

Junior Achievement

Middle Grades Pilot Program
JA Finance Park™

Executive Summary
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Introduction

JA Worldwide is a not-for-profit organization financed by businesses, foundations, government, and individuals. JA middle grades programs encompass economics and business curricula for students in grades six through eight. The *JA Finance Park*™ program consists of seven in-class Units and a visit to the Finance Park, a mobile simulation unit where students apply their learning of program concepts to develop and balance a budget based upon individualized “Life Situations.” The program was designed by Junior Achievement Worldwide (JA) to introduce students to personal financial planning and career exploration.

In 2006, JA contracted with the Evaluation and Training Institute (ETI) to conduct an evaluation of the pilot version of the *JA Finance Park*™ program to assist JA in improving the content of the program before implementing it on a larger scale.

Methodology

ETI primarily relied on surveys in both online and paper formats as the principal method of data collection for the evaluation of the *JA Finance Park*™ program and mobile simulation. Specifically, ETI developed surveys for participating teachers and students to be completed after five of the seven lessons.¹ Teachers were instructed to administer the paper and pencil surveys to their students within one day of each Unit and teachers were asked to complete similar Unit-specific surveys online. Volunteers who played a role in the simulation component of the program were asked to complete a post-survey at the conclusion of each simulation session. In addition, to supplement the surveys, each school participating in the pilot was included in either a classroom or a simulation observation conducted by an ETI staff member.

Demographic Profiles

Listed below are the demographic profiles for students and teachers that participated in the evaluation. Percentage and numeric ranges present those reported across the Unit-specific surveys.

Students

- Almost all of the students (99 percent) participating in the *JA Finance Park* program were in the eighth grade.
- The majority of students were 13 years old (65 to 76 percent); a smaller percentage of students were 14 years old (19 to 31 percent).

¹ Surveys were proctored for Units 1, 2, 3, 4, and 7 only. Units 5 and 6 contained limited curricular material and largely served as a preparation for the Finance Park simulation.

- The students were equally divided in terms of gender.
- Most students identified themselves as either African American/Black (24 to 48 percent) or Caucasian/White (27 to 41 percent).
- When asked how many JA programs they had participated in excluding *JA Finance Park*, the majority of the students reported that *JA Finance Park* was their first JA program (75 to 82 percent).

Teachers

- Teachers were most likely to have between 11 and 20 students in their class (50 to 67 percent).
- All of the teachers (100 percent) taught students in the eighth grade.
- Teachers participating in the evaluation were either White/Caucasian (n=5-8) or African American/Black (n=3-4). In addition, 83 percent of teachers were female.
- When asked how many JA programs they had participated in excluding *JA Finance Park*, half of the teachers (50 percent) responded that *JA Finance Park* was their first JA program.
- Teachers participating in the evaluation were most likely to have taught at their current school for one to two years (67 to 80 percent). However, when asked how many years they had taught overall, there were equal proportions of novice and experienced teachers.
- Teachers varied in terms of the subjects they reported teaching, which ranged from mathematics to Civics for English for Speakers of Other Languages (ESOL) students.
- Three-fourths of teachers (75 percent) identified their teaching style as equally didactic and experiential; 92 percent of teachers reported that they would be willing to spend time to prepare for experiential activities.

Findings

Student Findings

Content Knowledge

The Unit-specific surveys contained a series of content questions designed to assess students' understanding of the concepts presented in the curriculum. **Across the five Units studied, students answered between 70 and 88 percent of the questions correctly.**

In addition to the Unit-specific surveys, the pre-/post-test included a number of content questions drawn from across the Units to assess changes in students' understanding of the curriculum's concepts and ideas over the course of the program. The instrument contained 53 items, most of which were in a true/false or multiple choice format. Some questions required mathematical computations. A paired samples t-test (2-tailed) was used for the analysis of 344 matched survey pairs. From a total of 53 questions:

- **The percentage of students responding correctly increased for 51 of 53 questions.**
 - **The percentage of students responding correctly demonstrated a statistically significant increase for 48 questions.**
 - **Over half of the students correctly responded to 48 questions on the post-test, equivalent to 90 percent correct.**

The effect size of the overall mean difference in scores (i.e. an overall increase of 7.9 percentage points from pre- to post-test) resulted in a Cohen's d value of .998. The effect size for the comparison above is considered large and indicates that the influence of the program on students' knowledge is likely to be quite strong.

Student Satisfaction

Using a five-point scale ranging from "strongly disagree" to "strongly agree," students indicated their attitudes toward various aspects of the program in the Unit-specific surveys, such as whether they thought the Units were fun, whether the ideas presented were interesting, and if they felt they could personally relate to the content presented. Across the five Units assessed with the Unit-specific surveys:

- **Sixty-two to 79 percent of students felt that the Units had taught them new information.**
- **Seventy to 88 percent of students felt that the lessons had taught them information that would be useful in their lives.**

In addition to data gathered from students, teacher survey responses indicated that **80 to 100 percent of teachers felt that the Units were age-appropriate and that their students were engaged.**

Beyond students' attitudes toward the weekly Units, students were also asked to comment on the JA Finance Park™ program overall.

- **Ninety-four percent of students found the information to be “useful” in their everyday lives.**
- **The proportion of students expressing interest in personal finance and economics after completing the program totaled 79 percent.**
- **Most students (69 percent) found the difficulty of the information presented to be “just right.”**
- **Most notably, 72 percent of student participants completing the post-program survey indicated that they would recommend the JA Finance Park™ program to a friend.**

Teacher Findings

Teachers also completed Unit-specific and post-program surveys. A summary of their responses is below.

- **On a one to seven scale where one was unsatisfied, four was neutral, and seven was satisfied, 42 percent of the teachers gave the materials the highest rating and 84 percent of teachers selected a rating of five or higher.**
- **When asked to rate their level of satisfaction with the curriculum content on a one to seven scale where one was unsatisfied, four was neutral, and seven was satisfied, 83 percent of the teachers gave the curriculum a rating of five or higher, with one-fourth of the teachers (25 percent) rating the curriculum a seven, or “satisfied.”**
- **Eighty to 90 percent of the teachers agreed that the program curriculum contributed to their classroom curriculum.**
- **Seventy to 90 percent of the teachers indicated that the program curriculum corresponded well with state, district, and school standards.**
- **Most notably, 100 percent of the teachers reported that they would participate in the program again and 92 percent would recommend the program to other teachers.**

Simulation Findings

After completing six in-class lessons where students learned about financial institutions, saving, investing, credit, taxes, and budgeting, they visited the JA Finance Park™, a mobile simulation unit where they were given an opportunity to apply their in-class learning to a life situation. To address the effectiveness of the simulation, student, teacher, and volunteer surveys included questions that addressed their experiences at the Park.

Student Results

- Just under half of the students (47 percent) felt that the Units were an “*excellent*” preparation for the simulation. An additional 50 percent felt the Units served as a “*fair*” preparation.
- **Sixty-three percent of the students felt that the amount of time their class spent at the Capital One/JA Finance Park™ mobile simulation was “*just right.*”**
- **When asked about the difficulty of the tasks they completed at the Capital One/JA Finance Park™ mobile simulation, 71 percent of the students indicated that the tasks were “*just right.*”**
- **Almost all students (96 percent) reported that the “real world” usefulness of their visit to the Park was at least “*somewhat useful,*” while 57 percent of those students reported that the experience was “*very useful.*”**
- When asked about the location of the simulation, one quarter of students rated the location as “*excellent.*”
- Students’ responses to the question asking them to rate the Capital One/Junior Achievement Finance Park mobile simulation overall were fair. Most students felt the simulation was “*okay,*” (48 percent). Only 36 percent indicated that they felt the simulation was “*fun.*”

Teacher Results

Using a seven-point scale ranging from one or “unsatisfied” to seven or “satisfied,” teacher ratings were as follows:

- **Eighty-two percent selected the top rating when asked if the simulation was engaging.**
- **Eighty-two percent selected the top rating, or seven, indicating satisfaction with the content of the simulation.**
- **Eighty-two percent selected six or seven when asked about their overall satisfaction with the simulation.**
- **Seventy-three percent selected the top rating when asked about the value of the simulation to the student.**
- **Most notably, every teacher who participated in the mobile simulation agreed that the set-up and software interface facilitated the students’ experiences and enthusiasm.**

Volunteer Results

The Capital One volunteers were asked to do a number of things to assist during the simulation:

- Provide guidance and assistance to students;
- Facilitate scheduled student meetings;
- Monitor and verify students’ work progress; and,

- See that necessary JA Finance Park™ materials were collected at the end of the day and that the students left the student work area as they found it.

In the post-simulation survey, 98 percent of the volunteers indicated an interest in participating in the program again, and 80 percent related that they would like to receive information about other JA programs and events in the future.

Volunteers who stated that they would be willing to participate in a future JA Finance Park™ program were asked to rate on a one to five scale ranging from “strongly disagree” to “strongly agree” reasons for volunteering in the future. **The majority of volunteers agreed or strongly agreed that they would volunteer again because it was fun (96 percent), they believed in the cause (97 percent), Capital One supports their involvement (90 percent), volunteering uses their skills (77 percent), and because they found the experience to be rewarding (96 percent).**

The volunteers were also asked to rate on a one to six scale that ranged from “low satisfaction” to “high satisfaction” their overall satisfaction with the JA Finance Park™ program. **Most of the volunteers (86 percent) rated the program a five or higher**, also indicating that the volunteers were highly satisfied.

Recommendations

Although students, teachers, and volunteers indicated that the pilot was high in quality overall, a number of areas for improvement did arise from the responses and commentary they provided during the evaluation.²

Recommendations for the Program Overall

Decrease the amount of program content. The program was very content-heavy and included a large number of worksheets for students to complete for each Unit. Many teachers indicated that they were not able to complete the lessons in the time allocated for the program, and a significant proportion of students indicated that they found the program “boring.” By decreasing the amount of paperwork required, teachers will be able to move through the program more quickly and students may find the program more enjoyable.

Include more hands-on activities in the in-class Units. Again, many students indicated that they found the program “boring,” and asked that it be made more “fun.” In addition, students indicated that they liked the visit to the Park and hands-on program activities such as writing checks the most. Additional materials such as check books, tax receipts, deposit slips, and interactive games and activities will increase student engagement.

² Please note, many of the recommendations listed in this section were developed as a result of open-ended responses that are included in the Final Report but not presented in the Executive Summary.

Allocate more time for discussion. The curriculum in its present form requires that teachers rush to complete all of the worksheets included, allowing little time for discussions of important concepts and themes. In addition, many teachers did not have a clear sense of the level of students' understanding of key content. This issue was evidenced by classroom observations and teacher comments about the speed required to move through the curriculum and may have contributed to negative student reactions toward the program. Therefore, it is recommended that more time be built in for discussions of the topics addressed in addition to reducing the number of worksheets for the in-class Units. Teachers may find it helpful if introductions to discussion topics or lead-in questions were provided in the materials.

Specific Recommendations for the Curriculum

Reorganize the Teacher Guide. The Teacher Guide was not organized according to the order that activities and worksheets were to be conducted in class. Many teachers related that flipping back and forth was both confusing and a time-waster. In some cases, the Teacher Guide was not correctly aligned with the Student Workbook.

Provide Supplemental Materials/Curriculum for English Language Learners/Remedial Students. Some teachers voiced concerns that students without a strong grasp of the English language and lower-functioning students were not able to understand the concepts presented. A pared down version of the curriculum with simpler language and a more basic presentation of concepts may be helpful for different student groups.

Place greater emphasis on the career exploration piece. During site visits conducted while Unit 7 was underway, it was clear to the observer that little time was spent on the career exploration piece of the program. Many students had not spent sufficient time exploring careers of interest to them, and did not have a clear sense of the skills/abilities, training, and education required for various career fields. These results were further emphasized by pre-/post-survey findings on the Career Assessment portion. It may be helpful to include Unit 7 before the simulation so this piece is not lost. Additional materials such as print/media materials and/or age-appropriate career research websites for in-class use should also be provided, or additional discussion topics about career exploration so students gain a clearer understanding of career possibilities, the education/training required, and how career connects to salary and life circumstances.

Provide calculators for every student with the program materials. As evidenced by students' difficulty correctly answering content questions requiring hand calculations, it is likely that many were working without the assistance of a calculator. This was true of classrooms observed during the site visits, where some classes worked without calculators and others had a small number of calculators that students shared. This also slowed completion of worksheets requiring calculations of Gross Annual Income, Net Monthly Income, etc.