

**Outcomes of Participation in *Real Money, Real World*
2007 Statewide Evaluation**

Final Report

March 21, 2008

Prepared by

Lisa Sotak

Graduate Research Associate

Theresa M. Ferrari

Associate Professor and Extension Specialist, 4-H Youth Development

Nancy W. Hudson, CFCS

Assistant Professor and Extension Specialist, Family Finances, Center at Wooster

Graham Cochran

Assistant Professor and Leader, New Personnel Development, Human Resources

Beth L. Bridgeman

Extension Educator, 4-H Youth Development, Greene County



Ohio State University Extension
4-H Youth Development
Nationwide & Farm Bureau 4-H Center
2201 Fred Taylor Drive
Columbus, OH 43210



Outcomes of Participation in *Real Money, Real World* 2007 Statewide Evaluation

Final Report

Introduction

This report outlines key issues of concern regarding financial literacy for Ohio youth and how these issues were addressed by Ohio State University Extension through the implementation of programs using the *Real Money, Real World* curriculum. A statewide study was conducted to assess the outcomes of participation in these programs. The report provides a review of the issues, description of the program, a summary of the evaluation findings, lessons learned, and recommendations to guide future efforts.

The Issue: Youth Financial Literacy

Each year, America's high schools graduate thousands of young adults who are unprepared for the world ahead of them, particularly in important matters of financial decisions affecting their lives (Golden, 2006; Mandell, 2001). As a society, it is our role to teach youth how to develop into successful and productive adults, and inherent in reaching this outcome is preparing youth to successfully manage their personal finances (Varcoe et al., 2002). Unfortunately, studies have shown that many American adults do not possess adequate financial knowledge (Braunstein & Welch, 2002). Ted Beck, president and CEO of the National Endowment for Financial Education commented that young people today are at risk because many of them lack a good basic grasp on personal finance and money management skills that can last their entire lifetime (Golden, 2006). A nationwide survey conducted in 2004 measured 12th graders' knowledge of personal finance basics such as credit, savings, insurance, and retirement; more than half (65.5%) of students received failing grades (Mead, 2005). From learning how to manage a paycheck to understanding credit to saving money to pay for necessities, the need for financial education is stronger now than ever (Fox, Bartholomae, & Lee, 2005; Golden, 2006; Mead, 2005).

The ability to manage one's personal finances has become increasingly important in today's world (Greenspan, 2005; Morton; 2005). The need for financial literacy education is often demonstrated through "alarming rates of bankruptcy, high consumer debt levels, low savings rates, and other negative outcomes resulting from poor financial management and low financial literacy levels" (Fox et al., 2005, p. 195). By failing to provide children with a sound understanding of personal finances, we can expect them to make financial misjudgments and errors as adults (Danes, 1994).

Considering the relationship between education and income, on average, people with higher degrees earn higher incomes-regardless of race, gender, or ethnicity-resulting in a more productive and competitive society (Governor's Commission on Higher Education and the Economy [CHEE], 2004; Baum & Payea, 2004, 2006). Over their lifetime, typical college graduates earn about 73 percent more than typical high school graduates (Baum & Payea, 2004, 2006). In addition, those with more education have higher

employability rates and they are less likely to live in poverty than those who have less education (Baum & Payea, 2004).

Given the direct correlation between education, employability, and earning, there is a sound rationale for being concerned about the educational levels of Ohio citizens. Although Ohio's high school graduation rate is above the national average, its post secondary degree attainment rates are below the average (CHEE, 2004; The Ohio Association of Educational Opportunity Program Personnel [OAEOPP], 2005; U.S. Census Bureau, 2005). According to the U.S. Census Bureau (2005), only 23% of Ohioans hold bachelor's degrees compared to the nationwide average of 27%, with only 11 states having a smaller proportion of their population attaining bachelor's degrees (CHEE, 2004). To further illustrate the connection between income and education, data show that in 2002, the Ohio median annual income for a person with a high school diploma (or GED) was \$29,800, while the average for a person with a bachelor's degree was significantly higher at \$48,896. Additionally, in 2003, the unemployment rate for those with only high school diplomas was 5.5% in comparison to 3.3% for those holding bachelor's degrees (CHEE, 2004; Mortenson, 2002).

In the past, Ohioans with only high school diplomas or less could get high paying jobs in the agricultural or manufacturing sectors of the state; however, the availability of these jobs has decreased dramatically in the last few decades (CHEE, 2004; Ohio Board of Regents [OBR], 2004). Among states with the most people in severe poverty Ohio ranks sixth (Pugh, 2007), the state's unemployment rate is 5.3% as compared to the national average of 4.4% (Baum & Payea, 2006), and the state has lost more than 200,000 manufacturing jobs during the past five years (Achieve, Inc., 2007; Tankersley & Boak, 2006). Given these statistics, it is evident that Ohio's youth need to be aware of the direct connection between education and income and are in great need of effective financial literacy education.

In other words, Ohio is falling behind the rest of the nation. In an economy that places premium value on ideas and innovation, where knowledge is the currency of economic growth, Ohio is in relative terms becoming less educated and thus less competitive. If this trend is not reversed, Ohio will become increasingly less competitive as a state (CHEE, 2004, p.19).

Not only is the value of a high school diploma declining (Mortenson, 2002), our nation is moving towards a knowledge-based economy that is increasingly dependent on knowledge and skill and higher paying jobs requiring higher levels of education attainment. Given this situation, Ohio cannot afford to be relatively less educated and therefore less competitive (Achieve, Inc., 2007; CHEE, 2004; Levy & Murnane, 2006; Partnership for 21st Century Skills, 2003).

According to CHEE (2004), "despite the clearly demonstrated link between education-attainment level and earning power, too few Ohioans are aware of the connection and too few aspire to and attain postsecondary education" (p. 20). Without creating measures to increase youths' awareness and abilities related to the skills needed for financial success, we cannot expect them to sustain themselves in today's economy.

Financial Education Programs: The Role of Youth Organizations

In the last 30 years, the skills required for youth to succeed in the economy have changed radically. At the present time, financial literacy is not taught systematically as part of the curriculum in elementary, middle, or high schools. Interest in teaching personal financial literacy education is getting renewed attention across the country, including in the state of Ohio. Ohio Treasurer of State Richard Cordray has created the Commission on Personal Finance Education focused on making recommendations to school boards about implementing the Ohio financial literacy graduation requirements. In December 2006, the Ohio legislature passed a bill (S.B. No.311) requiring that all Ohio schools implement personal finance education beginning with students who enter ninth grade for the first time on or after July 1, 2010. The bill has the following provisions:

...Each school shall integrate the study of economics and financial literacy, as expressed by the social studies academic content standards adopted by the state board of education under section 3301.79 of the Revised Code, into one or more existing social studies credits required under division (C) (6) of this section, or into the content of another class, so that every high school student receives instruction in those concepts. In developing the curriculum required by this paragraph, schools shall use available public-private partnerships and resources and materials that exist in business, industry, and through the centers for economics education at the institutions of higher education in the state.

Source: (6) (b) of Ohio Revised Code 3313.603

Recently, there has been an increase in the development and delivery of financial education programs; these programs are offered by a variety of organizations, including Cooperative Extension (Fox et al., 2005). Financial education can be an effective means of creating change. Studies of adults generally find a positive correlation between financial training and achievement of specific goals (Braunstein & Welch, 2002). Studies of young people also indicate that they increased their knowledge and skills through participation in programs such as the NEFE *High School Financial Planning Program* (Boyce & Danes, 1998; Danes & Haberman, 2005) and *Money Talks* (Varcoe & Fitch, 2003).

Boyce and Danes (1998) suggest that schools alone cannot tackle the task of preparing financially literate youth. Youth development organizations have a unique opportunity to help young people develop financial skills and gain experiences they need to become efficient and successful adults. Effective personal financial management is not something students can develop by memorizing terms and phrases. It is a skill that students learn when given the opportunity to apply concepts and practices as part of thoughtfully designed curriculum (Mandell, 2001).

OSU Extension's Response: *Real Money, Real World*

Research indicates that highly interactive, reality-based courses in money management that provide intensive and applied instruction in personal finance are more effective in developing financially competent teens, and follow-up evaluations show that positive changes tended to persist over time (Mandell, 2001; Varcoe et al., 2002). In 2003 a group of OSU Extension professionals developed *Real Money, Real World* (Bridgeman et al., 2003). The curriculum was created to simulate real-life experiences to help make youth aware of the money management skills they need to be productive and successful members of society. The curriculum focuses on making students aware of the correlation between educational attainments and earning power.

In addition, the *Real Money, Real World* program offered by Ohio State University Extension supports the social studies content standard mentioned above (Economics Benchmark E, Grades 11-12) as well as Ohio's Family and Consumer Sciences Content Standards (Standard 3: Demonstrate Personal Financial Literacy). It also reinforces many concepts and skills identified in numerous national standards (Table 1).

Table 1 National Standards Supported by <i>Real Money, Real World</i>
Jump\$Start Coalition for Personal Financial Literacy: www.jumpstart.org National Standards in K-12 Personal Finance Education (2007)
National Council on Economic Education: www.ncee.net/ea/standards Voluntary National Standards in Economics (2003)
National Business Education Association: www.nbea.org National Standards for Business Education (2001)
National Council for Social Studies: www.socialstudies.org/standards Curriculum Standards for Social Studies: Economics (1994)
National Council of Teachers of English: www.ncte.org/about/over/standards Standard for the English Language Arts (1996)
National Council of Teachers of Mathematics: http://standards.nctm.org Principles and Standards for School Mathematics (2000)

The Lessons

Real Money, Real World is an active, hands-on experience that gives young people the opportunity to make lifestyle and budget choices similar to those they will make as adults. The curriculum is comprised of six lessons including:

1. How Occupation Affects Income;
2. Deductions-What You See is Not What You Get;
3. How to Use Checking and Savings Accounts;
4. Making Choices- Preparing for the Simulation;
5. *Real Money, Real World* Simulation; and
6. What Did You Learn?

Throughout the duration of the program, students assume the role of a 25-year-old adult who is the sole income provider for a family. They receive an occupation, monthly salary, and the number of children they are raising. Students learn to subtract savings, taxes, and health insurance amounts from their income. The amount of money left over is

what they have to spend during the simulation activity. The simulation involves community volunteers who represent actual businesses in the community; these volunteers set up and staff booths representing real-life businesses. By visiting the appropriate booths, students spend their salaries on items typically found in a monthly budget including housing, utilities, groceries, insurance, childcare, and transportation. Throughout the activity, students keep track of their finances and attempt to complete the simulation with a positive balance. During the post-simulation lesson, students reflect on their experience and what they learned by completing a self-assessment.

The Technique: Simulation and Reflection

An integral part of the *Real Money, Real World* experience is the simulation. Based on the idea of learning through experience, simulation is an educational technique that involves immersion in an authentic, realistic situation in a way that approximates the real-life situation as closely as feasible. Such experiences incorporate players who assume specific roles (Kriz, 2003). Simulations are thought to facilitate development of knowledge, proficiency, and confidence. They are thought to be superior to lecture methods for teaching about complex situations and choosing among alternatives (Oh, 2002).

Debriefing or reflection following participation is an important aspect of the learning experience. This step is necessary in order for the participants to evaluate the simulation itself as well as the knowledge gained in the process (Kriz, 2003). It is also a time when misconceptions may be clarified. Kriz (2003) notes that the reflection phases allows participants “to apply the knowledge acquired during the gaming simulation to the real world” (p. 497) and thus facilitates the transfer of learning from the simulation to real-life situations. This phase coincides with the experiential learning model promoted in 4-H Youth Development programs. Without this step, important insights may be lost, and the value of the simulation to the participants is diminished.

Creating a Statewide Effort: The Process and Procedures

Clearly, there is a need for financial education programs targeted to young people. Anecdotal reports indicated that *Real Money, Real World* had been used with success by many Extension Educators in Ohio. However, the information documenting program outcomes had not been collected and analyzed in a systematic way, nor had these results been shared through scholarly publications and presentation so that others might benefit from this knowledge. Thus, the statewide evaluation study was designed to address these concerns.

4-H Foundation Grant

Several steps and processes set the stage and made this evaluation project possible. In 2006, the Ohio 4-H Workforce Preparation team created a framework for guiding programming and setting priorities. This team researched the issue of workforce preparation and gathered input from key stakeholders from within the organization, other public agencies, and the private sector. Through this process, youth financial education emerged as an important issue in the research literature, the popular press, and in discussions with educators and business leaders.

During this time, the Ohio Workforce Preparation Team provided guidance, support, and recommendations for funding priorities to the Ohio 4-H Foundation to aid in their distribution of funds from the Sauder endowment. The Erie and Orlyss Sauder 4-H Career Development Endowment Fund was created in 1991 to help youth learn career opportunities, work ethics, and the life skills necessary for the world of work.

One recommendation provided was to redirect existing financial resources to fund specific priorities, making targeted investments in 4-H programming and providing opportunities for evaluating programs being implemented at numerous sites across Ohio. Because youth financial literacy had been identified as a priority and an existing curriculum was available, the 4-H Foundation selected programs using the *Real Money, Real World* curriculum as one area of focus.

Local Extension professionals had an opportunity to apply for small grants of \$1,000 to implement programming using *Real Money, Real World*. As part of their award, each county funded agreed to implement programs using the entire scope and sequence of the curriculum, collect student self-assessments, and submit these data for inclusion in the statewide evaluation.

Evaluating the Program

To evaluate the impact of the *Real Money, Real World* programs, a statewide evaluation of Ohio 4-H programs using the curriculum was initiated. The following questions were addressed:

1. To what extent does participants' awareness of money management concepts change as a result of their participation in *Real Money, Real World*?
2. To what extent do participants think that what they learned gave them a more realistic view of the financial consequences of choices they make?
3. What do participants believe is the most surprising thing that they learned?
4. To what extent does an awareness of financial realities affect choices the students intend to make?
5. What benefits do teachers perceive from their students' participation in *Real Money, Real World*?

After completing the six lessons in the curriculum, youth participants completed a self-assessment. The teachers in participating counties provided copies of the students' self-assessment to the Extension professionals. The Extension professional submitted these data to the principal investigator for data entry and analysis. Items from the self-assessment provided students' perspectives on the extent to which they had become more aware about major concepts presented in the curriculum and responded to questions regarding the importance of what they learned in *Real Money, Real World*.

The items evaluated the extent to which participants had become more aware about the major concepts presented in the curriculum and the importance of what they learned. The student self-assessment included retrospective pre- and post-test questions regarding awareness and importance of financial topics. Post-test only assessment questions evaluated students' intentions and the benefits of the program. Open-ended questions included "what surprised you the most?", "one thing you plan to change," and "other thoughts" about the program.

Who Participated

Data were collected from *Real Money, Real World* programs conducted from February to December 2007 in 19 counties. Fourteen of those counties had applied for and were selected for grant from the Sauder endowment. Another five counties that were conducting programs in area schools but did not receive grant money also participated in the study (Table 2). Schools were in rural, suburban, and urban school districts across the state.

Table 2 Participating Counties			
	County	Number of Schools Served	Number of Student Participants
1	Allen*	9	554
2	Geauga*	1	111
3	Greene	3	464
4	Hancock*	2	406
5	Highland	6	322
6	Holmes*	2	99
7	Jackson*	1	104
8	Jefferson*	2	65
9	Knox*	1	148
10	Lake*	2	98
11	Licking	1	76
12	Miami*	3	108
13	Monroe*	1	107
14	Preble*	3	224
15	Putnam*	3	141
16	Scioto*	1	79
17	Vinton*	1	25
18	Warren	2	310
19	Wayne	3	122
TOTAL		47	3,563
* Indicates those counties who applied for and were selected for funding from the Sauder fund of the Ohio 4-H Foundation to implement <i>Real Money, Real World</i> .			

Within these 19 counties, 3,563 students in 47 schools contributed data for the statewide evaluation. Of the youth who participated, nearly equal percentages were female (51%) and male (49%). Youth were in the 5th grade through the 12th grade (Table 3), and they ranged in age from 9 to 19 years old (Table 4). Fifty-one percent of participants were in middle school and 32% were in high school. The majority of the students were in the 8th (36%) or the 12th grade (15%). Seventeen percent of students were in multi-grade programs, meaning more than one grade participated in the program. The largest percentage of participants were 14 (29%) or 13 (18%) years old.

Table 3		
Grade Level of Participants		
Grade	Frequencies	
	Percent	Number of Students
5 th	1%	46
6 th	5%	168
7 th	9%	313
8 th	36%	1267
9 th	10%	372
10 th	5%	172
11 th	2%	82
12 th	15%	515
Multi-Grade	17%	615
TOTAL		3,550

Table 4		
Age of Participants		
Age	Frequencies	
	Percent	Number of Students
9	0%	1
10	1%	28
11	2%	58
12	6%	222
13	18%	630
14	29%	1022
15	14%	474
16	9%	305
17	10%	353
18	10%	356
19	0%	17
TOTAL		3,466

Key Findings

Awareness

Data showed that the program made a dramatic difference in raising youths' awareness about the costs to maintain a household, as well as an awareness of the interrelationships of education, job, and money (Table 5). At the completion of the program, at least 75% of the youth indicated that they were aware of these areas "a lot." The most impressive differences are noticeable in those items concerning financial expenses such as cost of maintaining a household, caring for children, and the deduction of taxes. Increases in these areas are fairly dramatic—nearly 50 percentage points. Also notable is the increased awareness of the connection between education and income. Although the percentages in these items are not as large, one should note that students reported an initial higher awareness of these items. The changes in these areas are at least 20 percentage points which is still a significant increase and seems small only in comparison to the extreme changes in the other items.

Table 5						
Awareness of Financial Concepts Resulting from Participation in <i>Real Money, Real World</i>						
How much did you realize...	Not Much		A Little		A Lot	
	Before	After	Before	After	Before	After
How much is deducted from pay	27%	3%	43%	22%	31%	75%
Cost to care for a child	28%	5%	39%	15%	33%	81%
Effects of spending decisions	21%	4%	46%	18%	34%	78%
Cost to maintain a household	15%	3%	49%	14%	36%	83%
Relationship of education and job	10%	4%	34%	16%	56%	79%
Relationship of job and money	8%	3%	31%	11%	61%	86%

Those responding (N=3,563)

Importance

Youth indicated an increase of importance regarding financial issues (Table 6). They reported that participating in the program gave them a better understanding of what is involved in earning, spending, and managing money. Their attitudes about the importance of financial topics regarding managing and spending money were the areas that had the most significant increase in percentage points. The importance of the relationship of education and income was also reflected with considerable increases in percentage points. Again, students indicated a stronger belief about the importance of these items.

Table 6 Importance of Financial Concepts Resulting from Participation in <i>Real Money, Real World</i>						
How important did you think this was...	Not Much		A Little		A Lot	
	Before	After	Before	After	Before	After
Having a spending plan with both needs and wants	18%	3%	48%	19%	34%	77%
Learning how to make financial decisions	18%	2%	43%	16%	39%	82%
Saving money regularly	18%	3%	40%	14%	42%	82%
Waiting to have children until financially ready	16%	4%	36%	14%	48%	82%
Getting more education after high school	8%	3%	33%	13%	59%	85%
Doing well in school	6%	3%	29%	10%	65%	87%

Those responding (N=3,529)

Intentions

Nearly two-thirds of students indicated intent to change in every category listed on the evaluation (Table 7). These categories included spending habits, savings habits and money management habits, education choices, and future planning. These results show that the curriculum is successful in providing motivation to change behavior by enhancing students' awareness of financial topics and allowing them to experience making choices in the simulation.

Table 7 Intentions to Change Behavior Resulting from Participation in <i>Real Money, Real World</i>			
How likely is it that you will make changes in...	Not Likely	Somewhat Likely	Very Likely
Doing well in school	9%	30%	61%
Having a spending plan with both needs and wants	6%	32%	63%
Waiting to have children until financially ready	8%	24%	68%
Saving money regularly	7%	25%	69%
Getting more education after high school	8%	20%	72%
Leaning to make financial decisions	5%	22%	73%

Those responding (N=3,529)

Representative student comments regarding intentions to change behaviors are summarized in Table 8. Another category that appeared in students' comments about their intentions to change was their attitudes towards money, education, and themselves.

Table 8 Students' Self-Reported Intended Behavior Changes Resulting from Participation in Real Money, Real World
<p>Spending habits</p> <ul style="list-style-type: none"> • <i>"I will change how much money I spend on clothes."</i> • <i>"Not asking my parents for money all the time."</i> • <i>"That generic brands of food can be just as good as name brands."</i> • <i>"Save money and don't waste in on stupid things."</i> • <i>"Make sure I make decisions based on NEEDS and not just wants."</i>
<p>Savings habits</p> <ul style="list-style-type: none"> • <i>"Starting a savings account."</i> • <i>"I learned I need to have a financial plan."</i> • <i>"Start saving sooner."</i> • <i>"Save up more of my money and start a savings account."</i> • <i>"How much I save from each paycheck."</i>
<p>Attitudes</p> <ul style="list-style-type: none"> • <i>"My point of view towards money."</i> • <i>"I plan to change how hard I work on things."</i> • <i>"Set higher goals for myself."</i> • <i>"That I will need to plan things out ahead of time."</i> • <i>"Don't take my parents for granted."</i>
<p>Educational choices</p> <ul style="list-style-type: none"> • <i>"To study more and to get better grades so I can get into a good college."</i> • <i>"I plan to change my schooling habits and try to get better grades so I can get a good job that pays good."</i> • <i>"To change my grades from F to B, C, or A, no more D's or F's."</i> • <i>"I'm going to focus on getting a better education."</i> • <i>"My future career."</i>
<p>Future planning</p> <ul style="list-style-type: none"> • <i>"Waiting to have kids."</i> • <i>"I would make sure that financially I will be ready for a family."</i> • <i>"I plan on saving enough money for the future."</i> • <i>"One thing I plan to change is not having kids until I'm settled and get the right job to support the things we need."</i> • <i>"Learn more about financial issues."</i>

Overall Benefits

Data regarding students' perceptions of the overall benefits of the *Real Money, Real World* program was also collected. When asked if participating in the program gave them a better idea of what is involved in earning, spending, and managing money, over two-thirds of students responded "a lot" (Table 9). In addition, nearly two-thirds of the youth reported that participating in the program will help them "a lot" in the future. These results show that youth found their participation in the program very beneficial.

Participating in this program...	Not Much	A Little	A Lot
Gave me a better idea of what's involved in earning, spending, and managing money	6%	25%	69%
Will help me in the future	6%	29%	65%

Those responding ($N=3,529$)

Students' Thoughts about *Real Money, Real World*

Students' comments in response to an open-ended question indicated that the program was eye opening and gave them a taste of the real world. Representative comments are summarized in Table 10.

<ul style="list-style-type: none">➤ "Although it was hard, it was fun and interesting in finding out what real life is like."➤ "It was really fun and it made me realize how hard my parents have to work to make a living."➤ "What surprised me was if you don't have a good education, you won't get a good job."➤ "When parents say they have no money when you ask them, they are most likely telling the truth. Living cost a lot more money than you think."➤ "I learned that a lot of money is taken out of your checks in taxes before you even seen the check, and that surprised me the most."➤ "The real world simulation was a lot of fun and taught me more than a book ever would."
--

Teacher Feedback

Teacher feedback was elicited at the completion of the program (Table 11). The major themes running through the teachers' comments were that the youth were very involved in the program, that they discussed topics presented in the curriculum at great length, and that the simulation portion of the program really allowed students to apply what they were learning.

Table 11
Teacher Feedback About Their Participation in *Real Money, Real World*

"This program was great. The class was noisier than usual, but the students talked about it all week. Parents were even asking me what was going on. We had just learned percents and this helped them apply what they learned. The students were very involved. We all loved it!" (*Monroe County*)

"As teachers we can put out a lot of information, but when students hear from someone outside of school, it seems to give that information more credibility. Some of the examples really brought home the need for money accountability and responsibility. Good job!" (*Jackson County*)

"A good culminating event to bring some reality to financial education training. I think the simulation changed a lot of negative attitudes towards learning financial literacy." (*Miami County*)

"The kids were able to see how real life and money go hand in hand. Most 5th graders don't realize the value of money and how expensive their needs really are. My hope is that they now understand how important education is and how to weigh their needs versus wants intelligently." (*Miami County*)

"Some of the students were surprised at how much money they had to spend for things they'd taken for granted (and seemed to show a better appreciation for their parents). Having children to support was also an issue they discussed. Overall, most of the students seemed to recognize the importance of furthering their education and of raising a family." (*Wayne County*)

"This was a wonderful, practical, effective way to teach our students about making wise financial decisions. My students were very positive about the simulation. They were surprised at how much it costs to "live"." (*Greene County*)

"It made me realize that as teachers, we should implement more lessons leaning towards the real world. Students were able to realize the importance of understanding what to expect when they become adults. I hope this will benefit them in their future decision making." (*Greene County*)

"It made me realize that using *Real Money, Real World* scenarios make the students more engaged and motivated to learn. It was eye-opening and shocking for most." (*Greene County*)

"It helped me to bring real life math situations into discussion. Students enjoyed and were amazed at how much it affected the money in their pockets. Experience in class, listening/discussing the different salaries, and what type of education was required for particular jobs was excellent. Students seemed to realize the importance of education after high school." (*Greene County*)

"They loved it! It gave them a 'taste' of the real world. I heard many say 'I'm not having any kids' or 'I need more education.' My students took this entire experience very seriously and learned a great deal. It helped my students to 'think' about choices and decisions. It made them more aware of what their parents go through." (*Greene County*)

Conclusions and Recommendations

Overall, the results of the study show that the use of the curriculum yields positive results. Self-reported data indicates that both financial knowledge and awareness of financial responsibility increases after participation in the program. Participation also provides motivation for behavior change.

Real Money, Real World is providing more Ohioans with the knowledge and skills necessary to succeed in the 21st century. The curriculum emphasizes the documented link between the level of educational attainment and level of economic prosperity and encourages youth to aspire to the highest practical levels of educational attainment.

The program provides an interactive and hands-on opportunity for youth to experience financial responsibilities pertinent to their lives at the present time and provides material to youth that is age and time appropriate. This method gets the youth more interested in learning about financial topics as they can connect with the information presented and relate to its relevance.

Lessons Learned: Programmatic

The outcomes of the statewide evaluation clearly indicate the curriculum accomplishes its goals of raising awareness, changing attitudes, and motivating students to plan for behavior changes concerning financial management, education, and career choices. Key elements of this are the educational techniques used in the curriculum, specifically the preparatory lessons, the interactive simulation, and the reflection on these experiences.

- ✓ Through the evaluation process, it was revealed that the program's highest concentrations of participants are in the 8th or 12th grades, both very critical decision making points in a student's educational career. This may increase the level of satisfaction students experience when participating in the program as they are making important life-decisions relevant to the topics presented in the curriculum.
- ✓ The simulation feature of the curriculum is an integral part of the *Real Money, Real World* experience. The realistic simulation that approximates the real-life situations and choices students will have to make one day as adults is often indicated by the students to be very helpful, eye-opening, enjoyable, and much more valuable than lecture. By experiencing complex situations, the technique of simulation allows students to gain insight into realities and apply the knowledge they have learned.
- ✓ The reflection aspect of the curriculum is key in the students' learning experience. This step allows the students to evaluate their understanding of the simulation and apply it to both current experiences in their everyday lives and how it pertains to the lives they will lead as adults in the "real world." In this step, students can clarify what they learned, identify misconceptions that may have existed prior to the event, and ascertain key messages. Without this step, the simulation is just a one-time event. If the reflection is not included, students may lose valuable insights into the lessons they learned and may not benefit fully from the

experience. Therefore, the reflection aspect of the *Real Money, Real World* curriculum creates more of an extended learning process for students, which is evident in the comments shared by students in their evaluations.

- ✓ Creating partnerships at state and local levels strengthens the program. Collaboration and funding support at the state level has allowed for program expansion and impact documentation. Collaborative efforts with Treasurer of State Cordray's office have resulted in the creation of supplemental materials to support this curriculum.
- ✓ Partnerships with business volunteers in the local community who staff the booths during the simulation allow students to connect with others who are sharing the same message with them that they heard in the classroom. The repetition of the importance of financial literacy topics not only by teachers in the classroom but other caring adults reinforces the message for students and offers more credibility to the topics' significance.
- ✓ A strength of this coordinated evaluation effort is that the same tool for evaluation is now being used throughout the state. Being able to document the impact of the program and show the significant outcomes resulting from participation in the program through a unified evaluation tool enables aggregation of data across sites and an ability to promote its use throughout the state.
- ✓ Parent support for the program has also surfaced. One Educator reported that a parent called the next day and thanked her for offering the program. It has become evident throughout the process of the statewide evaluation that people who find out about the program want to partake in it. This includes students who request to do the program again the following year and who are asking for more information about the topics.

Lessons Learned: Organizational

Organizational outcomes also resulted from the process of implementing the statewide study. Particularly in the area of funding, having a specific focus helped in conducting the statewide evaluation, and it positioned our organization to apply for additional funding when opportunities arose. The decision to focus on a particular program resulted in the creation of a "new funding model." The process has led to multiple implications for our organization and others.

- ✓ The decision to focus on a specific program or curriculum was positive. Because of a good fit with the work of Ohio's Workforce Preparation Team, current literature, and needs for youth in Ohio, our team decided that one focus area would be financial literacy using an existing Ohio 4-H curriculum. This enabled a rapid response to a current issue, which is important when such timely needs are identified.
- ✓ The focus on an issue like youth financial literacy enabled us to make investments in specific areas. Beginning to show focused programming and making an effort to

document impact allowed us to devote enough resources (either new or redirected) to a specific, focused purpose.

- ✓ Changes to the Ohio 4-H Foundation's grant funding process were instrumental in developing this study. A new approach was used with the Ohio 4-H Foundation's Sauder Fund Request for Applications issued in 2006. This approach of funding one program in multiple counties, using small grants, provided a foundation to focus on a coordinated effort leading to a statewide evaluation.
- ✓ Our focus and evaluation efforts positioned us for increased external funding. Because of this, we were ready when funding opportunities became available. As a result of our focus and documented success with youth financial literacy, the Ohio 4-H Foundation was invited to submit a proposal to Fifth Third Bank. This resulted in \$15,000 in addition funding to support financial education for youth.
- ✓ Relationships and communication with key stakeholders is important when aiming to change existing practices (e.g., change in grant making process). Our early success in redirecting resources and innovative practices would not have occurred without a solid foundation of communication with all stakeholders involved.

Recommendations

Based upon the results of the statewide evaluation, we feel confident in promoting the use of the *Real Money, Real World* curriculum by all counties in Ohio. The use of the program should be strongly encouraged as it can be tailored to meet individual counties' needs since the updated curriculum enables customization by county.

The curriculum presents a good opportunity for Extension professionals in 4-H and Family Consumer Sciences to collaborate their efforts, drawing from the strengths of both programs. Working together in a unified effort to reach youth about the topics presented in the curriculum can create a larger impact.

Because it is often hard to create an initial presence in schools, once that presence is established, we must be ready to respond to such requests to maintain our worth. Extension professionals can position themselves as knowledgeable resources that can make financial literacy come alive through active, hands-on learning experiences that youth desperately need.

Educators presenting the *Real Money, Real World* curriculum to schools need to be aware of other complementary financial literacy materials. After experiencing the curriculum, teachers often request more resources. This is only one curriculum; there are other curricula and resources that can complement it (e.g., National Endowment for Financial Education's High School Financial Planning Program and KnowHow2Go). It is one piece of a multi-faceted developmental approach: life costs money, more education is key to generating more income; barriers to getting that education can be knocked down.

Summary

In summary, the need for financial literacy education has become ever more imperative in today's world and by providing youth with a sound understanding of personal finances, we can support them in their development towards becoming successful adults.

The outcomes of this statewide evaluation show that the use of the *Real Money, Real World* curriculum yields positive results. Key findings indicate that the curriculum accomplishes its goals of raising awareness, changing attitudes, and motivating students to plan for behavior changes concerning financial management, education, and career choices. Youth reported that participating in the program was very beneficial and gave them a better idea of what is involved in earning, spending, and managing money. The use of the *Real Money, Real World* curriculum is getting youth more interested in learning about financial topics. In a time when instruction in personal finance is increasingly critical to the effective development of financial competence, the use of the *Real Money, Real World* curriculum and others with documented impacts is strongly encouraged.

References

- Achieve, Inc. (2007). *Creating a world class education system in Ohio*. Washington, DC: Author. Retrieved February 6, 2008, from: http://www.achieve.org/Ohio_report
- Baum, S., & Payea, K. (2004). *Education pays 2004: The benefits of higher education for individuals and society*. Washington, DC: College Board. Retrieved February 6, 2008, from http://www.collegeboard.com/prod_downloads/press/cost04/EducationPays2004.pdf
- Baum, S., & Payea, K. (2006). *Education pays second update: A supplement to education pays 2004: The benefits of higher education for individuals and society*. Washington, DC: College Board. Retrieved February 6, 2008, from http://www.collegeboard.com/prod_downloads/press/cost06/education_pays_06.pdf
- Boyce, L., & Danes, S. M. (1998). *Evaluation of the NEFE High School Financial Planning Program[®] 1997-1998*. Retrieved January 29, 2008, from: <http://hsfpp.nefe.org/loadFile.cfm?contentid=646>
- Braunstein, S., & Welch, C. (2002). Financial literacy: An overview of practice, research, and policy. *Federal Reserve Bulletin* (November), 445-457.
- Bridgeman, B., Clements, J., Crum, B., Dalzell, J., Hudson, N., King, A., McNeely, N. N. Varley, I., Williams, R., & Woods, D. (2003). *Real Money, Real World: A 4-H money management curriculum for youth (4-H 441 GPM)*. Columbus: Ohio State University Extension, 4-H Youth Development.
- Danes, S. M. (1994). Parental perceptions of children's financial socialization. *Financial Counseling and Planning*, 5, 127-149. Retrieved February 8, 2008, from <http://www.afcpe.org/doc/Vol%2058.pdf>
- Danes, S. M., & Haberman, H. (2005). *Evaluation of the NEFE High School Financial Planning Program 2003-2004*. Retrieved January 9, 2008, from: <http://www.nefe.org/hsfppportal/includes/main/home.asp?page=4000#evaluation2>
- Fox, J., Bartholomae, S., & Lee, J. (2005). Building the case for financial education. *The Journal of Consumer Affairs*, 39(1), 195-214.
- Golden, P. (2006). New series paints cloudy picture for young adults. *National Endowment for Financial Education*. Retrieved January 27, 2008, from <http://www.nefe.org/pages/multimedia.html>
- Governor's Commission on Higher Education and the Economy [CHEE]. (2004). *Building on knowledge, investing in people: Higher education and the future of*

- Ohio's economy*. Columbus, OH: CHEE. Retrieved February 6, 2008, from http://www.chee.ohio.gov/documents/CHEE_4_22.pdf
- Greenspan, A. (2005). The importance of financial education today. *Social Education*, 6(2), 64-65.
- Kriz, W. C. (2003). Creating effective learning environments and learning organizations through gaming simulation design. *Simulation and Gaming*, 34(4), 495-511.
- Mandell, L. (2001). Dumb and getting dumber. *Credit Union Magazine*, 6-7. Retrieved February 4, 2008, from http://www.cuna.org/download/svgtn_01c.pdf
- Mead, N. (2005). NEFE, CSREES continue to advance youth financial education. *National Endowment for Financial Education*. Retrieved January 28, 2008, from <http://www.nefe.org/pages/multimedia.html>
- Mortenson, T. (2002). *The human capital economy and higher educational opportunity in Ohio*. Oskaloosa, IA: Postsecondary Education Opportunity.
- Morton, J. S. (2005). The interdependence of economic and personal finance education. *Social Education*, 69(2), 66-68.
- Oh, E. (2002). Teaching software engineering through simulation. In *Proceedings of the 2002 International Conference on Software Engineering Doctoral Symposium*, Orlando, Florida, May 2002. Retrieved January 4, 2007, from <http://www.ics.uci.edu/~emilyo/papers/ICSEDS02.pdf>
- Ohio Board of Regents [OBR]. (2004). *Successful strategies for the knowledge economy*. Columbus, OH: Author. Retrieved February 6, 2008, from <http://regents.ohio.gov/kea/Final-Success-Strategies-1029.pdf>
- Partnership for 21st Century Skills. (2003). *Learning for the 21st century*. Tucson: AZ: Author. Retrieved January 26, 2008, from http://www.21stcenturyskills.org/images/stories/otherdocs/P21_Report.pdf
- Pugh, T. (2007, February 25). Poorest Americans get poorer. *The Columbus Dispatch*, pp. A1, A5.
- Tankersley, J., & Boak, J. (2006). *Ohio economy sputters as innovations decline*. Toledo, OH: The Toledo Blade Company. Retrieved January 28, 2008, from <http://www.toledoblade.com>
- The Ohio Association of Educational Opportunity Program Personnel [OAEOPP]. (2005). *State of college opportunity in Ohio*. Washington, DC: The Pell Institute for the Study of Opportunity in Higher Education. Retrieved February 6, 2008, from: http://www.oaeopp.org/Final_OH_COLLEGE_ACCESS.pdf

Varcoe, K. P., & Fitch, P. R. (2003). Money talks – a program to improve financial literacy of teens. *International Journal of Consumer Studies*, 27(3), 225-226.

Varcoe, K., Peterson, S., Go, C., Johns, M., René-Fitch, P., Powell, C., & Costello, C. (2002). Teen financial literacy evaluated to develop outreach materials. *California Agriculture*, 56(2), 65-68.

U.S. Census Bureau. (2005). *2004 American community survey*. Washington, DC.

Acknowledgements

- The Ohio 4-H Foundation for supporting the Ohio 4-H Workforce Preparation Initiative and making a targeted investment in youth financial literacy.
- Our OSU Extension colleagues who led programs across Ohio using the *Real Money, Real World* curriculum and those who assisted with data entry.
- Participating teachers who conducted *Real Money, Real World* programs in their classrooms and took the time to educate their students about this critical topic of financial literacy.
- School, business and community stakeholders who collaborated with local Extension staff to make the *Real Money, Real World* programs possible.