation in the program.

Lasting Effects and Banking Habits

Being banked, (i.e., having your own checking or savings account), is an important and positive choice to ensure low cost financial services. Having a bank account can help avoid costly transactions like check cashing fees and money order fees. It may also provide easier access to low cost loans when necessary. As seen in Table 6, 92% (60 of 65) of the high school students who participated in the in elementary school savings program have their own banking account compared to only 68% (25 of 37) of the students who did not participate in the program. This difference is significant at the 95% confidence level (2-tailed); $z=2.44$; $p=.01$).

Table 6. Percent of students with bank accounts

Have own checking/savings account?	Total Count	% of Respondents	Did not Participate	% Did not Participate	Participated in ISSP	% Participated
Yes	85	83.33	25	67.57*	60	92.31*
No	17	16.67	12	32.43	5	7.69
Total	102	100	37	100	65	100

*Significant difference at 95% confidence interval (2-tailed); $z=2.44$; $p=.01$

A linear regression, shown in Table 7, confirms significant results in Table 6 and further indicates that students who participated in the in-schools savings program during elementary school are 24.7 percentage points more likely to have their own bank account in high school.

Table 7. Regression of being banked as a function of participation

Model - Banked = f (participation)					
	B	SE	β	T	P
(Constant)	0.676	0.059		11.522	0.000
Participation ISSP	0.247	0.073	0.319	3.368	0.001

Examining when students opened their own banking accounts validates the correlation between participating in the in-school savings program and the likelihood of high school students having their own banking accounts. Students who reported having their own account were then asked when they opened those accounts. As show in Table 8, 32% (19 of 60) of the students in the savings program report they opened their own individual bank account at the end of the savings program at their elementary school. An additional 18% (11 of 60) said they opened their account in seventh grade, the year following the in-school savings program and 17% (10 of 60) report they had their own account before the saving program as their parents and/or grandparents had opened it for them. Of the students who participated in the elementary savings program, the remaining 33% (20 of 60) opened their own in account in later grades. Referring back to Table 6, at the time of the survey, only 8 percent (5 of 60) of those that participated in the savings program report not having their own bank account compared to 32 percent (12 of 37) of students who did not participate in the elementary savings program.

Table 8. When students opened bank accounts

When did you open your own banking account?	Count	% of Respondents	Of the 60 ISSP participants that have own account	% of ISSP participants with their own account	Of the 25 non participants that have their own account	% of non-participants with their own account
At end of savings program	19	22	19	31.67	0	0
Before the program/parents	17	20	10	16.67	7	28
7th grade	18	21	11	18.33	7	28
8th grade	7	8	6	10	1	4
9th grade	11	13	7	11.67	4	16
10th grade	7	8	4	6.67	3	12
11 th	4	5	2	3.33	2	8
12 th	2	2	1	1.67	1	4
Total	85	100	60	100	25	100

As shown in Table 8, of the 85 students who report having their own bank account, 17 of them report their parents and/or grandparents opened an account for them prior to their participation in the savings program (10 participated in the savings program and 7 did not). Clearly, the opening of an account prior to the program is not something that can be a result of participating in the program. Even after subtracting students who had their own banking accounts prior to participating there was a significant difference between students who participated in the elementary in-school savings program and those that did not participate. As seen in Table 9, 50 of 65 or 77% of students who participated in the in-school savings program opened their own bank account, compared to 18 of 37 or 49% of the students who did not participate in the program. These two samples are statistically different from one another at the 95% confidence level.

Table 9. Comparison of students who opened bank account after program

Participate in ISSP?	Count	Have own account	Percentage	Adjustment for those that had account before program	Percentages that opened after program
Yes	65	60	92.31	50	76.92*
No	37	25	67.57	18	48.65*
	102	85			

*Significant difference at 95% confidence interval (2-tailed); $z=2.0887$; $p=.0367$

When students graduate from sixth grade and move on to middle school, they are given their accumulated in-school savings program funds. Withdrawals are not allowed prior to graduation from the elementary school unless the student moves from the district. As seen in Table 10, at the end of the program most students deposit these in-school savings program funds into their own individual bank account. In addition, 40 percent of students utilize some of the funds to make a purchase. Given the emphasis on goal setting as part of the in-school savings program, this is a positive result. If students were participating in the program with a specific savings goal item in mind, they should feel proud of themselves and purchase the item(s) they want. Students also seem to utilize any additional funds to open or add to their own individual banking account. This question was a check all that apply option and students overwhelming selected these two options.

Table 10. What students did with savings

What did you do with ISSP savings? (Check all that apply).	Count	% of Respondents
I deposited into my own account	51	78.46
I used it to buy something	26	40.00
I donated it or gave it away	1	1.54
I don't remember	2	3.08

A goal of the in-school savings program is to encourage the habit of savings. Table 11 provides some encouraging information. Sixty-five percent of respondents reported that participation in the program taught them the importance of savings. Fifty-eight percent of respondents reported that the program encouraged them to save regularly. The percentages for how money is earned and how financial institutions work are much lower at 22% and 37% respectively. These two outcomes are not the primary foci of the program, but rather additional positive outcomes and something to be further explored.

Table 11. Program influences on money habits

How did participating in ISSP influence money habits? (Check all that apply)	Count	% of Respondents
It taught me the importance of savings	39	65.00
It encouraged me to save regularly	35	58.33
It taught me how financial institutions work	22	36.67
Helped me understand how money is earned	13	21.67
It didn't	3	5.00

Lasting Effects and Employment

Students who participated in the in-school savings program are more likely to earn income while in high school. As shown in Table 12, 66% (43 of 65) of the students who participated in the in-school savings program report having a job compared to only 54% (20 of 37) of the students who did not participate in the elementary savings program. Likely due to the small sample size, the difference between the two groups is not statistically significant; however, the results do indicate a higher proportion of the students who participated in the school savings program earned income during high school. Perhaps another reason these two groups are not statistically different is that

earning income is not a specific goal of the elementary savings program but does appear to be a tangential benefit for some students. Looking back at Table 11, 22% of students who participated in the program reported that the program helped them understand how money is earned.

Table 12. Working in high school

Do you have a job?	Count	% of Respondents	Of the 65 ISSP participant	% of ISSP participant	Of the 37 Non ISSP participant	% of Non-Participants
Yes	63	61.76	43	66.15	20	54.05
No	39	38.24	22	33.85	17	45.95
Total	102	100	65	100	37	100

Testing comparison of yes responses – Not significant at 95% confidence interval (2-tailed); $z=.89$; $p=.37$; likely due to small sample size

A regression of job on participation, as seen in Table 13, confirms the findings in Table 12. Students who participated in the Thayer Central in-school savings program are 12 percentage points more likely to have a job once in high school; however, the regression results are not significant.

Table 13. Regression of job status as a function of participation

	Model - Job = f (participation)				
	B	SE	<i>b</i>	<i>t</i>	<i>p</i>
(Constant)	0.541	0.080		6.748	0.000
Job	0.121	0.100	0.120	1.206	0.231

Lasting Effects and Savings Habits

In addition to banking habits and employment status, students were asked about their savings habits. Sixty-six of the 102 survey respondents reported that they save regularly. This represents 65% of the high school population. There is not a statistical

difference between students who participated in the in-school savings program and those that did not participate. As seen in table 14, both groups report fairly equally they that save regularly with 66% (43 of 65) of the in-school savings program group reporting that they save regularly and 62% (23 of 37) of the non in-school savings program group reporting that they, too, save regularly.

Table 14. Savings habits of high school students

Do you save regularly?	Count	% of Respondents	Of the 65 ISSP participant	% of ISSP Respondents	Of the 37 Non ISSP Participants	% of Non-Participants
Yes	66	64.71	43	66.15	23	62.16
No	36	35.29	22	33.85	14	37.84
Total	102	100	65	100	37	100

Table 15 confirms the results of Table 14 that students who participated in Thayer Central’s in-school savings program are 4% more likely to save regularly when compared to students who did not participate, but the result is not significant.

Table 15. Regression of saving regularly as a function of participation

	Model: Save regularly = f(participation)				
	B	SE	β	T	P
(Constant)	0.622	0.079		7.841	0.000
Saving regularly	0.040	,099	0.040	0.402	0.689

For the 22% of students, in Table 16, who report they have a job, but they are not saving regularly, the finding is statistically significant. These students likely view a job as a means for consumption rather than saving.

Table 16. Job and save regularly

Do you have a job?	Count	% of Respondents	Save Regularly?	% with job
Yes	63	61.76	49	77.78*
No	39	38.24	14	22.22*
Total	102	100	63	100

Significant difference at 95% confidence interval (2-tailed); $z=4.27$; $p=0.0$

A promising finding from the current study is that students who participated in the elementary savings program more often report saving at higher rates compared to students who did not participate in the program. As reported in Table 14, 66 of the 102 students in the survey reported they saved regularly, and as broken down in Table 17, 43 of the 66 participated in the elementary savings program and 22 did not. When asked how much they were saving, 65% (28 of 43) of students who participated in the in-school savings program reported they save more than 10% of any income, compared to 57% (13 of 23) of students who did not participate in the elementary in-school savings program. Additionally, students who did not participate in the program reported twice as often that they did not know how much they saved. While the two groups are not significantly different, likely due to the small sample size, it does appear that students who participated in the in-school savings program have a better handle on purposeful savings.

Table 17. How much do high school students save?

How much do you save?	Count	% of those that save regularly	Of the 43 ISSP participants that save regularly	% of ISSP Respondents	Of the 23 non ISSP participants that save regularly	% of non ISSP participants that save regularly
More than 10%	41	62.12	28	65.12	13	56.52
10%	14	21.21	9	20.93	5	21.74
Less than 10%	7	10.61	4	9.30	3	13.04
I don't know	4	6.06	2	4.65	2	8.70
Total	66	100	43	100	23	100

Testing difference in more than 10% - NOT Significant at 95% confidence interval (2-tailed); $z=0.51$; $p=.61$

As an additional test to see if participation in the program had a lasting effect and correlation with increased savings rates, a linear regression was run of savings rates on participation. In agreement with the cross tabulation in Table 17, the regression, as shown in Table 18, is not significant.

Table 18. Regression of save more than 10% as a function of participation

	Model - Saving rate = f(participation)				
	B	SE	β	t	p
(Constant)	0.857	0.070		12.238	0.000
Saving at 10% or more	0.045	0.086	0.068	0.526	0.601

Differences in Financial Behaviors by Gender

The current study finds that while males and females at Thayer Central High School report that they have jobs in fairly equal numbers as shown in Table 19, males report saving regularly more often than females. As reported in Table 19, 73% of the males report that they save regularly while only 57% of females report the same. The reasons for this difference are unknown.

Table 19. Savings and Work Habits by Gender

Gender	Count	% of Respondents	Have Job	% Gender with Job	Save Regularly	% Gender that Save Regularly
Male	48	47.06	31	64.58	35	72.92%
Female	54	52.94	32	59.26	31	57.41%
Total	102	100	63		66	

Not significant at 95% confidence interval (2-tailed); $z=1.31$; $p=.19$

A regression of the data confirms that the differences in savings by gender are not significant. However, as indicated by the regression results in Table 20, the significance is borderline at the 10% level with females, coded as dummy variable of one, saving 15.5 percentage points less than males.

Table 20. Regression of saving regularly as a function of gender

	Model - Save regularly = $f(\text{gender})$				
	B	SE	β	t	p
(Constant)	0.729	0.069		10.607	0.000
Saving regularly	-0.155	0.094	0.162	-1.642	0.104

The difference in terms of saving regularly by gender is concerning; however, a positive result, as shown in Table 21, is that males and females in high school at Thayer central report rather equally that once in high school they have their own bank accounts. Eighty-five percent of male and 82% of female high school students report having their own bank accounts.

Table 21. Banking habits by gender

Have own bank account?	Count	% of Respondents	Male	% Male	Female	% Female
Yes	85	83.33	41	85.42	44	81.48
No	17	16.67	7	14.58	10	18.52
Total	102	100	48	100	54	100

The equality between the genders of having their own bank accounts is confirmed by a regression on being banked as a function of gender as shown in Table 22. Males at Thayer Central high school are only 4 percentage points more likely to have their own bank account compared to females at Thayer Central high school and the difference between the genders is not significant.

Table 22. Regression of bank account by Gender

	Model - Banked = $f(\text{gender})$				
	B	SE	β	t	p
(Constant)	0.854	0.054		15.745	0.000
Banked	-0.039	0.075	-0.053	-0.528	0.599

Participation in the elementary in-school savings program at Thayer Central appears to make a significant difference in whether high school males have their own bank accounts. As shown in Table 23, 96% of the males that participated in the elementary savings program at Thayer Central have their own checking or savings account once they are in high school, yet only 70% of the male students who did not participate in the elementary savings program have their own checking or savings account. There is a significant statistical difference between these two groups.

Table 23. Male banking behavior after program participation

Have own bank account?	Count	% of Respondents	Male	% Male	Participated in ISSP	% Participated	Did not Participate in ISSP	% Did Not Participate
Yes	85	83.33	41	85.42	27	96.43*	14	70*
No	17	16.67	7	14.58	1	3.57	6	30
Total	102	100%	48	100%	28	100%	20	100%

*Significant difference at 95% confidence interval (2-tailed); $z=1.999$; $p=.0456$

Participation in the Thayer Central Elementary in-school savings programs also appears to make a difference in female students have their own banking account once they reach high school. As show in Table 24, 89% of the female students who participated in the elementary savings program have their own bank account once they are in high school compared to only 65% of the female students who did not participate in the program. Although the two groups not statistically different, this is likely due to the small sample size.

Table 24. Female banking behavior after program participation

Have own bank account?	Count	% of Respond ents	Female	% Female	Participated ISSP	% Particip ated ISSP	Did Not Participate in ISSP	% Did not Participate ISSP
Yes	85	83.33	44	81.48	33	89.19	11	64.71
No	17	16.67	10	18.52	4	10.81	6	35.29
Total	102	100	54	100	37	100	17	100

NOT Significant difference at 95% confidence interval (2-tailed); $z=1.52261$; $p=.1279$

As a robustness check, given the categorical nature of the variables, Chi-Square tests were performed on all of the above relationships. The results confirmed the results of both the z -scores tests of differences and linear regressions.

Power Analysis

One of the limitations of the survey research is the relatively small sample size. The survey was conducted on the entire high school student body at Thayer Central, but the population is only 113 students. Although the response rate is quite high (90.2%), the resulting sample is only 102 students with 65 participating in the savings program in elementary school and 37 not participating. As the data get analyzed further in terms of

participation and financial habits by gender it means segregating the data into smaller and smaller groups.

A power analysis, using a sample size calculator, was conducted. Assuming results for a Chi-Square test, which was run for a robustness check, and given the sample size of 102, with group 1 of 65 participating in the program (treatment) and group 2 of 37 not participating in the program (control), the sample of 102 is not large enough to show an effect. The sample size would need to be 125 with at least 83 students in the treatment and at least 42 students in the control group.

The fact that I find a significant difference even with a sample of 102, when typically you would need a sample size of 125 to find such a difference, provides additional support for the result indicating that students who participated in the in school savings program are significantly more likely to have their own bank accounts once they are in high school. This also provides support for findings showing students who participated in the program are more likely to have a job and are saving at higher rates when compared to students who did not participate in the program, albeit the findings were not statistically significant, perhaps due to the small sample size.

CHAPTER 5 - PERSPECTIVE OF SCHOOL PARTNERS

This chapter investigates the perspective of the school partners participating in Nebraska's in-school savings program in elementary school. It focuses on educators who directly interacted with the students involved in the program, both student tellers and student depositors. The commitment for an elementary school to take on an in-school savings program is a sizable one. They must provide someone from the school to oversee the project. This includes coordinating the student tellers and their weekly work schedules. This also includes being present during weekly deposit day. Once the attention and hoopla of the grand opening and have concluded, do school partners feel the program is living up to their expectations? Do they feel the program is worth the time commitment and students are getting something positive from participation? This chapter will provide a qualitative analysis of the perspective of the elementary in-school savings program education partners.

Qualitative Research Design

This section provides an overview of the research questions, the interview process and protocol, and research sample.

Research Questions Addressed in this Chapter

- Why do elementary schools take on an in-schools savings program partnership?
- What do educators think students gain from participation in the program?
- Given the limited time in an educational day and school year, is an in-school savings program conducted in elementary school an efficient and effective way to reach students with financial literacy?
- Does program participation differ by gender?

Before I conducted this study, it was my hypothesis that elementary school partners agreed to host and implement in-school savings program for one of two reasons: 1. They could see the tie to Nebraska's state social studies standards which include financial literacy requirements (NDE, 2019) and/or district standards or 2. As educators they believed in the benefits of hands on, real world experiential learning the program strived to provide. This qualitative analysis brought forth open discussion and a much more nuanced understanding of why schools partner and what coordinators feel students gain from participation in the program.

Interview Procedure

On March 4, 2020, an initial email was sent to the 25 in-school savings program elementary school partners that were in operation prior to the 2019-2020 school year. The email explained the research project and asked if the education program coordinator would be willing to set up a time to be interviewed to discuss their in-school savings program. The email explained the nature of the interview questions and explained that all results would be reported generally and anonymously, and that no singular programs would be named in the research reporting. As interviewees responded interviews were set up and the process began. The first interview was conducted on March 10, 2020. For those programs from whom a response had not yet been received follow up emails were sent on March 7, March 21, and April 9, 2020. Final interviews were conducted on April 9, 2020. Interviews were conducted via Zoom video conferencing, recorded and then returned to for detailed note taking on the interaction. The interviews took an average of 40 minutes.

Interview Protocol

A pilot test of the school partner questionnaire was conducted in January 2020. I emailed the draft version of the questionnaire to one of the school partners and invited them to review the questions. I specifically asked if all the questions made sense and if they would be able to respond to each of them. The response I received allowed me to see that a couple of the questions were too vague and one question used verbiage that included language with which the person was not familiar. The original question asked, “Do you have any idea of stories of upstream education? The response was, “I have no idea what upstream education is so I can’t really answer this.” The question was then edited to include a description of what was meant by upstream education (when students pass information onto parents). The second question that evolved in the pilot was a question about how the program fits into the school curriculum. The question was originally worded, “How does the program fit into schooling/curriculum? The respondent replied, “Are you asking about how it fits into the school day or just curriculum? What is schooling?” The question was amended to be, “Do you know if the program aligns with any school curriculum/standards? Given the pilot feedback, the questionnaire was amended for clarity.

After the first two interviews were conducted it was clear that a couple of additional demographic questions needed to be added to the questionnaire as it would be beneficial to have this information for all programs. These included questions on operations of the program and included what day of the week the bank operated, what time of day, average number of weekly deposits, grade levels that participated in the program, and student population of the school for those grades participating in the

program. The final education partner questionnaire included 18 questions. The complete and final interview protocol can be found in Appendix J.

Sample

The population from which the sample is derived consisted of all 25 Nebraska in-school savings programs that were opened prior to the 2019-2020 school year. The sample for this study includes the 14 programs that responded to my request to participate in interviews. Of the 14 programs six are in rural school districts and eight are in suburban school districts. Eleven of the schools in the study are designated Title 1. One school is not a Title 1 School and two of the schools are private schools that specifically cater to low-income, scholarship-aided students. A total of 11 interviews were conducted via Zoom video conferencing. One interview was conducted via telephone. Two respondents requested that I email them the questionnaire and they would reply with typed answers to the questions rather than set up an appointment for an interview. The sample of 14 represents a 56 percent response rate. Despite four email requests, seven of the 25 program coordinators never responded.

One explanation for the low response rate is the fact that the education partner interview process took place in the midst of the spring 2020 Covid-19 pandemic. Schools were closing and transitioning to remote education. The two education partners that asked to have the questions emailed, rather than interview via Zoom, cited overwhelm from Covid-19 as the reason for their request. Another program coordinator responded to my email inquiries and said they were willing to participate but they were overwhelmed with Covid-19 transitions. They asked me to follow up in successive weeks, which I did. The

scenario repeated and eventually, they simply stopped responding to my emails and data on their program was not collected.

Program coordinator turnover is another explanation for the low response rate. For three of the programs, the listed contact responded to my inquiry to let me know they were no longer at the school or they had retired. They forwarded the inquiry to the new program coordinator and/or provided me with contact information and I followed up. Only one of these three programs is included in the study and it is one of the two programs that asked for the questions to be emailed to them.

Results

On the whole, the in-school savings programs are generally well thought of by the education partners. One education program coordinator said, “It’s a great idea, love that students are in charge of it. Keep it up. Incredibly valuable, especially for Title 1 schools.” Another program coordinator had this to say,

“Education is important, but the social and emotional needs of the kids is equally important. Making relationships and caring about people is far more important. Testing is important, but kids caring about themselves will make them try their hardest. Doing a program like this helps with that.”

Themes that emerged from the interview process include the flexibility of the program, everyone does it a little bit differently; exploration of marketing activities and a desire to increase participation; a significant difference in participation by gender of program tellers with more female than male; and when in a K-12 building, a model of partnering with the school’s Future Business Leaders of America program. The results

discussed below include the responses to the research question for this chapter followed by a discussion of the emerged themes.

Why do elementary schools take on an in-school savings program partnership?

For those program coordinators who were involved when the program opened in their school, the responses to this direct interview question were quite similar. The responses revolved around wanting students to have the hands-on, real life experience, to highlight the importance of financial education and saving, and to partner with local community banking partners. Here are a few of the responses that typify the theme:

“I thought it would be a good way to start these personal finance concepts with younger students who would create a habit of saving that would carry on through their lifetime.”

“To give kids the opportunity for the real life experience; kids need to be financially responsible and that's something that we maybe don't spend any time on. This is a great way to do both of those things. Also the fact that we had a willing bank partner in the community.”

“I knew that this would be a good learning opportunity not only for kids that wanted to participate in terms of savings, but for the older kids to have the responsibility of being a tellers. Also really liked the idea of having a partnership with the local bank.”

"I was the spearhead; our student population doesn't always hear about savings in the home. We have high poverty, 80% free and reduced lunch, [and] that's a lot of families living paycheck-to-paycheck and savings is not always in their scope of modeling. I thought this would be a way of modeling, even if not actively participating at

least it's on their radar and maybe when they do have a chance to do it and earn some money that they'll think back to these days.”

“It was a no brainer, awesome opportunity for our kids to develop the knowledge and skills and the importance around saving money and why we do that. As far as tellers, it has given some of our silent leaders an opportunity to find their niche. For example, we have a student on an individual education plan (IEP) who is very low functioning and he has been an amazing teller.”

As you can see from the program coordinator quotes, the hope for the program was to provide a multifaceted education in the form of a real world experience. This experience would provide exposure to and modeling of financial topics, especially savings. In essence, schools that opted to establish an in-school savings program were striving for what Johnson and Sherraden (2007) called financial capability, a situation where young children have access to financial education accompanied by participation in meaningful financial services.

One of my hypotheses was that a mapping of the program to Nebraska state standards (NDE, 2019) would be an important part of the decision making and reasoning for schools to take on the program. None of the programs cited the match of the standards as part of the reasoning to opening the program. When I specifically asked if the program aligned with any required school standards or curriculum most of the responses were that they were unsure and that they would have to look it up, but felt sure that it would align with some of the math, economics, and college and career readiness standards. Two quotes exemplify the almost universal response and feeling of the interviewees: “Not sure. I'm sure there's some financial literacy stuff in there. Didn't matter – we were just

excited and wanted to do it” and “Financial literacy is important. We were more concerned about the experience rather than alignment. I am sure there is alignment in the standards and benchmarks, [and] there are some kids that would not conceptually understand a bank except for seeing it in action at school.” One coordinator explained that she remembered the standards correlation as a talking point when she pitched the program to administration and the school board.

In general, the education partners I interviewed explained that their schools took on the in-school savings program because they saw it as a real world experience for students. They saw it as a way to educate and model the importance of financial education and specifically savings. Educators also understood and believed the program aligned with several standards, but specific standards alignment was a secondary consideration in the decision making process.

What do educators feel students gain from program?

All study participants felt the in-school savings program was a beneficial educational experience for students. Several interviewees talked about the accumulated savings of participants. One interviewed coordinator said, “[I am] pretty excited about how much money they saved. The current balance is \$21,000! As of Feb 21, 2020 we have \$33,451 in total savings” and another said, “We are starting to see students with significant checks upon graduation.”

More often, respondents indicated the program provides a multi-dimensional learning opportunity for students, well beyond learning about financial literacy and savings. These learning opportunities for students included exposure to responsibilities related to having a job and associated soft skills. One participant explained, “Best thing

about this program is the job aspect for the tellers. Really teaches them about responsibility. There are so many kids that are leaving high school and college not knowing how to work or not knowing how to attend a job. This program is a great starting point where they can learn the lessons early.” Another interviewee explained it this way, “I think tellers improve their social-emotional skills, self-confidence, responsibility, and money math skills.”

Other program coordinators talked about the program benefits in more holistic ways. They expanded on the student gains in terms of responsibility and soft skills, to say that that program has benefits to the school and future benefits to society. “The tellers especially look forward to the opportunity. They generally come from consistent depositors from previous years and now it’s their time to shine. It’s a good foundation for what we’re trying to develop, students who are contributing members of society. The job skills learned in terms of responsibility and I’m scheduled for this time and have to show up, especially for the community of students who we serve in our very high poverty school. It’s a good opportunity to develop leaders and responsible students.” The response from one of the longest running programs was, “There are so many skills that the kids learn. I think it’s important for kids to do things and be involved. This is kinda fun, working with seven other people and building relationships. Relationships with adults too from the bank. That’s worth it for the school. The mentoring aspect is amazing. There is some competition between teachers and that helps to build morale. It is much more broad-base than I even give it credit for. It is part of the culture of the school.”

Is it an Effective Way to Produce Financial Education?

Forty-three percent of the interviewed educators reported they believed students were getting a foundation in financial education, specifically savings. One educator supported their evaluation this way, “I believe it is. When I talk to our local bank I hear kids are saving more than they did 10 years ago. Makes them fully aware as they move up through the ranks and get ready for college, they better start saving for something. It plants a seed.” Another simply stated, “I think it makes an impact on the students and their savings patterns. Teaches them the importance of saving.”

Two interviewed educators reported that they were not sure, given how the program was implemented, how it was possible to truly measure and assess if students were learning financial literacy. The responses were, “I’m not sure how we measure that. I have no idea on long term impact” and “It’s hard to say; I think so. From the elementary stand point, it is yet to be determined if they are learning the importance of saving. It’s hard to gauge if they are understanding the importance of saving. I think you will see it when some of the younger kids have done it for 6 six years.”

Program Differences by Gender

This study found a significant difference by gender in terms of teller participation in the in-school savings programs. As shown in Table 25, this was a clear and almost universal finding. Sixty-one percent of the student tellers reported in the study are female. Twelve of the 14 programs included in the study reported a higher percentage of female tellers compared to male tellers. The 14 programs in the study reported a total of 188 tellers, of these 115 were reported female. Given the universal finding in the literature that males score significantly higher on financial literacy knowledge exams, this finding

is quite thought provoking and brings more questions than answers to the financial literacy gender gap.

Table 25. Program teller breakdown by grade level, count, and gender

Program	Grade(s) of tellers	Number of tellers for the current program year (2019-2020)	Gender breakdown *more females
1	6th grade	8	*5 female/3 male
2	4th grade	7	*6 female/1 male
3	5th graders	10	*7 female/3 male
4	5th grade	15	*10 female/5 male
5	5th grade	13	6 female/7 male
6	5th grade	18	*11 female/6 male
7	5th grade	6	*4 female/2 male
8	high school FBLA students	20	*12 female/8 boys
9	5th and 6th graders	6	*4 female/2 boys
10	high school FBLA students	15	*12 female; 3 boys
11	6th grade	6	*5 female/1 boy
12	7th and 8 th	12	*9 female; 3 boy
13	7th graders	9	*6 female; 1 males
14	high school FBLA students	36	18 female/18 boys **115 females- 64.5% 66 male - 36.5%
		181	

**significant difference of females to males: z-score = 3.608387
p=.0003

Universally, tellers voluntarily apply for the position. Female students voluntarily applied more often than male students. Each school has some nuance to this. For example, at one school, the bank visits each 4th grade classroom to talk about the opportunity. Every student is provided with an application and students complete and submit the application if they are interested. This school has a teller breakdown of six females and one male. At another school, the education program coordinator asks the 4th grade teachers for recommendations and the students fill out an application if they are interested. Parents of students who submitted an application are contacted to make sure they support their child's involvement. This is important because these students will have to come to school before school on their day to work and parents will likely need to help ensure students arrive early. For the 2019-2020 program year, 12 students were recommended, 10 of the 12 completed the application (one male and one female choose not to apply), and all of the parents supported the opportunity. These 10 students were hired as tellers, seven were female and three were male. As part of the application process, many schools include a final oral interview to be hired. One school explained their process this way: interested students filled out application and students who have high marks in character development and did not miss any of the math problems on the application qualified for an interview. The program coordinator further explained that all students who were interviewed were hired. Two-thirds of the tellers at this program were female, 10 of 15. As universally explained by partner coordinators, the interview is an important real-life experience for students. All program coordinators also explained that the interview was a formality to provide the experience and that if a student made it through to an interview, they would be hired; however, this was not known to the student.

In terms of program participation and gender of depositors, four of the programs reported that there are more females participating and depositing compared to males. The responses included: “the majority of depositors are girls,”; “22 girls and 19 boys deposited from January through March,”; “regular depositors seem to be more female; there are many that come every week or every other week”; and “50 girls and 37 boys.” The other ten programs included in the study reported they did not notice any difference in depositors by gender or that the participating students were split equally in terms of gender.

Themes

Themes that emerged from the interview process include the flexibility of the program, everyone does it a little bit differently; an exploration of marking activities to increase low participation levels; and when in a K-12 building, a model of partnering with the school’s Future Business Leaders of America program.

Program Flexibility

After talking with 14 program coordinators, it is clear that each program is run quite differently and programs are constantly trying new things to find what works best for the school and the program. Programs operate on different days of the week and at different times of the day. Most programs are open and accept deposits on a weekly basis, but two of the programs included in this study are open on alternating weeks. Half of the programs included in the study are open before the instructional day begins. Student tellers arrive to school early on their scheduled work days. The cited reasons for choosing operating hours before school was to prevent students, both student tellers and depositors,

from missing class. One coordinator put it this way, “curriculum continues to get more and more. The schedule is so full that even taking 45 minutes each week is tough.”

Programs are also in different locations inside the school ranging from inside the front the doors, to a corner in the cafeteria or gym, to having its own shared classroom with other programs.

Statements from program coordinators exemplify program flexibility. One person said, “I have added a lot of stuff over the last 3 or 4 months,” which demonstrates not only the flexibility of the program, but the desire of the program coordinator to make it their own and improve it to fit their educational setting. Another example comes from a program coordinator who said, “Last year they used a certain application that I thought could be improved and once I realized I had more power over this thing than I thought I did, I sorta of changed the application a little bit. I added in some important things that weren't there before like requiring teacher recommendations on their teller application,” which confirms flexibility to make desired improvements to enhance areas each school program feels is important for their situation. Quotes from two program coordinators summarize the theme of program flexibility quite well, “Every year we fine tune it just a little bit” and “I took what Clinton did and replicated it and then fine-tuned it for our school.”

Low Participation Levels and Marketing

Fifty-seven percent of the study participants cited a struggle for their program was that of low participation and a desire to increase participation. Coordinators said, “participation is low, students seemingly don't care”, “Would like to see more students”, and “our deposit numbers are not too high.”

The median participation rate for the programs is 8% of the student body eligible to participate in the program. Table 26 provides a breakdown of each program's participation rate. Also included is a categorization if each program is below, equal to, or above the median rate. Given the positively skewed nature of the distribution, median is the most accurate measure of central tendency with, by definition, seven programs above the median and seven programs below the median participation rate.

Contrary to my expectation, there is no correlation to higher participation based on time of day the program is offered. However, there does appear to be a correlation between a program in a rural setting and having a higher than average participation rate. Five of the six rural programs are above the median participation rate with only one below the average. Likewise, at the other end of the population spectrum, there seems to be a correlation between being located in a suburban school district and having a program participate rate below the median participation rate. Six of the eight suburban schools are below the median participation rate, while two of the suburban programs are just one percent above the median of the programs in the study.

Table 26. Program participation rates

Program	Location	Title	Time	School pop for program grades	Avg. deposits /week	Participation Rate	Above/ Below Median Rate
1	Rural	Yes	During; beginning of day	215	72	0.33	↑
8	Rural	Yes	Before school	350	60	0.17	↑
9	Rural	Yes	During; afternoon	52	20	0.38	↑
10	Rural	Yes	Before school	323	18	0.06	↓

11	Rural	Yes	During; afternoon	93	12	0.13	↑
14	Rural	Yes	Before school	217	25	0.12	↑
2	Suburban	Yes	Before school	300	20	0.07	↓
3	Suburban	Yes	Before school	400	10	0.03	↓
4	Suburban	No	During; afternoon	600	23	0.04	↓
5	Suburban	Yes	During; beginning of day	460	40	0.09	↑
6	Suburban	Yes	During; afternoon	240	12	0.05	↓
7	Suburban	Yes	Before school	375	20	0.05	↓
12	Suburban	N/A	Before school	250	10	0.04	↓
13	Suburban	N/A	During; beginning of day	164	15	0.09	↑
Total				4039	357	0.08	7 above 7 below

As stated previously, 57% of coordinators noted a desire for higher participation rates. Of these, 62.5% discussed specific avenues they were employing in order to increase participation. For example, one program coordinator explained, “We are really working on marketing to increase depositors. The bank has created a monthly drawing of \$5 and \$10 prizes and once a quarter the bank does a \$25 scholarship that gets added to student savings account. Every time a student deposits in the month/quarter they get an entry into the drawing. They have also incentivized teachers. If they teach a 30 minute lesson, their name is entered into a prize drawing. We are trying to get all teachers to promote financial literacy.” This comment is from a program that was at the time of the interview below the mean participation rate, but the program coordinator also reported

that, “our average number of deposits was 10 and increased to 18 after some additional marketing.” Similarly, another program coordinator explained that they were seeing 12-15 depositors each week. After the coordinator visited all the first grade classrooms to talk about the program, the average number of weekly deposits jumped to 20.

Also worth noting, in terms of low participate rates, are independent comments from two different coordinators explaining that many of their students already have bank accounts and as such, students do not participate in the in-school savings program. One coordinator said, “I want to have 100% participation, but some kids already have a savings account.” While a second coordinator noted, “Our deposit numbers are not too high. I think one reason is we have quite a few students who already have established savings accounts outside of our program.”

A desire for higher participation rates is a common theme among program coordinators of in-school savings programs. Schools in rural settings have higher participation rates than schools in suburban settings. Coordinators from both suburban and rural districts were actively pursuing increased participation through marketing activities. That said, a 100% participation rate is likely unachievable given the diverse backgrounds of students and the fact that students may already have their own savings accounts outside of the in-school savings program.

FBLA Partnerships

The Nebraska in-schools savings program began in 2002. The program was designed as a hands-on, real-life education experience for elementary students. Relatively recently, the program has expanded to include a model that partners with a school’s high

school Future Business Leaders of America program, a national non-profit and the largest career student organization in the world (FBLA, n.d.).

The first of these models surfaced in 2015 with one of the rural programs in this study. Since then two additional programs have opened, both in 2018, and patterned after this model. One of the program coordinators said this about their program getting started, “It was a coincidental thing. I saw a story about the program in the FBLA newsletter. The same week I saw a kid put .58 cents in the give a penny and take a penny jar at the store check-out counter and thought to myself clearly kids need to better understand savings. That same week I asked the bank who happened to also be celebrating their 100th anniversary and felt this would make a wonderful project to honor the celebration.”

Unique to these models is the fact that the entire kindergarten through 12th grade are in the same building. This allows the upper and lower grades to easily interact with one another. With the FBLA program model the high school students are the tellers operating the in-school savings program. The program is a part of the FBLA chapter at the school and is much more student led compared to those operated by elementary student tellers.

The coordinators expressed many benefits to the FBLA model. One coordinator said, “I know from the high school side [that] it’s created confidence. There were kids that were apprehensive about going in to count money in front of people and being responsible for that and we’ve seen growth. You can see confidence and kids opening up.” Another coordinator explained how they had the high school students visit each of the elementary classrooms and teach a personal finance lesson which was a benefit for both the high school and elementary students. When asked what was going well with the

program, this program coordinator explained that one of best things was the job experience for the FBLA tellers. The coordinator further explained that they have a work schedule and if someone can't make their shift they are responsible for finding their own sub, which is an adult type of experience being provided at the high school level. The coordinator also explained that the student tellers are required to audit at end of the shift and ensure the received deposits match to the total monies received. It was a very true to life experience and opportunity for students involved in program and in FBLA.

In general, education partners felt positively about the in-school savings programs. They saw many benefits from participation in the program, from more student mentoring to positives in school culture and new niche leadership roles for students who may not have otherwise had a leadership role. Program coordinators unanimously believed the program was having a broadly positive impact on students and was worth implementing, but there was no way to systematically measure specific impact on financial literacy.

CHAPTER 6 – PERSPECTIVE OF FINANCIAL PARTNERS

A complete understanding of the Nebraska in-school savings programs necessarily includes the perspective of the financial institutions program partners. Financial institutions take on a significant commitment, both financially and in employee time, to sponsor an in-school savings program. At least one employee (and sometimes two or three) of the partner financial institution will visit the school each week on deposit day to assist and oversee the program, work with students, and collect the student deposits. The financial institution employees conduct student teller training and keep all the records of the in-school savings program student account. This includes auditing of the account to ensure accuracy of each students' balance. The financial institution incurs the expense of providing the savings incentives and program signage displayed at the school. After the hoopla and attention of the grand openings have passed, do the financial institution partners, and specifically the banking representatives that visit the schools each week, think their support for this experiential savings program is worthwhile? Do they think the program is making an impact? This chapter provides a descriptive analysis of the perspective of in-school program financial institution partners whose program were in opened prior to the 2019-2010 school year.

Qualitative Research Design

This section provides an overview of the research questions, the interview process and protocol, and research sample.

Research Questions Addressed in this Chapter

- Why do financial institutions partner and what do they think they get out of it?

- Is it worthwhile for financial institutions, given cost and time involved in running an in-school savings program in elementary school?
- What is the impact in terms of student savings?

Prior to conducting this study, it was my hypothesis that financial institution partners were participating in programs for two reasons: 1) as part of their service to the community and a way to earn their community reinvestment act (CRA) credits, and 2) as part of their marketing plan to get their name out into the community. Banks may believe that if they can establish a relationship early, students will continue to bank with them in the future. Based on my experience with the in-school savings programs in my role as president of the Nebraska Council on Economic Education, I further hypothesized that financial institutions newer to the program, within a year or two of opening, would be very engaged and feel their investment is worth it, but financial institutions that have been in operation longer may feel that the costs outweigh the benefits and that these financial commitments would weigh on them in unsustainable ways after the hoopla of grand openings and media attention had faded. Lastly, I hypothesized that student participation would diminish over time, unless there was a concerted effort on the part of the financial institution to keep up the excitement from the program inception, things like grand reopening events and regular communication with parents.

Interview Procedure

Interviews with financial institution partners provided me with insights their point of view and also provided meaningful information as part of the overall in-school savings program evaluation. As the main source of program financial support, understanding the point of the view of the financial institution is imperative for long-term sustainability.

On May 17, 2020, I sent an email to all current in-school savings program financial institution partners (n=20) whose programs opened prior to the 2019-2020 school year. The email explained the research and asked if they would be willing to set up an appointment for an interview to discuss their in-school savings program. The email wording is found in the appendix (Appendix E). The email included two attachments: the IRB required adult informed consent form (Appendix G) and a request for summary student data including number of student participants and annual aggregate savings totals (Appendix K).

As interviewees responded, interviews were set up and the process began. The first interview was conducted on May 22, 2020. For those programs from whom a response had not yet been received, follow up emails were sent on May 23 and June 1. Final interviews were conducted on June 5, 2020. Interviews were conducted via Zoom video conferencing, recorded, and then analyzed for categorization of the question responses. All interviewees were the primary person tasked with coordination of the in-school savings program, and who, visited the partner elementary schools on a weekly or regular basis. The average length of the interviews was 30 minutes.

Interview Protocol

A pilot test of the financial institution partner questionnaire was conducted in January 2020. I emailed the draft version of the questionnaire to one of the financial partners and invited them to review the draft materials that would be sent to all financial institution partners. This included the draft email that explained the research and requested an interview as well as summary data on their program. I specifically asked if all the information and interview questions made sense and if they would be able to

respond to each of them. The response I received allowed me to see that the proposed interview questions were clear, the data requested could be obtained and shared, but that some minor clarifications were needed in the introductory email requesting the interviews. The suggested edits included providing clarity to financial institutions with multiple in-school savings branches and allowing them to discuss all of their branches in a single interview rather than expecting them to set up multiple interviews to discuss each branch individually.

Once interviews had begun, I realized I was not getting sufficient information to answer the research questions. I was missing a question specific as to what financial institutions thought students were gaining from participation in the program, both as student tellers and as student depositors. The responses to this question allowed me to better understand what the financial partners thought the benefits of the program were. This additional question was added beginning with the fourth of 15 interviews and was included in all subsequent interviews. The complete and final protocols, both the advanced data related request for student participation and aggregate savings information (Appendix K) and the interview questionnaire (Appendix L) are included in the Appendix.

Sample

The population from which the sample is derived consisted of all 20 financial institutions that operated Nebraska's 25 in-school savings programs that were opened and operating prior to the 2019-2020 school year. The population of financial institutions and partner schools is found in Table 27. The sample for this study included the 15 financial institutions that responded to my request to participate. Fourteen interviews were

conducted and recorded via Zoom video conferencing. One financial institution partner requested the questions be emailed and they would respond in written form. This financial institution partner stated that the week they received my request was their first week back in the bank after working from home through the Covid-19 pandemic and that coupled with them being overwhelmed with CARES Act Paycheck Protection Loans resulting from the pandemic, they would prefer to have flexibility in providing responses. The 14 interviews and one email submission response represents a 75% response rate. The median length of time these 15 in-school savings program have been in operation is 5.5 years.

Table 27. Population of financial institutions and partner schools

Financial Institution	List of Branches
US Bank, Omaha Market	Conestoga Magnet Center, Omaha
US Bank, 233 S. 13 th Street, Lincoln	Clinton Elementary, Lincoln
Thayer County Bank	Thayer County Schools, Hebron
First State Bank, Fremont	Linden Elementary, Fremont Archbishop Bergen, Fremont
US Bank, 1700 Farnam St., Omaha	Skinner Magnet, Omaha
Treynor State Bank/TS Institute	Treynor Elementary, Treynor, IA
US Bank, Omaha/Council Bluffs Market	Bloomer Elementary, Council Bluffs, IA
Liberty First Credit Union	Hartley Elementary, Lincoln Huntington Elementary, Lincoln Belmont Elementary, Lincoln Cavett Elementary, Lincoln
LincOne Federal Credit Union	Elliott Elementary, Lincoln
US Bank, Omaha/Council Bluffs Market	Hoover Elementary, Council Bluffs, IA
Trius Federal Credit Union	Emerson Elementary, Kearney
West Gate Bank	Lakeview Elementary, Lincoln
Two Rivers Bank	Arlington Public Schools, Arlington

Jones Bank	Centennial Elementary, Utica St John Lutheran, Seward
First State Bank of Hordville	High Plains/Clarks Elementary, Polk
Cattle State Bank & Trust	Arnold Elementary, Lincoln
Adams Bank & Trust, Imperial	Chase County Schools, Imperial
Adams Bank & Trust, Chappell	Creek Valley Elementary, Chappell
Dundee Bank	Holy Name, Omaha All Saints, Omaha
Adams State Bank	Freeman Elementary, Adams

Results

The in-school savings programs were universally valued by the partner financial institutions. All 15 of the financial institution partners that participated in this study said they would recommend that other financial institutions participate in the program and establish their own in-school branch. This following quote from one partner is representative of these findings:

“100% yes! It's just fulfilling to me. It's been a learning experience to see how kids react to learning and see the lightbulb go off. It's been really fun and something different. It's not sitting in an office or board room. It's a really hands on experience with people who aren't even necessarily our customers. Dealing with kids is so different than adults. If I can touch this one kid's life. I think it can help them. If I can teach them how to save today, maybe they won't be on our list of overdrafts in 10 years.”

Why Financial Institutions Partner

Before I could understand what it meant for an in-school savings program to be successful, it was important to establish criteria for success. Assessing why financial institutions partner and what their expectations were provided an understanding of what they were hoping to accomplish with the program. As interviews progressed, clear themes emerged: a desire to actualize the banking industry's core values of participating in financial education and increasing financial literacy, a desire to reach people at a young age with financial education, a desire to give back to the community, and the desire to create strong partnerships.

Eighty-six percent of the interviewees explicitly cited that their goal or part of their goal in establishing an in-school savings program stemmed from a desire to increase financial literacy. The overarching sentiment is summed up by this participant: "It is part of our core values that we support financial education in the community."

Sixty-three percent of the interviewees overtly discussed the desire to teach financial literacy to kids. One financial institution partner said, "[The] goal is to increase financial literacy. The research has been done that the sooner you get them involved, the better off they're going to be." Another put it this way, "[I] heard about the program and was very interested in doing it. It incorporates saving at a young age and I know when you incorporate that at a young age it's more likely to continue as they get older." Another partner explained, "We wanted to spread financial literacy through the community. That's what we wanted to do and this was the best way to do it. Being able to connect with kids and maybe families who don't trust the financial system. Being able to communicate with them in a different way in a different atmosphere." While yet another

expressed the universal importance of financial education as their motive to reach kids, “To get in front of the kids to teach them savings, banking, money. It's just such an important piece of life. Everybody uses it till the day they die. It doesn't matter how old or young you are.”

Student Outcomes

Financial institution partners saw two distinctly different sets of outcomes for students participating in the in-school savings programs. The outcomes differed by the role the students play in the program: student depositors who participate by bringing their accumulated savings to school to deposit into their bank account and the student tellers who work at the in-school savings program.

When it comes to student depositors, the desired outcome is one of instilling a habit of savings and financial institution partners believed that this goal was being achieved. Programs were set up to incentivize the behavior. For example, one banker explained, “[We] are hoping [students are] getting into the habit of saving. Prizes are based on savings levels and there are prizes for saving consistently. This year we've had 30 students who did not miss more than two of the weekly opportunities to save. We do a pizza party or something for those kids.” Another banker stated, “Habit is really key, and we hope they save a good amount so they can do something with it, so they can see the rewards of saving. I am amazed at how many \$500+ and \$1000+ checks we've written out. It's just amazing.” Proof of a formed savings habit is known because, “We've had some 5th graders come over with their parents and open accounts to continue to saving process.” Another financial institution had similar results, “When 6th graders get their [accumulated] savings checks we include a letter that says if you bring the money and

open an account we will add \$10, if you already have an account and add, we still give extra \$10. We can see that several do this.”

In addition to instilling the savings habit, two themes related to outcomes for student tellers emerged: 1) exposure to a first job and acquiring some basic skills required in the workforce, and 2) exposure to the banking industry as a potential career. All of the interviewees that were asked the question about what they hoped students got out of the program discussed the opportunity for tellers to get some early job training. One of the partner financial institutions whose program tellers are high school Future Business Leaders of America students talked about the student response to completing their first job application. They explained, “Tellers fill out a job application. It’s funny, they panic a little bit in filling out the job application and have lots of questions. It’s an excellent experience to have so they know what to expect later on. We use the job application for the bank with some minor tweaks.” In agreement with what the education partners stated in Chapter Five, the financial institution partners discussed the fact that student tellers were learning responsibility, customer service training and working with people, “Tellers learn responsibilities of a job and our tellers took everything seriously. It was so important to them. I see them step up and they are so patient with the little ones and it’s great to see them being such good role models.” Financial institution partners further explained that tellers also have to balance their drawers at the end of the shift and learn how important record keeping is. “Tellers are learning a little bit about banking. When you first get them in there they struggle, but they’re learning how important is to fill out the deposit slip and how important it is to balance your drawer to those deposit slips. They are getting life experience, especially when they don’t balance and they have to

figure out why. [They are] getting record keeping.” Financial institution partners described other skills acquired by student tellers such as penmanship and the importance of confidentiality.

Three of the 15 financial institutions mentioned a “hope that some of these kids will see banking as a career possibility for themselves.” One explained that, “Beyond teaching students about savings, it's a great way for us to encourage a passion for banking in general on the career side too.” One of the interviewees summed up both the themes of student tellers receiving some early job skills and an exposure to a career in banking when they stated that student tellers were learning an “appreciation for the banking industry and getting some experience in a world where it's really hard to get experience without experience. It helps them with confidentiality, customer service, how to be a good steward of others resources, and being on time.” Another explained it this way: “We hire our student tellers and we train them as if they are our bank employees. They are brought to the bank for training [and we] talk about how they are representing the bank when they are working.”

Program Impact and Success

When asked directly if they believed the program was making an impact, all 15 of the financial institutions partners responded in the affirmative. In explaining how they knew, 60% of them cited the excitement of the kids to participate and save as an indicator of program impact. One financial partner effectively distinguished between long-term impact and feedback they can see, explaining “It's one of those things that you won't know the total impact, you might not ever know it because it's something that builds up. But the thing that you can see with the students is the excitement and the pride that they

have in depositing, having their own account, and earning incentives for being good savers. The kids are so excited.”

Financial institutions are making an impact with students and students are learning the habit of savings. One participant shared,

“We see kids that were savers that are now in high school and applying to be tellers. I think it's a great program. It gets kids to save. After Christmas they bring in their Christmas money or we'll hear ‘this is the birthday money I got from grandma and I want to save it.’ Those are the things you want to year, you see them choosing to save. The kids that are there every week - we have had more perfect attendance this year than ever before. This shows the creation of habit. It's a fun way to get them started. I do feel like we're making a difference in these kids.”

Another bank partner summarized it this way: “The fact that we are seeing students who are becoming regular savers. When you see kids come in and save every week - that's a behavior - and they wouldn't have that otherwise. When you see the excitement on their faces when they see their final checks.”

Others cited relationship building as a positive impact. “It's been a very positive experience for us and the kids. We've tried to really embrace the students. Tellers (7th grade) get to come to the bank for training. It's so nice to have the one-on-one with them. It's really positive for relationship [building]. That has been really powerful to feel like a positive presence.” Another financial partner talked about building relationship and trust. They explained, “The connections that you make with the students each week is a huge

thing for me. In no way is this transactional, it is all about relationships and trust: with school, students, and parents.” Having kids recognize and know “their banker” around town was cited as a positive relationship impact. “It’s successful because they recognize us in the community. They know us personally, pointing us out to mom and dad in the grocery store, and they know our bank”, this partner explained. Another talked about how the relationships from years past form a foundation for a future connection, saying “When you have students ask you to be a reference for a scholarship or a job you know they took it seriously and think that your opinion is valuable for their future.”

Financial Institution Cost Benefit Analysis of Program

Benefits to Financial Institutions

Financial institution partners were asked what benefits their banks or credit unions received from partnering to sponsor an in-school savings program. Quite striking was the fact that 100 percent of the financial institution study participants said their primary benefit and goal was giving back to the local community and school. Comments like, “We are a small community bank and part of our culture in general is really about giving back, supporting the community and trying to support youth where we can” and “we very much believe in providing financial education and being a community partner” were universal.

After allowing for free responses from interviewees as to how their banks benefit and as a way to stimulate more thought and conversation, I asked financial institution partners to rank a list of four potential benefits they might have considered when considering a program partnership. This list included giving back to the community, getting their name out in terms of branding and marketing, increasing company morale

through employee involvement, and earning Community Reinvestment Act credits. The response rankings are summarized in Table 28.

Table 28. Financial institution ranking of program benefits

Potential Benefits	Ranked 1st	Ranked 2 nd	Ranked 3 rd	Ranked 4 th	Did Not Consider
Helping local community/giving back	15	0	0	0	0
Brand/Marketing	0	9	5	1	0
Company Morale Booster/Employee Involvement	0	7	5	0	3
CRA requirements	0	0	2	4	9

After giving back to the community, the second highest ranked benefit to financial institutions was branding and getting their name out there. When setting up a program at the school it was explained that everything is labeled, branded, and printed with the financial institution name, though the branch name is generally the name of school mascot (for example, the “Cougar Branch of [Anonymous] Bank). Nine of 15 financial institutions ranked branding and marketing as second in terms of benefits. They explained it this way, “almost every person in the community ends up in school at some point,” meaning almost everyone will see their bank name and know they are involved in helping the school, a marketing benefit for name recognition. Another said, “In terms of brand, I love that we are very recognizable in the community. Hopefully that gives us the opportunity to earn their business.” Others stated, “Exposure in the school is a great benefit. Branding and marketing is a byproduct of helping in the community” and “our band is education and being involved in the community.” Financial institutions displayed a genuine interest in giving back and marketing themselves was clearly secondary. One

partner put it this way, “We are not big on pushing ourselves. [We] let what we do speak for itself.”

Seven of 15 participants ranked company morale and employee involvement as the second highest benefit to their financial institution. One partner explained, “We want to give our associates connection to the community and give them a sense of something to be able to get out there and do and see the difference that we're making. So they can be involved and say, yeah, it really matters and know that we do make a difference in everyone's lives not just the customers who walk in the door.” Other partners explained how they use the program as a company morale booster for employee involvement: “It overall gives our staff a different perspective and encourages [them]. It opens their eyes a little on how young we can talk about savings. Every time a staff members goes, they come back and they are like ‘I love this program.’” and “Employees enjoy getting to go over, [we] send out an email asking for volunteers and put a schedule together.” Two interviewees explained why they did not consider company morale or employee involvement a benefit. They explained that the same and singular employee handles the program. They were the only one that visited the school each week; therefore, the rest of the employees are not very exposed to the program.

Contrary to my hypothesis, there was minimal to no consideration of utilizing the in-school savings program to earn required community reinvestment act (CRA) credit. Partner financial institutions explained the reasons in one of three ways: 1) they were already well above their required CRA credits, 2) credit unions do not have the same requirements as banks in terms of community reinvestment act, or 3) our partner school is not a low or moderate income school, which is a requirement to earn CRA credit.

In terms of benefits to the program for financial institutions, partner financial institutions' stated goals were primarily about investing in the community. There was some thought as to getting their name out there and branding in the hopes that students return when they have a banking decision to be made. There was also some thought about providing an opportunity for employees to participate in the program in a hands-on way and feel good about where they work. There was minimal consideration in regards to community reinvestment act credits.

Costs to Financial Institutions

To garner information on program costs for financial institutions, I asked them to provide information on start-up costs, average annual costs, and any other costs. Three of the 15 financial institutions that participated in the interviews did not provide cost data. Four of the financial institutions that participated in the interviews have multiple in-school savings branches and provided information on each of their branches. The cost information included here represents 12 different financial institutions and 18 different in-school savings programs. This accounts for 60% of Nebraska's in-school savings program that were operating prior to the 2019-2020 school year.

Financial institutions reported average start-up costs of \$2,300. The median figure was \$1260. The highest reported start-up cost was \$10,500 and was well about the rest of the reported start-up costs. The second highest reported start-up cost was \$6,600. The lowest reported start-up cost was \$400. However, this \$400 figure was from a financial institution that opened an additional in-school branch. They reported a \$4,400 start-up expense for the first in-school branch opening. The expenses for prizes and supplies for their initial branch reduced the costs for opening subsequent branches. Start-up costs

included the initial purchase of student prizes/incentives to reach increasing savings levels. For many of the programs this was the largest expense as they are often purchased branded items like water bottles or pencil pouches and required a large minimum order. Other cited start-up expenses included printing, grand opening cookies/treats, teller stand, copies, teller name tags, checkbook registers and covers, deposit forms, lanyards, coin bags, lifesavers, treasure chest prizes, banner(s), and a money box. One financial partner explained, "A lot of our initial costs were really getting the prizes and the supplies for the students. It's an upfront cost, but it will last us for a couple of years. The upfront investment is a little higher but it definitely tapers off."

Financial institutions reported average annual costs to run the program of \$563. The median figure was \$500. This highest reported annual cost was \$1,023. The lowest reported annual cost was \$250. Average annual costs included replacing prizes/incentives as needed; expenses for special promotions, a match of up to \$5 on each students' first deposit, teller training supplies, and general operating supplies.

A significant expense for the financial institutions in operating and sponsoring these programs is that of employee time. The start-up costs and average annual expenses reported above do not include expenses related to employee time. Depending on how they are operating their program, financial institutions send anywhere from one to four employees for each deposit day. Several financial institutions cautioned future potential financial partners to consider employee time when considering establishing a program. One partner explained, "It's going to be an investment of time, dollars you can minimize, and you have to be okay with that. The return on investment in terms of recognition in the community is worth it." Another cautioned about the need for employee consistency:

“You need a committed person from the financial institution. There can't be turnover all the time, you need consistency.”

Costs vary greatly and depend on how a financial institution, in partnership with the school, operated the program. In line with the flexibility discussed with the education partners, the expense to operate a program is quite flexible as well. Some programs reported additional expenses such as a \$250 annual scholarship awarded to their selected stellar teller or incentives they provide to teachers who conduct financial literacy lessons in their classrooms. Programs that had opened more recently reported a shift away from a system of rewarding students as they reached incremental savings levels and instead instituted a system of rewarding students for each deposit they made thereby putting more emphasis on the habit of savings. These programs reported lower start-up costs.

In general, financial institutions are very positive about their programs. They perceive the benefits outweigh the costs. “Now we have built this into our budget and for the good that both our employees and the students are getting out of it, it's worth it. There's been some goodwill from the community too. The Omaha World Herald came and did a story, so that's was nice too.”

Challenges

All of the financial institutions partners shared positive experiences with their program and affirmed that it is a beneficial program; however, programs do have challenges and these could be seen as non-monetary costs including things that may result in additional time on the part of employees and things that may be frustrating. Two themes that emerged as challenges: 1) commitment on the part of the school and 2) a desire to increase participation.

The most commonly cited challenge, cited by one-third of financial institution partners, was a difficulty with not enough support for the program from the school. One partner explained,

“My biggest challenge is getting the schools to follow through on their end. At one school every year we’ve had a new school representative. They don’t all do it the same and not all of them want to be as involved as the year previous. Running into this at another location as well. The last person was amazing, totally on board at talking to students about it, helping us get in front of students to talk about the savings program, and now we have another representative and she’s not as involved. I can push, push, push, that we need to do these things, but unless I can get her to do them, it doesn’t work. Buy-in and consistency is key at the school.”

In discussing what financial institutions should know prior to establishing their own in-school savings program, three additional participants discussed how commitment from the school was essential. One said,

“I would encourage the financial institution to ensure early on that they have a committed primary point of contact at the school, who is able to be physically present at each deposit day. At one of our schools we have this and she is a God-send. At the other school, the principal was very excited to get the program started and we had a ‘group’ of staff members who were interested in helping, but the staff tends to point their fingers at each other when it comes to deposit days, and it can create a less positive environment for training and depositing.”

Three financial institutions cited getting more students to participate as a challenge. This challenge was also a theme discussed by the education partners and is

exemplified in this statement, “Marketing to the students is a challenge. We've been creative with going to back to school night, have kids make posters, always wanting to increase participation.” As depicted in financial institution partner comments above, this challenge can also be linked to low commitment on the part of the school if you cannot get assistance and support in getting in front of kids to talk about the program.

Program Impact in Terms of Student Savings

A stated goal of the Nebraska in-schools savings program conducted in the elementary grades is one of providing a hands-on experiential learning opportunity that encourages students to save. Prior to this dissertation, no purposeful program-wide evaluation had been conducted to evaluate if and how much students were saving. This section provides an overview of the program impact in terms of student savings.

To understand the broad scope of student savings, financial institution partners were asked to provide summary information on aggregate annual student savings total and a count of student participation. Three of the 15 financial institutions that participated in the interviews did not provide summary student savings data. Four of the financial institutions that participated in the interviews have multiple in-schools savings branches and provided information on each of their branches. The summary student savings information included here represents 12 different financial institutions and 18 different in-school savings programs. This accounts for 60% of Nebraska’s in-school savings program that were operating prior to the 2019-2020 school year.

As described in Table 29, over the course of a ten-year period, from the 2010-2011 school year through the 2019-2020 school year, 7,364 students from 18 different schools saved just under \$385,377. The average annual savings per student participating

in the Nebraska in-school savings programs is \$54.76. It is important to note the final year of savings data, 2019-2020, was cut short by approximately seven weeks as schools were closed in early to mid-March due to the Covid-19 pandemic. This accounts for the lower than average per students savings of \$41.65 for the school year. Had schools been open the entire school year, undoubtedly total savings and average savings for 2019-2020 would have been higher, which would likely result in an increased per student average savings rate higher than \$54.76.

Table 29. Aggregate student savings by year

School Year	# of Programs	Aggregate Savings	Total # of Students	Average savings Per Student
2010-2011	2	\$7,200.79	104	\$69.24
2011-2012	3	\$13,001.22	200	\$65.01
2012-2013	6	\$21,577.28	412	\$52.37
2013-2014	7	\$24,014.89	476	\$50.45
2014-2015	8	\$34,095.31	652	\$52.29
2015-2016	9	\$31,429.59	755	\$41.63
2016-2017	10	\$51,255.80	869	\$58.98
2017-2018	15	\$74,940.77	1179	\$63.56
2018-2019	18	\$71,587.36	1366	\$52.41
2019-2020*	18	\$56,273.96	1351	\$41.65
		\$385,376.97	7364	\$54.76

*Covid-19 pandemic closed schools and shorted savings opportunities by roughly 7 weeks

One financial partner provided a nice summation of this chapter. They addressed why financial institutions partner, a cost benefit analysis, and program impact when they said,

“To me, this program is a relatively easy way to ‘walk the walk’ in terms of filling the roles that financial institutions should be taking care of in our communities. We sometimes get a bad reputation when it comes to fees, interest rates, etc. and thus programs like this can be good PR for not just each individual financial institution but the industry as a whole. I think you could also argue that even if you don’t buy into the goals of the program you need to recognize that if our industry wants to survive and thrive in the generations to come we are going to need to have financially literate customers – and a great way to ensure that is the case is to start ‘training’ them now, through programs like this. Finally, I think risks are low and, while the deposits might not be as large as some of our active customers, the relationships built through this program have the potential for significant long term growth, and are thus well worth any associated costs and inconveniences.”

In-school savings programs are meeting the expectations of financial institution partners. The program fits squarely with the banking industry’s core values of giving back to the community and providing opportunities for financial education. Partners believe that the programs are having a positive impact, that students are learning the habit of savings, and that the benefits outweigh the costs of the program.

CHAPTER 7 – SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This dissertation was a mixed-methods case study that provided an in-depth and multi-phase inquiry into Nebraska’s in-school savings programs. The study was designed to evaluate the efficacy of the program. This was done from three points of view: a longitudinal one to determine if there were any lasting effects in terms of financial literacy and “good” financial behaviors for students who participated in the program in elementary school; an educational one to assess what educators coordinating the programs thought in terms of student outcomes; and finally an institutional one to assess financial institution partners’ thoughts in terms of cost benefit analysis and program success.

Program Efficacy in Terms of Teaching Financial Literacy

The high school survey results indicated that students who participated in the in-school savings program at Thayer Central Community Schools while in elementary school were significantly more likely to have their own individual bank account as high school students. They were also more likely to earn income and they were saving at higher rates when compared to students who did not participate, though these findings were not significant likely due to the small sample size.

The finding that students who participated in Thayer Central’s in-school savings program are significantly more likely to have their own bank account when compared to those that did not participate is consistent with prior research by Batty, Collins, and Odders-White (2015), who found that having a bank or credit union located in the school increased the likelihood a student was banked. In the same study, Batty, Collins, and Odders-White (2015) found that participation in an in-school savings program increased

the degree to which students felt it was easy to save and that banks were useful. Likewise, this study found that 37% of the students who participated in the elementary savings program reported that the program taught them how financial institutions work.

Being banked is an important and positive choice to ensure low cost financial services. Having a bank account can help avoid costly transactions like check cashing fees and money order fees. It may also provide easier access to low cost loans when necessary. Research by Brown, Cookson, and Heimer (2019) found that formative exposure to local banking improved consumer credit behavior by increasing financial literacy and financial trust. Further, the authors showed that financial markets individuals encounter at a young age have a large, persistent impact on how they build and manage credit over their lifetime. Providing opportunities for students in the elementary grades to have exposure to financial institutions appears to be a way to impact their future financial life in a positive way.

Also consistent with positive later behavior resulting from formative exposure to local banking shown by Brown, Cookson, and Heimer (2019), the current study showed that students who participated in the Thayer Central in-school savings program were saving at higher rates than those that did not participate in the program. In addition, 65% of participants reported that it helped teach them the importance of savings and 58% reported that encouraged them to save regularly.

Time is one of the largest assets people have when it comes to saving early and capitalizing on compound interest. The difference in increased savings habits early on could mean astronomical differences in financial security between early savers and those that wait. Given the positive longitudinal results, the inclusion of an in-school savings

program may be an effective and efficient way to not only impress upon students the importance of savings early, but to also encourage the behavior required to do so.

Income is a necessary prerequisite to savings. The finding that students who participated in the in-school savings program at Thayer Central were more likely to be employed and earn income while in high school provides support for the efficacy of the in-school savings program. Though employment is not a direct goal of the in-school savings programs, it does seem to have a tangential positive effect in terms of imparting broader foundation towards good financial behavior.

Students who participated in the school savings program in elementary school at Thayer Central were significantly more likely to be banked once they reached high school. They were also more likely to be employed and save at higher rates than students who did not participate in the elementary savings program. The combination of these three positive findings provides support for the efficacy of the in-school savings program in teaching financial literacy. These three behaviors: banking, working, and savings, are foundational behaviors for financial security.

Program Efficacy in Terms of Partner Expectations

Education and financial institution partners felt positively about the in-school savings programs. They saw many benefits from participation in the program, including student mentoring, acquisition of job skills, and a foundation for financial literacy. Program coordinators unanimously believed the program was having a broadly positive impact on students and was worth implementing.

Both education and financial institution partners expressed a desire for increased participation. Schools in rural settings had higher participation rates than schools in suburban settings. This may be due to the differences between rural education and urban education. McCracken and Barcinas (1991) found that even though there were more extra-curricular offerings in urban schools than in rural schools, “there was no difference between the two populations in the mean number of extra-curricular activities in which they participated” (pg. 33). Each student, whether rural or urban, participated in about 3.5 extra-curricular activities. This means that students in rural settings have fewer choices and therefore participate in a higher percentage of the offered opportunities, including in-school savings programs, compared to students in urban students.

Both education and financial institution partners cited exposure to and acquisition of job skills as a benefit to students from participation in the in-school savings programs. Partners stated that student tellers received early exposure to job skills including responsibility, customer service and working with people, confidentiality, and record keeping. Though not specifically assessed in this study, this early job training from participating as a teller in the in-school savings program may be a contributing factor to the finding that students that participated in the in-school savings program at Thayer Central are more likely to be working once in high school.

Motivation on the part of education partners in establishing an in-schools savings program was the desire to provide students a hand-on, real life experience that would highlight the importance of financial education and saving. Education partners also desired a partnership with local community bankers.

Financial institutions were motivated to support the in-school savings programs as a way to invest in the community and provide a financial education experience for students. Savings program coordinators from partner financial institutions also felt there was a benefit to getting their name out in the hopes that students return when they have a banking decision to be made. They also cited providing an opportunity for employees to participate in the program in a hands-on way and feel good about where they work. There was minimal consideration in regards to earning required community reinvestment act credits.

Financial institution partners felt the costs to support the program were minimal compared to benefits. They reported an average start-up costs of \$2,300. The median figure was \$1,260. Financial institutions further reported average annual costs to run the program of \$563. The median figure was \$500. These costs exclude expenses for employee labor. They also cited challenges in terms of commitment on the part of each partner. In order to be successful, financial institutions and education partners need consistency in program personnel.

This study found that students who participated in Nebraska's in school savings programs saved an average of \$55 a year. This finding can have significant future implications for students' financial futures. If we multiply that by 6 years of savings, students, on average, have \$330 when they graduate from 5th grade. If students choose to invest their \$330 principle when they receive their accumulated savings and continue to save \$55 a year, assuming a conservative rate of 6%, when they reach age 18, the age of college or other education expenses, the investment has grown to \$5,071.82. When they reach age 30, ripe age for purchasing a first home, the investment has grown to

\$21,339.66. If they wait and leave the investment to grow, when they reach age 65 and are considering retirement, the investment has grown to \$127,797.65. Given the average savings account balance for Americans aged 65-74 is \$54,089 and the median is \$15,000 (Federal Reserve, 2016), these numbers are astonishing and have the potential to offset future retirement shortages.

Financial Literacy and Gender

Males and females at Thayer Central exhibit similar patterns in banking and employment habits, but exhibit different savings habits. Males reported more often that they saved regularly. This is consistent with Lusardi and Tufano (2009) who found that men understood debt significantly better than women. This finding could have significant future implications for men and women in their retirement years.

This study found a significant difference by gender in terms of student teller participation in the in-school savings programs. Females accounted for sixty-one percent of the student tellers in the study. Twelve of the 14 programs included in the study reported a higher percentage of female tellers. This is consistent with reported gender differences across occupations in the United States. Employment in services such as health care, nongovernmental education, leisure, and other services account for more than four in ten women's jobs, but only one in four men's jobs (Status of Women, n.d.). It is also interesting to consider the finding of more female students tellers reflected alongside the plethora of research studies showing males score higher on financial literacy when compared to females (Lusardi and Mitchell, 2008 and 2014; Bucher-Koene, Lusardi, Alessie, and Van Rooij, 2017; Fonseca, Mullen, Zamarro, and Zissimopoulos, 2012). This finding brings more questions than answers to the literature and is an area

ripe for future study. What does more female student tellers today mean for gender differences in financial literacy later? Are we seeing a trend towards an equalization of financial literacy and savings rates between males and females? Only time and more research in this area will tell.

Limitations of the Study

This research is unique and an important contribution to the literature as it collected longitudinal data on student participation in an in-school savings program. It also provided a systematic inquiry into perspectives on program deliverables and success from program education partners and financial institution partners. While an important contribution, the study does have limitations. First, even though the high school survey response rate is impressive at 90 percent, the sample size of 102 participants is still quite small and as shown by the power analysis not large enough to adequately detect smaller yet potentially meaningful effects. The qualitative inquiries assessing education partner and financial institution partner perspectives also have relatively small sample sizes with 14 of 25 for a 56 percent response rate and 15 of 20 for a 75 percent response rate, respectively. Additionally, as this is a survey and a program evaluation, there is no control for additional variables. As is often the case with survey research the analysis is limited to cross tabulations of the data set. The small sample size and program evaluation research design do not allow for larger generalizations.

Another limitation of the study is one of self-selection. Participation in the in-school savings program is voluntary. Students self-selected into the two groups, those that participated in the in-school savings program and those that did not participate. The high school survey was conducted at a singular school district and at a snap-shot in time.

Study participants, particularly on the qualitative interviews also self-selected to participate in the research. The results may be due to bias in the sample and caution should be taken in considering the results.

Another limitation is the fact that both the survey and the interviews rely on self-reported data that may not be easily verified as it relies on the perceptions and opinions of respondents at a point in time.

Areas for Future Consideration and Study

Future research should explore more explicitly possible links between financial education and access to financial services and the increased knowledge gains and behavior changes from a combination of the two. A study expanding on the “I Can Save” program in Missouri to more specifically look at the benefits of in-school banking coupled with financial education would be very informative. A study design could include a treatment group receiving financial education and participating in an in-school savings program. The control group would only receive the financial education component and students would not participate in an in-school savings program. This would be helpful to isolate and measure any additional effects on learning that may come from the inclusion of an in-school savings program. More longitudinal studies are necessary to assess if cognitive gains in elementary school endure into high school and further into adulthood. To permit generalization to broader populations, future studies should use larger randomized samples with control groups that follow children for a longer time.

Future research to include a financial literacy measurement such as the Basic Finance Test (BFT) would help isolate gains in financial literacy knowledge. The BFT

could be utilized as a pre/post measurement at fifth grade to measure and evaluate differences between students who participated in an in-school savings program and those who did not.

Future studies should investigate the significantly different participation rates of student tellers and savings behaviors between the genders. A longitudinal study to follow student tellers and compare their future selected employment fields compared to general United States employment statistics would provide a glimpse into any lasting effects or differences from participation in the in-school savings program as a student teller. Additional studies to determine why there are differences in savings behaviors between the genders are vitally important to inform educational practice and programs that could be targeted to females to help equalize the savings patterns.

A future consideration for the in-school savings program may be to gather, create, and provide specific companion curriculum mapped to state standards for use by teachers of grades K-6. This may be helpful in providing partner schools and districts with an easy way to address Nebraska's 2019 updated financial literacy strand of the social studies standards (NDE, 2019). Having a specific curriculum school wide curriculum in use would also be helpful to future research potential.

An additional future consideration for this program is to contemplate what adjustments could be made to mitigate the effect of a continued shift to increased remote education. The qualitative portions, interviews with educators and financial institution partners, of this study were conducted during the spring 2020 Covid-19 pandemic. As a result schools were shutting down and switching to remote learning. Programs were cut short by seven weeks of potential saving. If continued benefits are to be seen from the

program some consideration should be taken into how this program might be affected if there is a sustained shift to online education. Specifically how could the program be adapted to fit within a remote education setting?

Lastly, given the current times with both Covid-19 and the Black Lives Matter movement providing a heightened awareness of inequity between racial groups, an important area of future research is financial literacy education that is sensitive to culture and that explores impacts for specific income and racial groups. Waning confidence in institutions, an urgency of need in families on the edge of poverty, and systematic racism may undermine with the success of any such program. Understanding these issues is necessary to create programming that is successful in mitigating opportunity gaps.

Key Conclusions and Recommendations

The combination of the quantitative inquiry into longitudinal benefits from participation in Thayer Central's in-school savings program and the qualitative inquiry into program partners' observations and experiences provided an in-depth evaluation of Nebraska's in-school savings programs. The quantitative results indicated there are lasting beneficial returns in terms of financial behaviors including having a bank account, working, and saving. The qualitative analysis inquiring into the perspectives of program partners from both education and financial institutions and provided a more holistic understanding of the nuances, benefits, and challenges of the in-school savings programs. The quantitative analysis supported statements from educators and financial partners who reported from their experience with the program that it was making a positive difference in teaching financial literacy.

This study adds to the growing evidence that starting economic and financial education early is beneficial for students. Studies show that children have adequate cognitive development and to understand concepts related to saving money in early childhood (Berti and Monaci, 1998; Collins and Odders-White, 2015; Siegler and Thompon, 1998; Webly, 2001). Reaching students early with positive financial education is preferable to starting later as it facilitates the initial formation of positive attitudes and behaviors, where later interventions often require participants to unlearn negative behaviors before they can acquire positive ones (Walstad & Shug, 1991).

There is a dearth of literature specific to in-school savings programs – only three studies. This study adds to the literature and supports findings of program benefits and effectiveness in the few studies that do exist (Sherraden, Johnson, Gao, and Elliott, 2010; Batty, Collins, and Odders-White, 2015; Amsong, Chowa, Masa, Despard, Sherraden, Wu, and Osei-Akoto, 2019).

This study suggests that partnerships between state Councils on Economic Education, local financial institutions, and school districts in the form of an experiential in-school savings program is a promising strategy, with lasting financial benefits, to instill financial literacy and skills to children early in life. Moreover, the in-school savings programs are valued and seen as beneficial by both education and financial institution program partners. In addition to the benefits of imparting some financial literacy on participants, program partners provided evidence that that there are additional positive returns, especially to students participating as student tellers, including exposure to job skills.

Given the limited time in an educational day and school year, results of this mixed-methods dissertation suggest that an in-school savings program conducted in elementary school is an efficient and effective way to reach students with introductory financial literacy that can have lasting effects that translate into “good” financial behaviors.

The positive results of previous studies and the program evaluation conducted for this study suggest that school districts, financial institutions, and Councils for Economic Education should continue to work to expand the in-school savings programs to reach more students with this real life, positive, and experiential learning opportunity. Though limited, there appear to be both quantitative and qualitative positive returns to the program. Additional locations of in-school savings programs should include a purposeful research component to and continue to close the gap in the literature.

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APPENDICIES

Appendix A – High School Survey IRB Ruling

Institutional Review Board

irb@unl.edu

IRB - Not Human Subjects Research - New Project Form

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Sent To: Jennifer Davidson <jdavidson2@unl.edu>, Guy Trainin <gtrainin2@unl.edu>

Sent By: Jenn Klein <jklein2@unl.edu>

Sent On: 01/04/2019 11:25 am

Reference: Workflow - 247195

Message:

Your project has been marked "Not Human Subject Research" with the following comments:

Approvers Comments:

Dear Jennifer Davidson and Guy Trainin,

Project ID: 18880

Form ID: 51638

Review Type: New Project Form

Title: Long Term Effects of Participation in an In School Saving Program

Determination: Not human subjects research

Based on our review, including clarifications and revisions from investigators, we have determined that this project does not meet the definitions of human subjects research under regulatory requirements at 45 CFR 46.102. This project does not require IRB approval.

Human subjects is defined as a living individual about whom an investigator (whether professional or student) conducting research obtains, 1) data through intervention or interaction with the individual, or 2) identifiable private information (including data or tissues); and research is defined as a systematic investigation wherein the activity is designed to develop or contribute to generalizable knowledge, i.e., designed in such a way as to generate data/results that would be applicable broadly, to individuals other than to just those participating in the study.

In this case, the project does involve human subjects but it does not involve research. It is our understanding that you are conducting a program evaluation where the purpose is to assess the success of an established program in achieving its objectives in a specific population and the information gained from the evaluation will be used to provide feedback to that program, and not contributing to generalizable knowledge.

Based on this assessment, the project will be marked as not human subjects research and no further oversight is required at this time. Please be certain that all supporting communication and documents (e.g. recruitment scripts, informed consent documents, fliers, etc.) have been revised to remove any contact information for the UNL IRB office, as well as replacing the word research with program evaluation.

Additionally, since Thayer Central school will be sending data with student identification numbers, which is considered Personally Identifiable Information (PII), please be in touch with a Contracts Manager within the UNL Office of Sponsored Programs (unlosp@unl.edu) to ensure a Data Transfer and Use Agreement is in place.

Should the scope of your project change please contact the IRB office at 472-6965 to discuss future procedures.

9, 11:27 AM

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Human Research Protection Program

Project Title: Long Term Effects of Participation in an In School Saving Program (RCS Note: Program evaluation)

Appendix B - IRB Exemption Letter – Study on Education Partners



January 30, 2020

Jennifer Davidson
 Department of Economics
 HLH 525G UNL NE 685880482

Guy Trainin
 College of Education and Human Sciences
 HENZ 118 UNL NE 685880355

IRB Number: 20200120132EX

Project ID: 20132

Project Title: A PROGRAM EVALUATION OF NEBRASKAS IN-SCHOOL ELEMENTARY GRADES SAVINGS PROGRAMS: PERSPECTIVES OF EDUCATIONAL PARTNERS

Dear Jennifer:

This letter is to officially notify you of the certification of exemption of your project for the Protection of Human Subjects. Your proposal is in compliance with this institution's Federal Wide Assurance 00002258 and the DHHS Regulations for the Protection of Human Subjects at 45 CFR 46 2018 Requirements and has been classified as exempt. Exempt categories are listed within HRPP Policy #4.001: Exempt Research available at: <http://research.unl.edu/researchcompliance/policies-procedures/>.

o Date of Final Exemption: 01/30/2020

o Review conducted using exempt category 2b at 45 CFR 46.104

o Funding (Grant congruency, OSP Project/Form ID and Funding Sponsor Award Number, if applicable): N/A

You are authorized to implement this study as of the Date of Final Approval: 01/30/2020.

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:

- * Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) which in the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;
- * Any serious accidental or unintentional change to the IRB-approved protocol that involves risk or has the potential to recur;
- * Any protocol violation or protocol deviation
- * An incarceration of a research participant in a protocol that was not approved to include prisoners
- * Any knowledge of adverse audits or enforcement actions required by Sponsors
- * Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
- * Any breach in confidentiality or compromise in data privacy related to the subject or others; or
- * Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff.

This project should be conducted in full accordance with all applicable sections of the IRB Guidelines and you should notify the IRB immediately of any proposed changes that may affect the exempt status of your research project. You should report any unanticipated problems involving risks to the participants or others to the Board.

If you have any questions, please contact the IRB office at 402-472-6965.

Sincerely,

Jenn Klein

Jenn Klein
for the IRB



Appendix C - IRB Exemption Letter – Study of Financial Institution Partners



January 30, 2020

Jennifer Davidson
 Department of Economics
 HLH 525G UNL NE 685880482

Guy Trainin
 College of Education and Human Sciences
 HENZ 118 UNL NE 685880355

IRB Number: 20200120131EX
 Project ID: 20131
 Project Title: A PROGRAM EVALUATION OF NEBRASKAS IN-SCHOOL ELEMENTARY GRADES SAVINGS PROGRAMS: PERSPECTIVES OF FINANCIAL INSTITUTIONS

Dear Jennifer:

This letter is to officially notify you of the certification of exemption of your project for the Protection of Human Subjects. Your proposal is in compliance with this institution's Federal Wide Assurance 00002258 and the DHHS Regulations for the Protection of Human Subjects at 45 CFR 46 2018 Requirements and has been classified as exempt. Exempt categories are listed within HRPP Policy #4.001: Exempt Research available at: <http://research.unl.edu/researchcompliance/policies-procedures/>.

- o Date of Final Exemption: 01/30/2020
- o Review conducted using exempt category 2b at 45 CFR 46.104
- o Funding (Grant congruency, OSP Project/Form ID and Funding Sponsor Award Number, if applicable): N/A

You are authorized to implement this study as of the Date of Final Approval: 01/30/2020.

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:

- * Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) which in the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;
- * Any serious accidental or unintentional change to the IRB-approved protocol that involves risk or has the potential to recur;
- * Any protocol violation or protocol deviation
- * An incarceration of a research participant in a protocol that was not approved to include prisoners
- * Any knowledge of adverse audits or enforcement actions required by Sponsors
- * Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
- * Any breach in confidentiality or compromise in data privacy related to the subject or others; or
- * Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff.

This project should be conducted in full accordance with all applicable sections of the IRB Guidelines and you should notify the IRB immediately of any proposed changes that may affect the exempt status of your research project. You should report any unanticipated problems involving risks to the participants or others to the Board.

If you have any questions, please contact the IRB office at 402-472-6965.

Sincerely,

Jenn Klein

Jenn Klein
for the IRB



Appendix D - Email Sent to Potential Education Partners Study Participants

Dear <Name>,

Thank you for all your work to coordinate the in school savings program at <elementary school>. Your time and effort does not go unnoticed.

I am Jennifer Davidson, President of the Nebraska Council on Economic Education (NCEE), an organization whose mission is to increase economic and financial literacy in Nebraska. To date we have helped open 32 in school savings program, including yours.

As my PhD dissertation, I am conducting an evaluation of these elementary savings programs and I would very much like to learn more about your program at <elementary school.>

I want to understand the statewide program impact and better understand why elementary schools agree to implement the program. I also want to learn more about your teller selection and if you see any differences in gender in tellers or depositors. In my role at NCEE I also want to know of any success you are seeing and any struggles your program may be facing. Understanding these issues can help us improve things. This is not an evaluation of your individual program or a reflection on you in any way. Rather, this is for my own research only.

I would very much like to schedule a 60 minute interview via Zoom to learn more about your program at <elementary school>. Know that I will not ask for any individual student information.

I have attached a consent from which explains more about the research. If you are willing to participate, would you please sign and return the form by Friday, March 13 and we will then set up an appointment to chat.

I thank you in advance for your time. Your perspective is invaluable to this project.

If you have any questions, please contact me. I am happy to share all details with you.

Thank you!!!

JD



Jennifer A. Davidson

*Assistant Professor of Practice in Economics
President, Nebraska Council on Economic Education
Nebraska Bankers Association Faculty Fellow*

College of Business, University of Nebraska–Lincoln

HLH 525G, 730 N. 14th Street, Lincoln, NE 68588-0404
402-472-3805 | nebraskacouncil.unl.edu

Gallup Strengths: Achiever, Maximizer, Focus, Harmony, Competition

Appendix E – Email Sent to Potential Financial Institution Study Participants

Dear <Name>,

Thank you for your partnership to provide the in school savings program at <elementary school>. I am Jennifer Davidson, President of the Nebraska Council on Economic Education (NCEE), an organization whose mission is to increase economic and financial literacy in Nebraska. To date we have helped open 32 in school savings program, including yours.

As my PhD dissertation, I am conducting an evaluation of these elementary savings programs and I would very much like to learn more about your program at <elementary school>.

I want to understand the statewide program impact and better understand why financial institutions agree to implement the program. I also want to understand what financial institutions hope to get out of the program and if your expectations are being met. In my role at NCEE, I want to know of any success you are seeing and any struggles your program may be facing. Understanding these issues can help us improve things. This is not an evaluation of your individual program or a reflection on you in any way. Rather, this is for my own research only.

In order to get a sense of the statewide savings impact of the programs, I am hoping one of you could please gather some historical summary data on total savings and number of student participants. I have attached a form for you to please complete and return.

I would also very much like to schedule a 45-60 minute interview via Zoom. Know that I will not ask for any individual student information.

I have attached a consent form which explains more about the research. If you are willing to participate, would you **please sign and return the form ASAP and by May 27**. We will then set up an appointment to chat.

I thank you in advance for your time. **Your perspective is invaluable to this project.**

If you have any questions, please contact me. I am happy to share all details with you.

Thank you!!!



Jennifer A. Davidson

*Assistant Professor of Practice in Economics
President, Nebraska Council on Economic Education
Nebraska Bankers Association Faculty Fellow*

College of Business, University of Nebraska–Lincoln

HLH 525G, 730 N. 14th Street, Lincoln, NE 68588-0404
402-472-3805 | nebraskacouncil.unl.edu

Gallup Strengths: Achiever, Maximizer, Focus, Harmony, Competition

Appendix F – Education Partners Adult Informed Consent

IRB #: 20132

Formal Study Title: A program evaluation of Nebraska’s In-School Elementary Grades Savings Programs: Perspective of Educational Partners.

Authorized Study Personnel

Principal Investigator: Jennifer Davidson, PhD Candidate

Office (402)472-3805

Secondary Investigator: Guy Trainin, Ph.D.

Office (402) 472-2231

If you agree to participate in this study, the project will involve:

- A 60 minute interview to discuss your in-school savings program.
- All education partners with in-school savings program as being recruited to participate.
- Additional aggregate information on annual student participation and school population numbers will be requested.
- There are no risks associated with this study

Invitation

You are invited to take part in this research study. The information in this form is meant to help you decide whether or not to participate. If you have any questions, please ask.

Why are you being asked to be in this research study?

You are being asked to be in this study because you are an education partner who coordinates an elementary grades in school savings program.

What is the reason for doing this research study?

We are conducting a program evaluation of Nebraska’s elementary grades in-school savings programs. We want to understand the statewide program impact. We also want to better understand why elementary schools implement savings programs and what elementary schools hope students get out of the program?

What will be done during this research study?

You will also be asked to participate in a 60 minute interview to discuss your program. Discussion topics will include why your school decided to open an in school savings program, if you feel like you are making an impact, things are going well, things that are a struggle, how tellers are selected and if you have noticed any difference in terms of participation by gender.

How will my data be used?

Any personal information that could identify you will be removed before any research is shared or presented. Your information will be combined with information from other study participants to see what common themes emerge. The research will only report aggregate information.

What are the possible risks of being in this research study?

There are no known risks to you from being in this research study.

What are the possible benefits to you?

You are not expected to get any benefit from being in this study.

What are the possible benefits to other people?

The benefits to society may include a better understanding of why schools open in-school savings program. Information obtained may help us improve the program and attract additional schools. With additional school participation we may be able to reach more students with impactful financial education.

What will being in this research study cost you?

Other than the time involved in the interview and data gathering, there is no cost to you to be in this research study.

Will you be compensated for being in this research study?

There is no compensation for your participation in this study.

What should you do if you have a problem during this research study?

Your welfare is the major concern of every member of the research team. If you have a problem as a direct result of being in this study, you should immediately contact one of the people listed at the beginning of this consent form.

How will information about you be protected?

Reasonable steps will be taken to protect your privacy and the confidentiality of your study data. The data will be stored electronically through a secure server and will only be seen by the research team during the study and for 3 years after the study is complete.

The only persons who will have access to your research records are the study personnel, the Institutional Review Board (IRB), and any other person, agency, or sponsor as required by law. The information from this study may be published in scientific journals or presented at scientific meetings but the data will be reported as group or summarized data and your identity will be kept strictly confidential.

What are your rights as a research subject?

You may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the study. For study related questions, please contact the investigator(s) listed at the beginning of this form. For questions concerning your rights or complaints about the research contact the Institutional Review Board (IRB):

- Phone: 1(402)472-6965
- Email: irb@unl.edu

What will happen if you decide not to be in this research study or decide to stop participating once you start?

You can decide not to be in this research study, or you can stop being in this research study (“withdraw”) at any time before, during, or after the research begins for any reason. Deciding not to be in this research study or deciding to withdraw will not affect your relationship with the investigator or with the University of Nebraska-Lincoln. You will not lose any benefits to which you are entitled.

Documentation of informed consent

You are voluntarily making a decision whether or not to be in this research study. Signing this form means that (1) you have read and understood this consent form, (2) you have had the consent form explained to you, (3) you have had your questions answered and (4) you have decided to be in the research study. You will be given a copy of this consent form to keep. If willing to participate, please sign and return via email to Jennifer Davidson at jdavidson2@unl.edu

Participant Name:

(Name of Participant: Please print)

Participant Signature:

Signature of Research Participant

Date

Appendix G – Financial Institution Partner Adult Informed Consent

IRB #: 54222

Formal Study Title: A program evaluation of Nebraska’s In-School Elementary Grades Savings Programs: Perspective of Financial Institutions.

Authorized Study Personnel

Principal Investigator: Jennifer Davidson, PhD Candidate Office (402) 472-3805

Secondary Investigator: Guy Trainin, Ph.D. Office (402) 472-2231

If you agree to participate in this study, the project will involve:

- A 60 minute interview to discuss your in-school savings program.
- All financial institution partners with in-school savings program as being recruited to participate.
- Additional aggregate information on annual student participation numbers and savings totals will also be requested.
- There are no risks associated with this study

Invitation

You are invited to take part in this research study. The information in this form is meant to help you decide whether or not to participate. If you have any questions, please ask.

Why are you being asked to be in this research study?

You are being asked to be in this study because you are a financial institution employee that coordinates an elementary grades in school savings program.

What is the reason for doing this research study?

We are conducting a program evaluation of Nebraska’s elementary grades in-school savings programs. We want to understand the statewide program impact. We also want to better understand why financial institutions participate and take on such programs including what they hope to get out of program participation. Lastly, we want to learn if financial institutions find the program worthwhile and worth the time and expense.

What will be done during this research study?

You will be asked to provide aggregate data, including annual savings totals, annual student participation, and annual cash out payments for graduating students on your in-schools savings program. You will also be asked to participate in a 60 minute interview to discuss your program. Questions will be emailed ahead of time. Discussion topics will include why your financial institution decided to open an in school savings program, if

you feel like you are making an impact, what things are going well, and what things that are a struggle.

How will my data be used?

Any personal information that could identify you will be removed before any research is shared or presented. Your information will be combined with information from other study participants to see what common themes emerge. The research will only report aggregate information.

What are the possible risks of being in this research study?

There are no known risks to you from being in this research study.

What are the possible benefits to you?

You are not expected to get any benefit from being in this study.

What are the possible benefits to other people?

The benefits to society may include a better understanding of why financial institutions open in-school savings program. Information obtained may help us improve the program and attract additional financial institutions. With additional financial institution we may be able to reach more students with impactful financial education.

What will being in this research study cost you?

Other than the time involved in the interview and data gathering, there is no cost to you to be in this research study.

Will you be compensated for being in this research study?

There is no compensation for your participation in this study.

What should you do if you have a problem during this research study?

Your welfare is the major concern of every member of the research team. If you have a problem as a direct result of being in this study, you should immediately contact one of the people listed at the beginning of this consent form.

How will information about you be protected?

Reasonable steps will be taken to protect your privacy and the confidentiality of your study data. The data will be stored electronically through a secure server and will only be seen by the research team during the study and for e years after the study is complete. The only persons who will have access to your research records are the study personnel, the Institutional Review Board (IRB), and any other person, agency, or sponsor as required by law. The information from this study may be published in scientific journals or presented at scientific meetings but the data will be reported as group or summarized data and your identity will be kept strictly confidential.

What are your rights as a research subject?

You may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the study. For study related questions, please contact the investigator(s) listed at the beginning of this form. For questions concerning your rights or complaints about the research contact the Institutional Review Board (IRB):

- Phone: 1(402)472-6965
- Email: irb@unl.edu

What will happen if you decide not to be in this research study or decide to stop participating once you start?

You can decide not to be in this research study, or you can stop being in this research study (“withdraw”) at any time before, during, or after the research begins for any reason. Deciding not to be in this research study or deciding to withdraw will not affect your relationship with the investigator or with the University of Nebraska-Lincoln. You will not lose any benefits to which you are entitled.

Documentation of informed consent

You are voluntarily making a decision whether or not to be in this research study. Signing this form means that (1) you have read and understood this consent form, (2) you have had the consent form explained to you, (3) you have had your questions answered and (4) you have decided to be in the research study. You will be given a copy of this consent form to keep. If willing to participate, please sign and return via email to Jennifer Davidson at jdavidson2@unl.edu

Participant Name:

(Name of Participant: Please print)

Participant Signature:

Signature of Research Participant

Date

Appendix H – Letter of Support from Thayer Central Superintendent



P.O. Box 9, Hebron, NE 68370

Drew Harris, Superintendent
930 Eads Ave.
Phone: 402-768-6117
Fax: 402-768-6110

Tom Kiburz, HS/MS Principal
930 Eads Ave.
Phone: 402-768-6117
Fax: 402-768-6110

Kurk Wiedel, Elem. Principal
1030 Eads Ave.
Phone: 402-768-7287
Fax: 402-768-2572

November 29, 2018

Dear Professor Davidson,

We look forward to working with you to evaluate our long running In School Savings Program. We are proud of the program here at Thayer Central and look forward to working with you to determine if there are long term beneficial effects for student participants.

You will work with our elementary school principal, Mr. Kurk Wiedel, on the project. He is also the program coordinator.

The Thayer Central school board has approved the survey instrument, but will not allow student names to be included; instead we will request student ID numbers. Mr. Wiedel will match the in school savings program record with the survey information prior to sending the data to you for analyzing. We will not provide any individually identifiable student information.

We will conduct the survey here at school and will require passive parent permission. Parents/students can opt out if they so choose.

Sincerely,

Drew Harris
Superintendent, Thayer Central Community Schools
cc: Kurk Wiedel

Appendix I – High School Survey Instrument

Welcome to the In-School Savings Program study!

We are interested in understanding any long term effects from participation in an In-School Savings Program. You will be asked to answer some questions about your participation in the in-school savings program during elementary school and questions on your current money habits. Please be assured that your responses will be kept completely confidential. The survey should take you less than 5 minutes to complete. Thank you for your honest and responses.

1. What is your student ID number? _____
2. What grade are you in?
 - a. 9th – Freshman
 - b. 10th – Sophomore
 - c. 11th – Junior
 - d. 12th – Senior
3. Did you attend Thayer Central for your elementary school grades?
 - a. Yes, all years K-6
 - b. No, I went to elementary school elsewhere
 - c. At least one year, but not all years
4. Gender
 - a. Male
 - b. Female
5. Thayer Central Community Schools offered a savings program while you were in elementary school. Did you participate in that program? Check only one response.
 - a. Yes, I was a depositor
 - b. Yes, I was a teller
 - c. Yes, I was a depositor and teller
 - d. No, I did not participate
 - e. I don't remember
6. If the student participated in the program, they were delivered the question: Did you like participating in the elementary savings program?
 - a. Yes
 - b. No
 - c. Uncertain

7. If the student participated in the program, they were delivered the question: At end of the savings program (6th grade) what did you do with your money? Check all that apply.
- I deposited it into my own checking or savings account
 - I used it to buy something
 - I donated it or gave it away
 - I did something not listed here. Please explain: _____
8. If the student participated in the program, they were delivered the question: In what ways did participating in the Savings Program at your elementary school influence your money habits today?
- It taught me the importance of savings
 - It encouraged me to save regularly
 - It taught me how financial institutions work
 - It helped me understand how money is earned
 - Other, please explain: _____
9. Do you currently have your own checking or savings account at a financial institution?
- Yes
 - No
10. If the student participated in the program, they were delivered the question: Did the Savings Program influence your decision to open your own checking or savings account?
- Yes
 - No
 - Not sure
11. If the student responded that they did have their own checking or savings account, they were delivered the question: About when did you open your account at a financial institution? Select the best option.
- At the end of the savings program (6th grade)
 - 7th grade
 - 8th grade
 - 9th grade
 - 10th grade
 - 11th grade
 - 12th grade
 - Other, please explain: _____
12. If the student responded that they did have their own checking or savings account, they were delivered the question: What is the name of the financial institution that holds your account? Note: these are the only physical banks in the town.
- Thayer County Bank
 - Bruning State Bank
 - Other, please enter name of bank/credit union: _____
13. Do you have a job?
- Yes
 - No

14. If the student indicated that they do have a job, they were delivered the question:
About how many hours per week do you work?
- 1 to 5 hours
 - 6 to 10 hours
 - 11 to 15 hours
 - 16 or more hours
15. Do you save money for future expenses or for an emergency on a regular basis?
- Yes
 - No
16. If the student indicated that they do save on a regular basis, they were delivered the question: How often to you save?
- Weekly
 - Monthly
 - Whenever I get paid
 - Occasionally when I receive money as a gift
 - Other, please explain: _____
17. If the student indicated that they do save on a regular basis, they were delivered the question: How much do you save?
- 10% of any income
 - Less than 10% of any income
 - More than 10% of any income
 - Other, please explain: _____

Appendix J - Education Partner Interview Protocol

1. When did you become the program coordinator? When open?
2. What day is banking day?
3. What time open – during school day?
4. How many students attend your school?
5. What grades participate in the program?
6. Average number of weekly deposits?
7. Why did your school agree to take on this project?
8. How many tellers do you have for the current program year (2019-2020)?
9. How are tellers selected?
10. Do you see a difference in teller participation/selection by gender?
11. Have you noticed any patterns in terms of gender for depositors?
12. What's going well?
13. Is the program making an impact? How do you know?
14. Do you have any idea or stories of upstream education from students to parents?
15. What's a struggle?
 - a. Mobility issues, administration issues, student participation, other???
 - b. Supported by bank???
16. Do you know if the program aligns with any school curriculum/standards?
17. Do you see it as a beneficial, educational experience?
18. Anything else you want to share that we have not covered already?

Appendix K – Financial Institution Partner Advanced Data Request

1. When did you open your in-school savings program? Please provide month and year for each program you operate.

Use table for questions 2 and 3.

2. We are trying to get a picture of statewide program savings impact.
 - a. What is the year by year aggregate savings total for all participants?
 - b. What is the total to date savings for the program? (this should be the sum of the responses to a above)
3. What are the costs you have incurred to run the program?
 Start-up costs? What did this entail/what does this include?
 3b. Annual costs? What does this include?
 3c. Any other costs?
4. Any other comments you want to make prior to interview?

Please use table to provide requested information in questions 2 and 3.

Example - Name of Financial Institution and School Branch			
opened October 2010			
Year of Operation	All grades Savings Total	Total # of students participating	Average savings total/students *calculation
<i>2010-2011</i>	<i>\$10,000</i>	<i>150 students</i>	<i>\$67.00</i>
<i>2011-2012</i>	<i>\$9,875</i>	<i>165 students</i>	<i>\$60.00</i>
Add lines as necessary			
Start up costs: \$ (includes:)			
Average annual costs: \$ (includes:)			
Other costs:			
Other comments:			

Appendix L – Financial Institution Partner Interview Protocol

Questions to be addressed during interview:

1. Why did your financial institution take on this project?
2. What are some of the benefits of partnering in the In School Savings Program?
Please rank.
 - Helping the local community/giving back
 - Meeting CRA requirements
 - Company Morale Booster/Employee Involvement
 - Brand/Product marketing
 - Other benefits not listed _____
3. What do you hope students get out of this program? Two sides – depositors and tellers. (question added with 4th interview).
4. Do you feel like you are making an impact? How do you know or what makes you think that?
5. What are some of the challenges of your program?
 - Mobility Issues
 - Commitment from the School/School District
 - Staffing on the part of the Financial Partner
 - Staffing on the part of the School
 - None, we have not faced any of these issues
 - Other issues _____
6. Would you recommend other financial institutions partner in the In School Savings Program? Yes or No and why?
7. What should other financial institutions know prior to establishing their own in school savings program?
8. Anything else to share?