
Getting Real Results with Ohio State University Extension's *Real Money. Real World.* Program

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Abstract: Youth development organizations have a unique opportunity to offer programs that help young people develop financial skills they need to become successful adults. This article describes Ohio State University Extension's *Real Money. Real World.* (RMRW) and the systematic approach used to evaluate its effectiveness. The RMRW curriculum includes 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 realistic simulation creates a teachable moment. 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. The article concludes with a discussion of the organizational outcomes of conducting the evaluation.

Introduction

Financial literacy has become a concern recently due to reports of high credit card debt, low and negative savings rates, and increased personal bankruptcies (Bernheim, Garrett, & Maki, 2001) and the current state of the economy. A recent report by *BusinessWeek* declared that Americans are "functionally illiterate" when it comes to financial matters (Steverman, 2009). Likewise, youth financial education has emerged as an important issue in the research literature, popular press, and in discussions with educators, business leaders, and other key stakeholders. Numerous surveys conducted on American youth's understanding of basic financial concepts consistently reveal that they lack basic knowledge of money management and do not possess adequate skills to be financially proficient in adulthood (Americans for Consumer Education and Competition, 2001; American Savings Education Council, 2001; Braunstein & Welch, 2002; Charles Schwab, 2007; Jump\$tart, 1997, 2000, 2002, 2004, 2006, 2008; Yakoboski, 1999). Although some states do require it, financial topics are not taught systematically as part of elementary, middle, or high school curriculums.

There is limited documentation of results of financial education programs for youth. Studies of programs such as the National Endowment for Financial Education's (NEFE) *High School Financial Planning Program* (Boyce & Danes, 1998; Danes & Haberman, 2005, 2007; Danes, Huddleston-Casas, & Boyce, 1999) and the *I Can Save* program (Sherraden, Johnson, Guo, & Elliott, 2009) indicate that participants increased their knowledge and skills. Evaluations of the Extension programs *Money Talks* in California (Varcoe & Fitch, 2003; Varcoe, Martin, DeVitto, & Go, 2005), *Welcome to the Real World* in Idaho (Spencer, Petty, Stimpson, Dees, & Riley, 2003), and *4-H Survivor Camp* in Oregon (Smith, Cowan, & Schreiber, 2008) have shown that they are effective in educating youth about financial topics.

In the current economic climate, youth development organizations have a unique opportunity to offer programs that help young people develop financial skills they need to become successful adults. In this article, we will describe Ohio State University (OSU) Extension's *Real Money. Real World. (RMRW)* program and the systematic approach used to evaluate its effectiveness. The article concludes with a discussion of the organizational outcomes of conducting the evaluation.

Program Description

In 2005 a group of Ohio State University Extension professionals developed *Real Money. Real World.* (Bridgeman et al., 2005) by adapting a curriculum that was originally from the University of Illinois (*Welcome to the Real World*). The *RMRW* (<http://realmoneyrealworld.osu.edu>) curriculum includes 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 goal of *RMRW* is to make youth aware of the educational decisions, income and expense factors relative to lifestyle choices, and the money management skills that will impact their adult lives. It was designed for middle school audiences, but in practice has been used with youth from 5th through 12th grades.

The curriculum contains the background information needed for educators to facilitate the program, such as checklists, simulation booth recruitment charts and booth-specific information sheets, sample press releases, and sample volunteer letters. There are six lessons with all necessary materials included.

- pre-simulation preparation (4 lessons)
 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
- hands-on simulation (1 lesson)
- post-simulation reflection and evaluation (1 lesson)

The program is designed to be a partnership of the county Extension Office, local schools, and the business community. Collaboration among community partners is an effective strategy for implementing financial education programs (McKenna & Carroll, 1999; Morton, 2005; Suiter & Meszaros, 2005). Typically, the classroom teacher or the Extension professional conducts the pre-simulation lessons, while the county Extension professional also trains and leverages volunteers and business contacts in the community to organize the simulation.

During the pre-simulation preparation, participants assume the role of a 25-year-old adult. They select or are assigned an occupation with its corresponding monthly salary and are given the number children that will comprise the family they need to provide for (between 0 and 3). It is assumed that they have completed their education and that they are the sole provider in the family. After subtracting health insurance premiums, retirement savings, and taxes, the net income figure remaining is what students take to the simulation activity.

Simulation

Researchers have concluded that teaching financial literacy in the abstract appears to be ineffective (Braunstein & Welch, 2002) whereas highly interactive, reality-based courses in money management are effective in developing financially competent teens (Mandell, 2001; O'Neill, 2008; Varcoe et al., 2002). Therefore, 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. Simulations facilitate development of knowledge, proficiency, and confidence, and are believed to be superior to lecture methods for teaching about complex situations (Oh, 2002).

The *RMRW* simulation involves community volunteers staffing booths representing real-life businesses. At the appropriate booths, students make spending choices about typical monthly expenses and keep track of their transactions. They must pay for child care (based on the number and ages of their children), food, housing, utilities, transportation, insurance, clothing, communications, entertainment, and charitable contributions. They visit each booth, choose from among the options presented, and make the appropriate deductions from their check register. For example, at the food booth they are given the option of a low, medium, or high priced plan. Students are encouraged to make charitable contributions; they may select the option to volunteer, which involves giving their time, but not their money. If they are having difficulties making ends meet, they can elect to seek advice from a financial adviser. Whether they have adequate funds or run out of money, they continue through the simulation and finish with either a positive or negative balance.

Reflection following participation is also an important aspect of the learning experience. Reflection is necessary in order for the participants to evaluate the simulation itself as well as the knowledge gained in the process and its application to the real world (Kriz, 2003). Without this step, important insights may be lost, and the value of the simulation to the participants is diminished. Thus, during the post-simulation lesson students reflect on what they learned by completing a retrospective pre and post self-assessment containing questions regarding awareness and importance of financial topics. They also answer several open-ended questions regarding their major insights from completing the lessons.

Program Evaluation

Anecdotal reports indicated that *RMRW* had been used with success by Extension educators in Ohio. However, no systematic evaluation had been conducted to document this success. As part of a larger effort to enhance workforce preparation in 4-H, a concerted effort to increase use of *RMRW* began in 2006. Local Extension professionals could apply for 4-H Foundation grants of \$1,000 to implement *RMRW* in their county. In exchange, they agreed to implement the entire scope and sequence of the curriculum, use the standardized self-assessment, and submit data for analysis. Two training sessions were held to familiarize Extension professionals with the curriculum and data collection procedures.

The purpose of the evaluation was to investigate the benefits of participation in *RMRW*. Results from other studies that conducted evaluation across multiple sites indicated that using a standardized evaluation tool was an effective way to address evaluation inconsistencies (Arnold, Bourdeau, & Nagele, 2005; Garst & Bruce, 2003).

Measures

The study design was descriptive and used a combination of quantitative and qualitative measures. The use of self-assessment is an established instructional practice to determine if learning objectives have been achieved, and the retrospective format is recommended to minimize response shift-bias in self-reporting (Benjamin, 1982; Danes et al., 1999; Howard & Daily, 1979; Howard, Ralph, Gulanick, Maxwell, Nance, & Gerber, 1979; Marshall, Higginbotham, Harris, & Lee, 2007; Pratt, McGuigan, & Katzev, 2000; Rockwell & Kohn, 1989). The self-assessment was completed as part of Lesson 6, the final lesson in *RMRW*. 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 using fixed-response and open-ended questions. Demographic questions (e.g., participants' age and gender) were also included.

Procedures

Approval was obtained through The Ohio State University Institutional Review Board. Data were collected from *RMRW* programs conducted during 2007. Once the self-assessments were collected from the classrooms, responses were entered using an on-line Zoomerang® survey to allow for on-going data entry from multiple sites. The responses were summarized with descriptive statistics. Qualitative data were analyzed via open coding to identify themes.

Participants

Data were collected from a total of 19 counties (22% of the 88 counties in Ohio). Within the participating counties, 3,570 students in 47 schools contributed data for the evaluation. Of the participating youth, nearly equal percentages were female (51%) and male (49%). Youth were in the 5th grade through the 12th grade, and they ranged in age from 9 to 19 years old (Table 1).

Table 1
Participant Characteristics (N=3,570)

Grade	Number of Students	Percent	Age	Number of Students	Percent
5 th	46	1%	9	1	0%
6 th	168	5%	10	28	1%
7 th	313	9%	11	58	2%
8 th	1,267	36%	12	222	6%
9 th	376	11%	13	630	18%
10 th	175	5%	14	1,026	29%
11 th	82	2%	15	475	13%
12 th	515	14%	16	307	9%
Multi-Grade ^a	615	17%	17	353	10%
Missing	13	0%	18	356	10%
TOTAL	3,570	100%	19	17	0%
			Missing	97	2%
			TOTAL	3,570	100%

^aAlthough in most instances the classrooms consisted of one grade level, some groups consisted of a combination of different grades.

Evaluation Results

Awareness

Data showed the program made dramatic differences in raising youths' awareness about the costs to maintain a household, care for children, and the deduction of taxes, as well as an awareness of the interrelationships of education, job, and income. At the completion of the program, at least 75% of the youth indicated that they were aware of these areas "a lot." Results are summarized in Table 2.

Table 2
Awareness of Financial Concepts Resulting from
Participation in *Real Money. Real World.* (N=3,570)

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

Note: Some rows do not sum to 100% due to rounding.

Importance

Youth indicated participating in the program gave them a better understanding of what is involved in earning, spending, and managing money (Table 3). Their attitudes about the importance of financial topics regarding managing and spending money were the areas that had the largest increase in percentage points.

Table 3

Importance of Financial Concepts Resulting from Participation in *Real Money. Real World.* (N=3,570)

How important did you think this was...	Not Much		A Little		A Lot	
	Before	After	Before	After	Before	After
Doing well in school	6%	3%	29%	10%	65%	87%
Getting more education after high school	8%	3%	33%	13%	59%	85%
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%
Having a spending plan with both needs & wants	18%	3%	48%	19%	34%	77%

Note: Some rows do not sum to 100% due to rounding.

Intentions

Nearly two-thirds of students indicated intent to change behavior in every category listed on the assessment (Table 4). These results showed that the curriculum was 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 4

Intentions to Change Behavior Resulting from Participation in *Real Money. Real World.* (N=3,570)

How likely is it that you will make changes in...	Not Likely	Somewhat Likely	Very Likely
Learning to make financial decisions	5%	22%	73%
Getting more education after high school	8%	20%	72%
Saving money regularly	7%	25%	69%
Waiting to have children until financially ready	8%	24%	68%
Having a spending plan with both needs and wants	6%	32%	63%
Doing well in school	9%	30%	61%

Note: Some rows do not sum to 100% due to rounding.

In an open-ended question asking students about the changes they intended to make, themes that emerged from student responses included spending habits, savings habits, attitudes, educational choices, and future planning (Table 5).

Table 5

Anticipated Behavior Changes Expressed by
Real Money. Real World. Participants

Themes Generated	Representative Quotes to Support Themes
Spending Habits	<p><i>"Spending less on shopping."</i></p> <p><i>"How much money I spend on things I just want."</i></p> <p><i>"I will be wiser with my money."</i></p>
Savings Habits	<p><i>"I plan on putting more money in savings."</i></p> <p><i>"How much I will save from each check."</i></p> <p><i>"Putting more money into a savings account."</i></p>
Attitudes	<p><i>"My point of view towards money."</i></p> <p><i>"Not asking my parents for money all the time."</i></p> <p><i>"Set higher goals for myself."</i></p>
Educational Choices	<p><i>"Working harder in school."</i></p> <p><i>"To study more and to get better grades so I can get into a good college."</i></p> <p><i>"I plan to try harder and pass all of my classes."</i></p>
Future Planning	<p><i>"Save as much as possible before I have kids."</i></p> <p><i>"Be more aware of how much it cost to live and raise a family."</i></p> <p><i>"I will not spend as much as I thought I would. I will manage my money a lot better too."</i></p>

Overall Benefits

Data regarding students' perceptions of overall benefits of the *RMRW* program were also collected (Table 6). 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". In addition, nearly two-thirds of the youth reported that participating in the program will help them "a lot" in the future.

Table 6

Overall Benefits from
Participation in *Real Money. Real World.* (N=3,570)

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%

Self-Reported Learning

Students were also asked what they learned from participating in the program that surprised them the most. Themes that emerged from their responses included the cost of household items, the connection between income and education, the amount of deductions, the difficulty of separating needs from wants, and the consequences of mismanagement and debt. They also expressed a new understanding of how difficult money management can be and a realization of their parents' role as providers. A complete list of themes with representative quotes can be found in Table 7.

Table 7Self-Reported Learning by *Real Money. Real World.* Participants

Themes Generated	Representative Quotes to Support Themes
Needs Versus Wants	<p><i>"How much it actually costs to live...to just live...It is hard to pay for your things you need let alone the things you want."</i></p> <p><i>"I never knew how much things really cost. I learned that it's important to buy the necessary things first."</i></p> <p><i>"That it takes a lot to get both your needs and wants taken care of. And sometimes you have to give up something you want so you can fill your needs."</i></p>
Cause and Effect of Choices	<p><i>"I learned that each decision that you make affects the direction that your life will take."</i></p> <p><i>"The thing that surprised me the most was how much one choice affected the other choices you made."</i></p> <p><i>"I didn't realize that if you make one bad decision then it affects you in the long run."</i></p>
Spending Wisely	<p><i>"In this program, I learned that it's very important to handle your money wisely."</i></p> <p><i>"Maintaining enough money for fun and necessity is quite hard."</i></p> <p><i>"It doesn't matter how much you make, you still need to spend wisely."</i></p>
Connection between Job and Lifestyle	<p><i>"I learned how much your salary effects all the other decisions you have to make such as your car and house."</i></p> <p><i>"How much of a difference it makes to have a good job."</i></p> <p><i>"Getting as good of a job as you can so that you can make more money and have more money to spend in life."</i></p>
Connection between Education and Job	<p><i>"If you get a good enough education you get a better paying job."</i></p> <p><i>"I learned that it is good to go to college to get more money in the future."</i></p> <p><i>"I didn't know there's such a big difference between pay between people with a bachelor's degree and associate's degree."</i></p>
Deductions	<p><i>"How much pay gets deducted from taxes, health insurance, etc."</i></p> <p><i>"Taxes take more money than I thought."</i></p> <p><i>"How much money is gone before you even get your paycheck."</i></p>
Family Expenses	<p><i>"I learned how much money it takes to pay the bills and have a family."</i></p> <p><i>"How much money you need in order to support a family and the responsibility needed to maintain a family."</i></p> <p><i>"How much it really cost to run a household. I knew it was a lot but it turned out to be more than I thought."</i></p>
Making Financial Decisions	<p><i>"That you have to make wise decisions on how you spend."</i></p> <p><i>"I learned you should make good decisions about your money."</i></p> <p><i>"I learned the variety of things life can throw at you and how hard some decisions are."</i></p>
Monthly Expenses	<p><i>"That groceries are very expensive."</i></p> <p><i>"The monthly cost of things like child care and housing."</i></p> <p><i>"It surprised me how much bills cost a month."</i></p>
Saving	<p><i>"How important it is to save money."</i></p> <p><i>"That it is always important to save money regularly, so eventually it will be there for you when you need it most."</i></p> <p><i>"The amount of money you can gain from a savings account over the years."</i></p>
Budgeting	<p><i>"Just how hard it could be to budget your money."</i></p> <p><i>"I learned that I have to manage my money a lot more than I expected."</i></p> <p><i>"How hard it is to keep track of your money and buying what you want isn't very important."</i></p>
Realities of the Real World	<p><i>"I learned that the real world is a lot more difficult than I thought."</i></p> <p><i>"I learned that what I thought was a lot of money ended up being a lot less than I thought."</i></p> <p><i>"There is so much you have to account for and a lot of the times you overlook that."</i></p>

Themes Generated	Representative Quotes to Support Themes
Parents' Financial Responsibilities	<p><i>"That it's really hard for parents to deal with all those money decisions especially with child care. I never thought it was that much."</i></p> <p><i>"I learned that the real life is hard now I know what our parents go through."</i></p> <p><i>"What I learned that surprised me the most was what my parents had to pay and how hard it can be on them."</i></p>
Debt	<p><i>"That I didn't think that all of the stuff that you needed in life would actually get you in debt if you are not careful."</i></p> <p><i>"That is was extremely hard to stay out of debt."</i></p> <p><i>"I think the thing that surprised me the most is just how much it takes to pay off your debts."</i></p>
Credit Cards	<p><i>"Credit cards could put you in bankruptcy and that even though you make the minimum payment it still takes a lot of time to pay it all."</i></p> <p><i>"The interest that is charged on credit cards. I have one but didn't know too much about them."</i></p> <p><i>"What surprised me the most is the payment on credit card debt. This taught me to not use a credit card unless it's an emergency."</i></p>

Note: Selected responses to the question: "What surprised you the most about what you learned in *Real Money. Real World?*"

Teacher Feedback

Teacher feedback was elicited at the program's completion. 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. Representative comments from teachers are summarized in Table 8.

Table 8

Teacher Feedback about Their Participation in *Real Money. Real World.*

<ul style="list-style-type: none"> • "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!" <i>(Monroe County)</i>
<ul style="list-style-type: none"> • "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!" <i>(Jackson County)</i>
<ul style="list-style-type: none"> • "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." <i>(Miami County)</i>
<ul style="list-style-type: none"> • "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." <i>(Wayne County)</i>

- “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*)

Discussion

Students often indicate that the realistic simulation approximating real-life situations and choices they will have to make as adults is very helpful, eye-opening, enjoyable, and much more valuable than lecture. By creating such a teachable moment, *RMRW* sets the stage for pursuing financial topics in greater depth than can be accomplished in six lessons. Educators presenting the *RMRW* curriculum also need to be aware of other complementary financial literacy resources (e.g., NEFE's *High School Financial Planning Program* [www.nefe.org], the 4-H curriculum *Financial Champions* [Mincemoyer & Furry, 2003], the National Student Loan Program's financial literacy on-line website [<http://www.nslpflonline.org>], and the eXtension Financial Security for All Community of Practice [Pankow & O'Neill, 2009]).

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. *RMRW* is providing more Ohioans with the knowledge and skills necessary to succeed in the 21st century. In a time when instruction in personal finance is increasingly critical to the effective development of financial competence, the use of the *RMRW* and others with documented impacts is strongly encouraged.

Organizational Outcomes

A strength of this coordinated evaluation effort is that the same tools for evaluation were used throughout the state. We used the self-assessment completed by students to provide data for the evaluation. Thus, it did not require additional time for teachers to administer. Because the on-line option allowed for continuous data entry and review of results, we were able to summarize the results whenever necessary throughout the year-long process of multi-site data collection. At the conclusion of the evaluation, we produced an executive summary (Sotak, Ferrari, Hudson, Cochran, & Bridgeman, 2007) and a full report (Sotak, Ferrari, Hudson, Cochran, & Bridgeman, 2008) to share the results with others.

Organizational outcomes resulted from the statewide use of the curriculum and the availability of evaluation results. An evaluation with statewide scope positioned Ohio 4-H Youth Development to apply for additional funding when opportunities arose. As a result of our ability to present documented success with youth financial literacy, the Ohio 4-H Foundation was able to submit a proposal to a bank that resulted in \$15,000 in external funding to support youth financial education programs.

RMRW presented an opportunity for Extension professionals in 4-H and Family Consumer Sciences to collaborate on their programming efforts. In 2007, the curriculum was updated to include current costs and document the sources of the cost data. In addition, 500 family and consumer sciences teachers were made aware of *RMRW* through conference presentations around the state. This collaboration earned the *RMRW* team a multi-disciplinary Team Teaching

award from the state chapter of Epsilon Sigma Phi (an Extension professional association). We demonstrated that working together in a unified effort to reach teachers and youth about the topics presented in the curriculum can create a larger impact than when efforts are unfocused or fragmented.

In addition, *RMRW* was selected as an OSU Extension Signature Program. Signature programs were identified in the 2008 OSU Extension Strategic Plan as being successful, replicable programs that reflect OSU Extension's capabilities and are interdisciplinary in nature. As a signature program, additional resources were made available to support *RMRW* program implementation and gain visibility with stakeholders.

RMRW use has continued, with 34 counties reporting use of the curriculum in 2009. It has been used successfully with diverse audiences, including juvenile detention centers, pregnant and parenting teens, and rural and urban settings. County Extension professionals have secured additional local resources to support the program. The curriculum was updated again in 2009. A follow-up study of participants in 2009 documented that students reported additional impacts several months after participation (Bateson, 2009; Bateson & Ferrari, 2009).

Devoting sufficient resources to a specific, focused purpose and making a concerted effort to replicate a program at multiple sites allowed us to document impacts. Others could follow a similar process with similar timely topics.

Notes:

The *RMRW* curriculum is available from <http://estore.osu-extension.org/searchproducts.cfm?step=2>. Questions regarding the evaluation results should be directed to Theresa Ferrari. Questions regarding program implementation should be directed to Beth Bridgeman or Nancy Recker (recker.22@osu.edu).

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