About Junior Achievement USA® (JA)

Junior Achievement is the world’s largest organization dedicated to giving young people the knowledge and skills they need to own their economic success, plan for their future, and make smart academic and economic choices. JA programs are delivered by corporate and community volunteers, and provide relevant, hands-on experiences that give students from kindergarten through high school knowledge and skills in financial literacy, work readiness and entrepreneurship. Today, JA reaches 4.4 million students per year in 118 markets across the United States, with an additional 5.7 million students served by operations in 120 other countries worldwide. Visit [www.ja.org](http://www.ja.org) for more information.
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Executive Summary

Junior Achievement USA (JA) is the world's largest organization dedicated to giving young people the knowledge and skills they need to own their economic success, plan for their future, and make smart academic and economic choices. *JA Our City*® is an elementary school program that targets the JA pillar of financial literacy. Over the course of five sessions, with topics including business, economics, ethics, reading, writing, and characteristics of cities, *JA Our City*® introduces students to the ways that people and businesses in cities make decisions about their money.

The aim of this summative assessment was to measure the impact of *JA Our City*®. Conducted during spring 2014, this summative assessment measured the impact of *JA Our City*® on students in nine JA Areas by measuring and comparing student knowledge and attitudes, and student satisfaction as a result of their participation in the program. In addition, the assessment addressed volunteer and teacher satisfaction, perceived program impact, ability of the program to address learning objectives, and relevance to students’ lives.

Post-program surveys were administered to teachers and volunteers. Pre-program and post-program assessments were administered to program students (students who participated in *JA Economics for Success*) and to control student (students who did not participate in the program). The responses of program students were compared to control students to determine how impactful the program was. Teachers and volunteers also participated in one-on-one interviews to provide more in-depth feedback on program impact and stakeholder satisfaction.

Demographics and Implementation Characteristics
Most teachers participating in this assessment had taught for ten or more years, had participated in six or more previous JA programs, and were female. Most volunteers participating in the assessment were also female, and working with JA for the first time.

Most of the students who completed an assessment, regardless of whether they were in the control or the program group, were in 3rd grade and had previously participated in a JA program.

A majority of the classrooms included in this report participated in JA in a Day. One volunteer typically taught the program, while teachers walked around the classroom and helped students answer questions. Neither teachers nor volunteer reported extensive use of non-JA materials to supplement the program curriculum.

JA Program Effectiveness and Engagement
Teachers who participated in the program described their volunteers as effective, and both teachers and volunteers reported that they were adequately trained and clear about their program roles and responsibilities. Teachers and volunteers also concurred that students were engaged throughout the program.

Across every measure of teacher attitudes about learning objectives, teachers reported that the program addressed its learning objectives. Teachers additionally indicated that the *JA Our City*® program was age-appropriate, reflected their state’s educational standards, and aligned with their regular course curriculum. However, several teachers reported concerns that the instructional materials were too complex for third graders.

Volunteers noted that students enjoyed having the chance to hear from adults in their communities, and noted that the program was relevant to students’ lives outside the classroom.
Program Impact
Program students demonstrated larger knowledge gains regarding program’s concepts compared to the control group. These gains were modest but statistically significant, meaning that the difference was not due to chance. Over the course of JA, most students maintained or increased their understanding of the concepts in the program’s learning objectives. The high proportion of students who maintained their knowledge of the program’s learning concepts—including city planning, producers and consumers, savings, needs and wants, buying things, and banks and credit unions as places where people keep, borrow, and save money—suggests that students were familiar with these concepts prior to beginning the JA program. The large amount of variability across questions suggests that concepts relating to cities, entrepreneurs, and online communication were new concepts for students participating in JA Our City®.

Program Satisfaction
Teachers, volunteers, and students all reported high levels of satisfaction with JA Our City®. Teachers and volunteers strongly agreed that students were engaged in the program’s activities and appeared interested in the curriculum. A majority of teachers and volunteers also rated the instructional materials provided by JA as excellent. A majority of students indicated that they were glad that their class had JA Our City®, and that they learned important things in the program. Most teachers, volunteers, and students also agreed that they would want to participate in another JA program. Overall, JA Our City® has a positive impact on student knowledge and is enjoyed by all stakeholders who participated.

Recommendations
Teachers and volunteers agreed that one way to improve the program would be to have more hands-on activities and more small-group work. In addition, both teachers and volunteers reported that there was too much material to cover in the allotted time.
Introduction

The aim of this summative assessment was to measure the impact of one of Junior Achievement USA’s (JA) elementary school programs: JA Our City®. This assessment took place during spring 2014 and measured impact by identifying changes in student knowledge and attitudes, student satisfaction, and short-term student behavior. In addition, volunteer and teacher satisfaction, perceived impact, ability of the program to address learning objectives, and relevance were also assessed.

All JA elementary programs are developed with a primary emphasis on work readiness, financial literacy, and entrepreneurship. JA Our City® targets the JA pillar of financial literacy. The program’s five sessions link financial literacy to third grade concepts in social studies, business, economics, ethics, reading, writing, and mathematics. JA Our City® introduces students to the characteristics of cities and the ways that people and businesses in cities make decisions about their money. Exhibit 1 summarizes the core learning concepts addressed in each of the five sessions of JA Our City®.

<table>
<thead>
<tr>
<th>Session</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 1: Our City: A Place Where People Live, Work, and Play</td>
<td>Students identify the different zones used in city planning and apply the information to organize businesses.</td>
</tr>
<tr>
<td>Session 2: Our City: A Place Where People Spend Money</td>
<td>Students examine the importance of money to a city and how people use different methods to pay for goods and services.</td>
</tr>
<tr>
<td>Session 3: Our City: A Place Where People Bank</td>
<td>Students see the contributions of financial institutions to a city and how those institutions help businesses and people achieve their economic goals.</td>
</tr>
<tr>
<td>Session 4: Our City: A Place Where People Dine</td>
<td>Students learn the role of an entrepreneur by exploring the process involved in starting one type of business: a restaurant. They learn how businesses promote a healthy economy within a city.</td>
</tr>
<tr>
<td>Session 5: Our City: A Place Where People Communicate</td>
<td>The students learn the importance of news media to the financial well-being of a city.</td>
</tr>
</tbody>
</table>

Summary of Methods

Nine JA Areas participated in the JA Our City® summative assessment. In order to obtain feedback from participants, Harder+Company Community Research, the contractor selected to implement the summative assessment, administered surveys and protocols for participating teachers, volunteers, and students (program and control) at participating JA Areas.

As seen in Exhibit 2, two post-program online surveys (one for volunteers and one for teachers) were administered immediately following the conclusion of the program to identify the program’s impact, relevance, and how well it addressed the learning objectives. Additionally, questions related to classroom characteristics, program implementation, and program recommendations were also included. A sample of teachers and volunteers was interviewed via phone to obtain additional perceptions of program impact.
Both program and control students were administered two assessments: a pre-program assessment administered prior to program implementation, and a post-program assessment administered within 24-hours post-program implementation. The time frame of when post-program assessments were administered to control students varied by teacher and JA Area; the time frame ranged from the following day after the pre-program assessments to five weeks. The pre- and post-program assessments contained the same set of demographic, knowledge, and attitudinal questions; the post-program assessment included additional attitudinal questions. In order to measure and compare knowledge and attitudinal change, pre- and post-program assessments were matched using a combination of students’ last name and date-of-birth. Some analyses only include program students’ post-program assessments.
Exhibit 3 provides details of the number of participating teachers, volunteers, and students in each JA Area.

<table>
<thead>
<tr>
<th>JA Area</th>
<th>Program</th>
<th>Control</th>
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<tbody>
<tr>
<td></td>
<td>Teachers</td>
<td>Volunteers</td>
</tr>
<tr>
<td></td>
<td>Survey</td>
<td>Interview</td>
</tr>
<tr>
<td>JA of Greater St. Louis</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>JA of Greater Washington</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>JA of Lincoln</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>JA of Northern California</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>JA of Rocky Mountain</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>JA of Tampa Bay</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>JA of Western New York</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>JA of Delaware Valley</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>JA of Southern Colorado</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>0</strong></td>
</tr>
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Surveys that were returned were tracked and weekly status reports were sent to JA Area Staff to assist in monitoring response rates at each site. Weekly email reminders with links to the online surveys were also sent to adult stakeholders. Efforts were made to interview eight program teachers and eight program volunteers; potential interview participants were contacted at least three times. The findings of this assessment are limited by the small number of teacher and volunteer interview participants, as well as the number of control student surveys received.

**Analyses and Effect Size**
Students’ pre- and post-program assessments were matched using their last names and dates-of-birth. Quantitative data were entered into a standard statistical program (Statistical Package for the Social Sciences: Version 19) and analyzed using standard statistical procedures. Totals for specific survey items may not equal the overall sample size if some respondents left that item blank. The n-size for each variable is presented in the data tables and charts. In most cases, descriptive analysis (i.e., response frequencies) is provided. Various statistical tests were conducted based on the specific research question being answered. Findings noted as “statistically significant” are based on a p-value less than or equal to 0.5 and indicate that the groups being compared were different from one another in a statistical sense, and that the difference is not by chance alone; significant findings are noted with an asterisk (*). However, please note that tests of significance are sensitive to sample size; the larger the sample size the easier it is to show a “statistically significant difference”. When a
significant difference is found, other metrics should be explored in tandem with the discovery, including the mean or median, standard deviation, and effect size (when calculated).

As noted above, to more effectively explore the impact of the program on student knowledge, analysis of effect size is included. The effect size is the magnitude, or size, of an effect. It is useful to include as it provides a “practical” or “meaningful” context to the statistical significance (i.e., something can be statistically significant, but not meaningfully different). The range for effect size is typically from -3.0 to 3.0. A general rule of thumb is that r=0.2 is considered a ’small’ effect size, 0.5 represents a ’medium’ effect size and 0.8 or greater is a ’large’ effect size.

Qualitative data from open-ended survey responses and interviews were analyzed using content analysis, an approach which comprehensively examines participant commentary for trends and emerging themes. A software program (ATLAS.ti) was utilized for this process.

Overview of Report Findings
Findings are based on survey and interview responses. Findings are separated out by stakeholder (teacher, volunteer, and student) and stratified into the following sections, as applicable:

- **Demographics of Participants**: Demographic findings highlight information about prior involvement and other key pieces of information (number of years teaching, gender, etc.) for all stakeholders.

- **Characteristics of JA Program Implementation**: As each stakeholder had a different role implementing the program, teachers and volunteers were asked to provide a host of feedback related to program implementation. It is important to ascertain how the program was implemented, as this information contextualizes the observed level of impact the program had on student outcomes. Students were not asked any program implementation questions; therefore, they do not have findings associated with this section.

- **Perception of JA Program Components, Effectiveness, and Engagement**: Both teachers and volunteers provided feedback regarding their perception of their own preparation and role administering the program, how well learning objectives were effectively addressed during the program, the level of student engagement, and the quality of instructional materials. Additionally, teachers were asked to rate the effectiveness and value of their JA volunteer, and alignment and appropriateness of the JA curriculum. Students were not asked any questions related to this section; therefore, they do not have findings associated with this section.

- **Program Impact**: In order to meet the changing education needs of students, JA programs are revised on a regular cycle. Demonstrating program impact is critical to validate the importance and value of *JA Our City*® in its current iteration. Program impact was measured in a variety of ways including changes in students’ knowledge, and teachers’ and volunteers’ perceptions of program impact.

- **Program Satisfaction**: All stakeholders provided feedback related to their level of satisfaction with *JA Our City*®.
Teacher Findings
Without the support of teachers, JA program implementation would not be possible. Teachers also provide unique and critical feedback regarding the impact and alignment of the JA curriculum.

Teacher Demographics
Most teachers participating in this assessment had taught for ten or more years, participated in many previous JA programs, and were female.

Exhibit 4. Teachers’ Previous Teaching Experience (n=16)

<table>
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<tr>
<th>Experience</th>
<th>Percentage</th>
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<tr>
<td>10+ years</td>
<td>87.5%</td>
</tr>
<tr>
<td>6-9 years</td>
<td>12.6%</td>
</tr>
<tr>
<td>3-5 years</td>
<td>0%</td>
</tr>
<tr>
<td>1-2 years</td>
<td>0%</td>
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Exhibit 5. Teachers’ Previous JA Experience (n=16)

<table>
<thead>
<tr>
<th>Experience</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>6+ Programs</td>
<td>62.5%</td>
</tr>
<tr>
<td>4-5 Programs</td>
<td>25.1%</td>
</tr>
<tr>
<td>2-3 Programs</td>
<td>6.3%</td>
</tr>
<tr>
<td>First JA Experience</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

Exhibit 6. Teachers’ Gender (n=16)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>93.8%</td>
</tr>
<tr>
<td>Male</td>
<td>6.3%</td>
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Teacher Reported Characteristics of Program Implementation

Most teachers participating in this assessment participated in JA in a Day, had one volunteer teach the program, and walked around and helped answer student questions. The majority of teachers did not use non-JA materials to supplement the program curriculum (81.3%; n=16). Those teachers who did bring in outside materials to supplement the program curriculum did so for one session (50.0%; n=2) or all sessions (50.0%; n=2).

Exhibit 7. Teacher Reported Program Delivery Format (n=16)

- JA in a Day: 50.0%
- Once a Week: 31.3%
- Twice a Week: 12.5%
- Other: 6.3%

Exhibit 8. Teacher Reported Number of Volunteers who Taught the Program (n=16)

- One: 75.0%
- Two: 18.8%
- Other: 6.3%

Exhibit 9. Teacher Reported Level of Teacher Involvement in Program Delivery (n=16)

- I walked around and helped answer student questions: 56.3%
- I observed the JA volunteer but did not get actively involved in the lesson: 37.5%
- I helped the JA volunteer with the student activities: 31.3%
- I co-led the program with the JA volunteer: 6.3%
- I did not observe the JA volunteer deliver the program: 0.0%
Teacher Perception of Program Components, Effectiveness, and Engagement

Most teachers agreed or strongly agreed that they understood their role as a teacher in a JA classroom, and strongly agreed that the JA volunteer assigned to their classroom provided value to the program. The majority of teachers reported that their volunteer was very effective and that all of the learning objectives in *JA Our City* were thoroughly addressed and agreed or strongly agreed that the *JA Our City* curriculum is age-appropriate, reflects their state’s educational standards, and aligned well with their regular course curriculum. The highest percentages of teachers strongly agreed with the statement that students appeared interested in the curriculum and that students were engaged during activities. A majority of teachers strongly agreed that students were engaged during discussion, appeared to understand the concepts presented, and that the instructional materials provided by JA were excellent.

Exhibit 10. Teacher Reported Use of Non-JA Materials by Type (n=2)

- Maps: 50.0%
- Online resources: 50.0%
- Magazines: 50.0%
- Newspapers: 50.0%
- Other (specify): 0.0%
- Video: 0.0%
- Advertisements: 0.0%

Exhibit 11. Teacher Reported Level of Agreement Regarding Understanding Their Role and Value of JA Volunteer

- I understood my role as a teacher. (n=16)
  - Strongly Disagree: 6.3%
  - Disagree: 12.5%
  - Neither Agree/ Nor Disagree: 31.3%
  - Agree: 50.0%

- The JA volunteer(s) provided value to the program. (n=15)
  - 6.3% 6.7% 6.7% 80.0%

Exhibit 12. Teacher Reported Rating of Overall Effectiveness of JA Volunteer (n=16)

- Very Ineffective: 6.3%
- Somewhat Ineffective: 12.5%
- Somewhat Effective: 81.3%
- Very Effective: 0.0%
### Students will understand how financial institutions contribute to a city. (n=16)

- **6.3%** Not Addressed at all
- **6.3%** Slightly Addressed
- **6.3%** Moderately Addressed
- **93.8%** Thoroughly Addressed

### Students will identify what a city is. (n=16)

- **6.3%** Not Addressed at all
- **6.3%** Slightly Addressed
- **6.3%** Moderately Addressed
- **87.5%** Thoroughly Addressed

### Students will define what a consumer, producer and entrepreneur is. (n=16)

- **6.3%** Not Addressed at all
- **18.8%** Slightly Addressed
- **75.0%** Thoroughly Addressed

### Students will understand the responsibilities of operating a business. (n=15)

- **6.7%** Not Addressed at all
- **20.0%** Slightly Addressed
- **73.3%** Thoroughly Addressed

### Students will understand the different ways people pay for goods and services. (n=16)

- **6.3%** Not Addressed at all
- **25.0%** Slightly Addressed
- **68.8%** Thoroughly Addressed

### Students will recognize the importance of news media and technology in a community. (n=16)

- **6.3%** Not Addressed at all
- **18.8%** Slightly Addressed
- **68.8%** Thoroughly Addressed

### Students will explain the importance of money in a city, including the role of taxes. (n=16)

- **6.3%** Not Addressed at all
- **31.3%** Slightly Addressed
- **62.5%** Thoroughly Addressed

### Students will describe how the news is delivered in various formats. (n=16)

- **6.3%** Not Addressed at all
- **31.3%** Slightly Addressed
- **62.5%** Thoroughly Addressed

### Students will identify the basic functions of banking and budgets. (n=15)

- **6.7%** Not Addressed at all
- **33.3%** Slightly Addressed
- **53.3%** Thoroughly Addressed

### Students will understand how financial institutions contribute to a city. (n=16)

- **6.3%** Not Addressed at all
- **43.8%** Slightly Addressed
- **50.0%** Thoroughly Addressed

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*Exhibit 13. Teacher Reported Rating of How Well Learning Objectives were Addressed*
The JA curriculum reflects the state’s educational standards. (n=16)

6.3% 18.8% 37.5% 37.5%

The JA materials aligned well with my regular course curriculum. (n=16)

6.3% 18.8% 43.8% 31.3%

The JA curriculum is age-appropriate. (n=16)

18.8% 37.5% 43.8% 31.3%

Exhibit 14. Teacher Reported Level of Agreement Regarding JA Curriculum

Exhibit 15. Teacher Reported Level of Agreement Regarding Student Engagement

Students Appeared Interested in Curriculum. (n=16)

12.5% 18.8% 68.8%

Students were Engaged During Activities. (n=16)

18.8% 12.5% 68.8%

Students Engaged During Discussion. (n=15)

13.3% 33.3% 53.3%

Students Appeared to Understand Concepts Presented. (n=16)

6.3% 12.5% 31.3% 50.0%

Exhibit 16. Teacher Reported Rating of Instructional Materials Provided by JA (n=16)

6.3% 18.8% 18.8% 56.3%

Extremely Poor Below Average Average Above Average Excellent
Teacher Perceived Program Impact
Nearly all teachers (93.3%) reported that they believed JA Our City® has a positive impact on students (n=15). Furthermore, most teachers strongly agreed or agreed that the JA curriculum was impactful. The majority of teachers agreed or strongly agreed that students developed the skills outlined in the program curriculum. Teachers that indicated that JA had a positive impact noted that, “The program provides life lessons that are not part of a traditional math or reading curriculum” and that, “Students look forward to the program. The real-life activities make it important to them.” Other teachers agreed with the relevance to students’ lives outside of the community, commenting that, “The curriculum offers real life examples of how to apply classroom learning. Also, students see positive role models in our community” and that, “Students connect their learning from the JA curriculum to the experiences they have on a daily basis.”

In addition to providing their level of agreement to statements regarding skills students developed or improved due to JA participation, teachers were asked to identify three skills they perceived students had most improved due to their participation in JA. The top three responses were:

1. Financial literacy skills (62.5%);
2. Teamwork (56.3%); and
3. Decision-making (50.0%).

Exhibit 17. Teacher Reported Level of Agreement Regarding Skills Students Developed or Improved by Participating in JA
Teacher Satisfaction

When asked if they would participate in JA again, all teachers (100%) indicated they would (n=15). Teachers were asked to provide feedback on their experience with JA through open-ended questions on the online survey. Teachers were generally satisfied with the program, particularly because of how much their students enjoyed it. For example, one teacher commented, “The materials are interactive and encourage children working with each other in small groups. They learn practical information that they can use in their lives.” Another noted, “I think the experience, especially meeting working successful adults outside of their school, is highly valuable. Many of the materials are over the heads of my learners, especially my special needs learners.”

This teacher’s feeling that the materials went over the heads of some students was echoed by others, who remarked that some of the materials were too complex for third graders. For instance, one teacher commented that doing JA in a Day, “Was way too much information for one day.” Another expressed concern with the difficulty of the pre-test, saying, “The pre-test needs to come with a warning. It was heartbreaking as kids assumed they should know all the terms, and the length of time they took trying to decipher the questions frustrated the JA teachers. Third graders have never seen the bubble and letter or number scan sheets. They messed up, across the board...even my brightest kids. I ended up redoing this portion so the lesson could start.”
Volunteer Findings
Volunteers have diverse backgrounds and varied experiences with JA. They provide another lens through which to examine the impact of the JA program.

Volunteer Demographics
Most volunteers participating in this assessment were leading JA for the first time and were female.

Volunteer Reported Characteristics of Program Implementation
Most volunteers participating in this assessment participated in JA in a Day, taught the program by themselves, and worked with a teacher who observed but did not get actively involved in the sessions. The majority of volunteers reported that they did not use non-JA materials to supplement the program curriculum (90.9%; n=11); those who did, used them for one session (100%; n=2).
I received adequate training to deliver the JA Program. (n=10)

Exhibit 23. Volunteer Reported Level of Teacher Involvement in Program Delivery (n=10)

- The teacher was not present in the classroom. 0%
- The teacher observed the session, but did not get actively involved in the lessons. 40.0%
- The teacher walked around and helped answer student questions. 30.0%
- The teacher helped with the student activities. 30.0%
- The teacher co-led the program with me. 0%

Through telephone interviews, two volunteers provided feedback on the use of supplemental materials. One volunteer interviewed noted that she taught her students to, “Calculate tax on an item, because they haven’t done it before. They didn’t know the math behind it so I showed them that.” This same volunteer also mentioned that she works in pharmaceutical sales, so she brought in a model of an eyeball and her iPad to show the students when she begins teaching JA.

**Volunteer Perception of Program Components, Thoroughness, and Engagement**
Most volunteers strongly agreed that they understood their role as a volunteer, and agreed or strongly agreed that they received adequate training to deliver the JA program. All volunteers who participated in the online survey agreed or strongly agreed that students appeared to understand the concepts presented, were engaged during the activities, appeared interested in the curriculum, were engaged during discussions and described the materials provided by JA as above average or excellent.

Exhibit 24. Volunteer Reported Level of Agreement Regarding Understanding Their Role and Training Provided by JA

<table>
<thead>
<tr>
<th>Understanding Their Role and Training Provided by JA</th>
<th>(n=10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I understood my role as a volunteer</td>
<td>10.0% 90.0%</td>
</tr>
<tr>
<td>I received adequate training to deliver the JA Program.</td>
<td>10.0% 40.0% 50.0%</td>
</tr>
</tbody>
</table>
Students will identify the basic functions of banking and budgets. (n= 10)  
- Not Addressed at all: 50.0%  
- Slightly Addressed: 50.0%  
- Moderately Addressed: 0.0%  
- Thoroughly Addressed: 0.0%

Students will explain the importance of money in a city, including the role of taxes. (n= 9)  
- Not Addressed at all: 55.6%  
- Slightly Addressed: 44.4%  
- Moderately Addressed: 0.0%  
- Thoroughly Addressed: 0.0%

Students will understand how financial institutions contribute to a city. (n= 10)  
- Not Addressed at all: 70.0%  
- Slightly Addressed: 0.0%  
- Moderately Addressed: 30.0%  
- Thoroughly Addressed: 0.0%

Students will recognize the relationship between a city, zones and businesses. (n= 9)  
- Not Addressed at all: 88.9%  
- Slightly Addressed: 11.1%  
- Moderately Addressed: 0.0%  
- Thoroughly Addressed: 0.0%

Students will identify what a city is. (n= 9)  
- Not Addressed at all: 88.9%  
- Slightly Addressed: 11.1%  
- Moderately Addressed: 0.0%  
- Thoroughly Addressed: 0.0%

Students will understand the responsibilities of operating a business. (n= 10)  
- Not Addressed at all: 80.0%  
- Slightly Addressed: 20.0%  
- Moderately Addressed: 0.0%  
- Thoroughly Addressed: 0.0%

Students will recognize the importance of news media and technology in a community. (n= 9)  
- Not Addressed at all: 88.9%  
- Slightly Addressed: 11.1%  
- Moderately Addressed: 0.0%  
- Thoroughly Addressed: 0.0%

Students will describe how the news is delivered in various formats. (n= 9)  
- Not Addressed at all: 77.8%  
- Slightly Addressed: 11.1%  
- Moderately Addressed: 11.1%  
- Thoroughly Addressed: 0.0%

Students will define what a consumer, producer and entrepreneur is. (n= 10)  
- Not Addressed at all: 10.0%  
- Slightly Addressed: 90.0%  
- Moderately Addressed: 0.0%  
- Thoroughly Addressed: 0.0%

Students will understand the different ways people pay for goods and services. (n= 9)  
- Not Addressed at all: 88.9%  
- Slightly Addressed: 11.1%  
- Moderately Addressed: 0.0%  
- Thoroughly Addressed: 0.0%
Two volunteers interviewed by telephone agreed that students were engaged during the curriculum, noting that, “Students were really involved throughout,” and that JA, “Was a good experience for all of them.” Another volunteer commented that, “The kids are very smart and had a lot of really good questions… they loved the games, they were really excited the whole time. The games are really fun.” The volunteers interviewed agreed that students were most engaged during the activities, but had a tendency to get distracted by some of the props.

Volunteer Perceived Program Impact
All volunteers (100%) reported that they believed JA Our City® has a positive impact on students (n=10). Furthermore, most volunteers strongly agreed or agreed that the JA curriculum was impactful. Volunteers that indicated that JA had a positive impact noted that the program, “Exposes students to information they may not get in the regular classroom,” and that it, “Brings real world, hands-on learning about finances and business.” As a result of this connection to the world outside of their classrooms, volunteers affirmed, “Students have a better understanding about economic issues that affect everyone,” and “students learn about entrepreneurship, financial literacy during the JA day.” In addition to providing their level of agreement to statements regarding skills students developed or improved due to JA participation, teachers were asked to identify three skills they reported students had most improved due to their participation in JA. The top three responses were:

1. Financial literacy skills (90.0%);
2. Teamwork (50.0%); and
3. Entrepreneurial skills (40.0%).

Exhibit 28. Volunteer Reported Level of Agreement Regarding Skills
Students Developed or Improved by Participating in JA
In interviews conducted over the phone, both volunteers reinforced the perception that JA Our City® is relevant to students’ lives outside of the classroom. One volunteer reflected on the curriculum’s relevance by saying, “I think it got them thinking more critically about how cities are laid out in different areas… Now when they’re out with their families they’re looking for things like that, pointing out, ‘this is the industrial area, this is the business area. [The program] helps them understand how our city is laid out….[Also], the whole thought process behind how credit cards and debit cards work, how banks lend, interest, that was new to a lot of them. Several asked if they could open their own bank account afterward; they were thinking about how they could save money to buy things they want down the line.”

Volunteer Satisfaction
When asked if they would participate in JA again, nearly all volunteers (90.0%) indicated they would (n=10). Through telephone interviews and open-ended questions on the online survey, volunteers were asked to provide feedback on their experience with JA. Volunteers were enthusiastic about their experience with the program, saying “I think it was really good, the best one I’ve taught…For JA Our City®, each lesson was great, excellent.” Another volunteer also had positive feedback, noting that “[Students] were a lot more engaged than I thought; the teacher did a great job of getting them prepped and excited. I expected that to some degree but I was surprised by how much they knew…We were expecting less participation and excitement, [I was] very, very shocked by the level of participation and excitement.”
Student Findings

Feedback from students, including answers to knowledge questions was used to determine the overall impact of JA Our City® on student knowledge, attitudes, and behaviors.

Student Demographics

Most program students who completed a post-program assessment were in 3rd grade and participated in JA previously. Most program and control students who completed both a pre- and a post-program assessment were in 3rd grade and participated in JA previously.

<table>
<thead>
<tr>
<th>Exhibit 30. Student Demographics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Grade (n)</strong></td>
</tr>
<tr>
<td><strong>Program</strong></td>
</tr>
<tr>
<td>Post Only</td>
</tr>
<tr>
<td>312</td>
</tr>
<tr>
<td>Pre &amp; Post</td>
</tr>
<tr>
<td>240</td>
</tr>
<tr>
<td>Pre &amp; Post</td>
</tr>
<tr>
<td>40</td>
</tr>
<tr>
<td><strong>Control</strong></td>
</tr>
<tr>
<td>Previous JA Experience (n)</td>
</tr>
<tr>
<td><strong>Program</strong></td>
</tr>
<tr>
<td>No Previous Experience</td>
</tr>
<tr>
<td>19.9%</td>
</tr>
<tr>
<td>Previous Experience</td>
</tr>
<tr>
<td>80.1%</td>
</tr>
<tr>
<td><strong>Control</strong></td>
</tr>
<tr>
<td>No Previous Experience</td>
</tr>
<tr>
<td>32.6%</td>
</tr>
<tr>
<td>Previous Experience</td>
</tr>
<tr>
<td>67.4%</td>
</tr>
</tbody>
</table>

Program Impact on Students

Assessments results for students are a key element of this summative assessment as pre-program and post-program assessment data, along with comparison data, provide evidence of student learning and attitudinal/behavioral changes due to involvement in JA.

Student Knowledge Change

Students were asked nine knowledge questions on the pre- and post-program assessment. A knowledge score for the pre- and post-program assessment was derived by adding the number of total correct responses. The majority of students answered most questions correctly on both the pre-program and post-program assessment. Exhibit 31 displays the average pre- and post-program assessment score for both program and control students. The average change score (post-program assessment knowledge score minus pre-program assessment knowledge score) of the program group (mean=1.2; SD=1.6) and the control group (mean=.2; SD=1.0) was statistically different (p<.05); the program group showed a higher increase in knowledge gain. The associated effect size (r=.35) indicates a nearly ’medium’ effect. Additional detail on whether students answered each question correctly or incorrectly on the both the pre-program assessment and the post-program assessment can be found in the Technical Appendix.
To fully understand the impact of a program, it is often helpful to explore whether some variables can predict a specific outcome. One way to test this notion is to conduct a statistical process called “multiple regression,” which measures which variables influence the accurate prediction of another variable, such as an outcome variable. In this assessment, two variables, participation in the current JA program (program or control group) and prior experience with JA, were analyzed to see how much they can predict the amount of change in knowledge scores. The result of that analysis indicated that participating in JA predicted a higher change score, regardless of prior participation in JA, meaning that participating in JA Our City® does appear to positively impact knowledge change on core program concepts. Additional detail regarding this analysis can be found in the Technical Appendix.

To determine if certain factors contribute to the knowledge gain observed in program students, chi-square analyses to measure the association between various factors and knowledge change were performed. The association between teacher reported program delivery format (JA in a Day vs. Non JA in a Day) and change in student knowledge was not statistically significant (p>.05); the percentage of students was similar across groups.

Program Impact on Student Attitudes
On the post-program assessment, program students were asked to rate their level of agreement to a series of attitudinal statements. When provided statements connected to school, a high percentage of program students reported that JA made school more interesting and that they looked forward to going to school more on the days JA takes place. Program students also provided feedback on statements regarding current and future
issues. The majority of students reported that the things they learned in JA will be important later in life and help them get a good job. Most students were glad that they had JA in their class; indicated that they had learned about things that are important; wanted to participate in another JA program; and believed JA Our City® would help them learn about how to get a job when they grow up. However, many students were uncertain whether or not they would tell their friends to join a Junior Achievement Program.

### Exhibit 33. Student Reported Post-Participation Levels of Agreement Regarding Attitudes**

<table>
<thead>
<tr>
<th>Question</th>
<th>No</th>
<th>Maybe</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you glad you had JA Our City in your class? (n=304)</td>
<td>5.3%</td>
<td>12.8%</td>
<td>81.9%</td>
</tr>
<tr>
<td>Did the JA Our City Program help you learn about things that are important? (n=308)</td>
<td>11.4%</td>
<td></td>
<td>85.4%</td>
</tr>
<tr>
<td>Do you want to participate in another Junior Achievement Program? (n=308)</td>
<td>9.4%</td>
<td>27.6%</td>
<td>63.0%</td>
</tr>
<tr>
<td>Did the JA Our City Program help you learn about how to get a job when you grow up? (n=306)</td>
<td>15.4%</td>
<td>24.5%</td>
<td>60.1%</td>
</tr>
<tr>
<td>Will you tell your friends to join a Junior Achievement Program? (n=308)</td>
<td>16.6%</td>
<td>48.4%</td>
<td>35.1%</td>
</tr>
</tbody>
</table>

**All percentages less than 5.3% are not displayed**
Stakeholder Recommendations

Teachers and volunteers provided additional feedback as to how JA Our City® could be further improved. Overall, teachers suggested slight changes to the program curriculum. Many of their comments suggested ways to make the curriculum more interactive or that there was occasionally too much material to cover in the session.

Teachers who provided answers to the open-ended questions on the online survey noted that it would be helpful to allow more time for each activity. As noted above, others commented that some of the material was too advanced for third grade students, which led to students disengaging from the sessions.

- Seven teachers (77.8%; n=9) suggested slight changes to the JA Our City® curriculum, in particular commenting that the curriculum could include more hands-on activities. Suggestions to make the curriculum more engaging included incorporating more small-group work or hands-on activities, and allowing for more differences in learning styles. Teachers also suggested allowing more time for students’ written responses and allowing students to keep all pieces of the JA curriculum for the entire week.

- Three teachers (33.3%; n=9) noted the material was too much to cover during the allotted time. For example, one teacher noted that they think the times should be expanded to an hour per session and another that the curriculum should provide more time for activities. One teacher said that although it was their choice to participate in JA in a Day, they would not make that choice again since the content needs to be broken up.

Volunteer suggestions to improve the overall curriculum varied widely:

- Almost half of volunteers (47.4%; n=19) commented that the materials could be improved in one way or another, though their suggestions varied widely. Generally speaking, they commented that certain session materials could be made clearer, of higher quality, or more engaging.

- Over 20% of volunteers (21.1%; n=19) mentioned time constraints with the existing curriculum, suggesting that one activity be removed from every session or the first few sessions.

- Over 20% of volunteers (21.1%; n=19) suggested changes to the topics from the curriculum. Volunteer suggested adding more information on charities and nonprofits, expanding to a 6th or 7th session, and adding a discussion of entrepreneurship.

Volunteers concurred with teachers that the program would benefit from more activities, but that there was often not enough time to complete the activities currently included in the program. Additional comments or suggestions from volunteers and teachers included:

- Integrate some of the successful pieces from the old program into the new program to make it stronger;

- Incorporate more technology;

- Bring in more visitors from the community;

- Provide students with a folder to carry all of their materials;

- Provide a thank you luncheon for volunteers; and

- Provide more training for volunteers.
Conclusions

The purpose of this assessment was to measure the impact of one of Junior Achievement USA’s (JA) elementary school programs: JA Our City®. Students were administered pre- and post-program assessments to identify and measure changes in student knowledge and attitudes, student satisfaction, and short-term student behavior. In addition, teacher satisfaction, perceived impact, ability of the program to address learning objectives, and relevance were also assessed through online surveys which were administered after the teacher had participated in JA. Teachers, volunteers, and students form nine JA Areas participated. Two volunteers were interviewed via phone to obtain additional feedback regarding program impact.

Most classes that participated in JA Our City® were comprised of students in the 3rd grade, had a teacher with previous JA experience, and a volunteer participating for the first time. The program was implemented over the course one day and most teachers walked around and answered student questions but let the volunteer lead the session. Teachers and volunteers both indicated they understood their role in the program and reported that the instructional materials were excellent. Teachers indicated that the curriculum reflected that state’s educational standards and was age-appropriate.

Teachers, volunteers, and students all reported high levels of satisfaction with JA Our City®. Teachers and volunteers also strongly agreed that students were engaged in the program’s activities and appeared interested in the curriculum. A majority of teachers and volunteers also rated the instructional materials provided by Junior Achievement as excellent. A majority of students indicated that they were glad that their class had JA Our City, and that they learned important things in the program. Teachers, volunteers, and students also all agreed that they would want to participate in another JA program.

Teachers and volunteers indicated that the JA Our City® program thoroughly addressed learning objectives including cities and their zones and consumption, production, and entrepreneurship. Teachers identified students’ financial literacy, teamwork, and decision-making skills as the three areas where they observed students had made the most improvements by participating in JA. For their part, volunteers ranked students’ financial literacy, teamwork, and entrepreneurial skills as the areas where students demonstrated the most improvement after the program.

The program had a positive impact on student knowledge, as the program predicted a higher knowledge change score for program students compared to control students. This shows that participating in JA does increase student understanding of specific concepts covered. Most students maintained or increased their understanding of the concepts in the program’s learning objectives. The high proportion of students who maintained their knowledge of city planning, producers and consumers, savings, needs and wants, buying things, and banks and credit unions as places where people keep, borrow, and save money suggests that students were familiar with these concepts prior to beginning the JA program.

There was much greater variability in student knowledge change on questions about what cities are and how they are organized into zones. Similarly, there was substantial variation in the amount of student knowledge change about entrepreneurs and online communication. These questions had high proportions of students whose knowledge increased and of students who did not gain in knowledge. Such variability suggests that these were new concepts for students participating in JA Our City®.
The program delivery format of JA Our City® does not appear to have an effect on gains in student knowledge. Similar percentages of students who participated in JA in a Day and non-JA in a Day demonstrated increased knowledge and understanding of the program’s concepts and learning objectives as measured by the post-program assessment, and the relationship between program delivery format and change in student knowledge was not statistically significant (p>.05).

Overall, JA Our City® has a positive impact on student knowledge and is enjoyed by all stakeholders who participated. Students who participated in the program demonstrated greater increases in knowledge than students who do not, and teachers, volunteers, and students all reported willingness to participate in future JA programs.
Prepared by Harder+Company for Junior Achievement USA

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