Junior Achievement®
Finance Park Virtual
2010 Final Report

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Executive Summary

Introduction

JA Finance Park Virtual (FPV) builds on the successes of *JA Finance Park*— an economics education program providing students with the opportunity to develop personal money management skills, acquire personal finance, and prepare for financial decisions and challenges in their adult lives— by providing a simulation alternative to the in-person interactive model, accessible via computers at the school site. In June 2010, JA Worldwide contracted with the Evaluation and Training Institute (ETI) to conduct a multi-site, multi-stakeholder formative evaluation of *JA Finance Park Virtual.*

Methodology

In order to provide the necessary information to make changes to the *FPV* program during the course of implementation, ETI collected ongoing feedback from participating students, classroom teachers, JA volunteers, and JA Member Office staff. Throughout the ongoing reporting process, ETI submitted bi-weekly "snapshots" of the successes and challenges of the simulation component. This final report builds on these findings to present a more fully formed picture of the way the simulation component was implemented, as well as stakeholder responses to their experience.

Key Findings

JA FPV was implemented by classroom teachers, JA volunteers, and, in some cases, JA Member Office Staff between August and November 2010. Over 80 middle and high school classrooms completed the program across 14 JA Member Offices across the United States. Ongoing and final reporting of data collected from student and adults stakeholders strongly indicate that the pilot implementation of *JA Finance Park Virtual* across these 14 JA Member Offices was largely successful.

According to teachers, volunteers, JA staff and students themselves, students enjoyed the overall experience, were engaged throughout the sessions and learned both specific program content and more globally relevant lessons for adulthood. Key simulation highlights are presented below as reported by student and adult stakeholders:

- *Overall, analyses of statistically significant group differences indicate that mastery of the in-class curriculum is likely to influence low and high scoring students' experiences, and their subsequent reactions, differently. These findings substantiate the value of the in-class curriculum in ensuring that students develop the foundational knowledge needed both to effectively complete the simulation component and to enjoy the experience.*
- *Between 56 and 60 percent of students "agreed" that the classroom lessons were enjoyable, taught valuable information, and helped to prepare them for the simulation sessions.*
- *Almost nine out of 10 students agreed that the sessions taught them valuable lessons for their financial and work future and a further eight out of 10 students*

reported, that as a result of their participation in FPV, they understood that their role in their community makes a difference.

- *Seventy-three percent of students cited the fact that the simulation sessions were interactive and hands-on and that they were able to create their own avatar as the leading reasons for why the liked the sessions. Students were especially favorable of the fact that they were able to use a computer, with almost 80 percent of students citing this feature as one of their likes.*
- *In open-ended comments, students said they enjoyed the real world learning that allowed them to behave as an adult and the non-traditional, fun approach to learning that allowed them to learn hands on in an interactive environment.*
- *Students' overwhelmingly positive experience was reinforced by the fact that 75 percent of students said they would recommend the program to a friend. When asked how much their recommendation would be based on the simulation sessions, students were almost evenly split with 47 and 48 percent reporting that their recommendation would be "completely" or "somewhat" based on the sessions, respectively.*

Overall, adult stakeholders praised FPV as an engaging, interactive and fun learning experience that allowed students to learn about the real world in tangible and unexpected ways. Teachers, volunteers and JA staff overwhelmingly agreed that the sessions taught students skills and exposed them to concepts that are important to their finance and work futures. Additional findings from adult stakeholders are listed below:

- *The majority of teachers (at 95 percent; n=20) and all JA staff members (n=11) "strongly agreed" or "agreed" that the volunteer was helpful during the simulation session(s).*
- *In open-ended responses, teachers acknowledged the contribution that volunteers made to the Finance Park Virtual experience. Not only did teachers say the volunteers provided additional assistance in the classroom, but teachers recognized the value of the volunteers' real-world experience in engaging students and advancing the connection between students and the program content.*
- *Teachers, volunteers, and JA staff largely agreed that the simulation sessions were easy to navigate, accommodated for a range of students' abilities and provided clear instructions.*
- *Teachers and JA staff responded positively to the overall pacing of the four simulation sessions, with almost 90 percent of teachers and over 80 percent of JA staff members rating it as "just right."*

While the pilot implementation of *FPV* produced significant highlights across participating locations, our evaluation generated valuable feedback from participants as to how the program can be improved to better suit the expectations and abilities of students, as well as the needs of teachers and volunteers. Key findings are presented below:

- *In general, students wanted more options to personalize and make individualized choices during the sessions, greater functionality to enhance the interactivity of sessions, and they requested shorter sessions with less math and calculations.*
- *Students were most critical of the ease of navigation, or moving from one setting or activity to the next, and of their interaction with Casey the Park Guide, with over one third of students rating both as "poor" or "fair."*
- *Students disliked the length of the sessions and expressed frustration over technical and computer issues that affected downloading, navigation, and calculator speed. Students remarked on the repetitive nature and amount of math calculations.*
- *In terms of consistent challenges, students, as well as adult stakeholders, most often cited technical and/or computer problems which caused the simulation to stall or freeze completely. These technical interruptions negatively impacted how well students navigated through the sessions, as well as the teacher and/or volunteer's ability to complete the sessions on time.*
- *From the adults' perspective, students struggled with converting decimals to percentages, calculating individual budget categories, balancing their overall budget, and rounding numbers to the nearest whole dollar. Volunteers and teachers cited the volume of math, as well as the difficulty of the calculations in session 3, in particular, as the main reason they could not finish the session.*

Key recommendations as culled from evaluation participants' feedback, as well as ETI's independent recommendations as observed throughout the evaluation process, are presented below:

- *Identify the technical/computer problems most frequently cited during the pilot and institute a protocol for troubleshooting these problems as they arise in the classroom.*
- *Alter the voice and look of Casey the Park Guide.*
- *Make specific aspects of the simulation more realistic and applicable to the various locales and demographic groups.*
- *Allow greater flexibility in individualizing implementation of sessions in the classroom.*
- *Reduce the volume of math and mathematical calculations in sessions 1 and 3.*
- *Combine elements of the sessions overall to sustain evenly paced sessions that focus on the teaching of concepts rather than the completion of discrete tasks.*
- *To maximize the role of the volunteer and to take full advantage of what a volunteer can offer, consider providing time before or during simulation sessions for volunteers to share their background and knowledge*

Introduction

Designed for the middle and high school grades, *JA Finance Park* is an economics education program providing students with the opportunity to develop personal money management skills, acquire personal finance, and prepare for financial decisions and challenges in their adult lives. Students explore finance and career options through classroom instruction culminating in a hands-on experience where students put into practice what they have learned about economic options and the principles of budgeting. With *JA Finance Park Virtual (FPV),* JA builds on the successes of *Finance Park* while keeping on track with the most current trends in education. *Finance Park Virtual* provides a simulation alternative to the in-person interactive model, accessible via computers at the school site.

JA FPV begins with four weeks of teacher-led classrooms lessons during which students learn core program concepts and develop the basic skills necessary for personal finance. Students then implement what they have learned about economic options and budgeting, for example, in an online role-playing scenario- i.e. a virtual Finance Park. In four online simulation sessions students assume randomly generated "life situations" and are guided through the realities of successfully developing and managing a budget, maintaining a household, and pursuing a career.

In June 2010, JA Worldwide contracted with the Evaluation and Training Institute (ETI) to conduct a multi-site, multi-stakeholder formative evaluation of *JA Finance Park Virtual.* ETI's evaluation assessed various aspects of the program using two primary methods: 1. data collection and reporting of ongoing feedback (i.e. as participants completed each of the four simulation sessions) and 2. analysis and synthesis of overall reactions from participants (including student test scores and staff classroom observations). The findings from the latter are included in this final report.

Research Design & Methodology

ETI conducted a formative evaluation of the *FPV* program to provide supporting evidence and direct feedback from evaluation participants about how to develop a highly effective simulation-based program. ETI framed the overall evaluation on the following research questions:

I. To what extent does the *FPV* simulation support the learning objectives and core concepts of the *JA Finance Park* program?

II. How effectively does the *FPV* simulation facilitate and support student learning?

III. To what extent does the design and structure of the *FPV* simulation impact stakeholders' experiences?

IV. To what extent do volunteers rate their time spent with students as important to themselves personally and to the development of youth?

V. What areas of the *FPV* simulation would benefit from improvement or revision?

The methods used to answer the above research questions are outlined below.

Measurement Model & Data Collection

In order to provide the necessary information to make changes to the *FPV* program during the course of implementation, ETI collected ongoing feedback from participating students, classroom teachers, JA volunteers, and JA Member Office staff. Data collected from participants as they experienced each simulation session were summarized in bi-weekly reports throughout November. As such, the accompanying measurement model and data collection tools for our ongoing reporting will not be outlined here. The focus of this final report, on the other hand, is to summarize participants' overall reactions to the program, and the simulation component in particular, and to provide final recommendations for program improvement. Our measurement model and methods for data collection are outlined by stakeholder group below.

Students

As the recipients of the *JA Finance Park* curriculum and simulation component, students served as a valuable source of formative information. Feedback collected from students helped to answer several research questions; namely, how effectively the *FPV* simulation facilitated student learning, how it impacted students' experience, and how the simulation could be improved.

ETI developed a pre-simulation test to assess students' understanding and comprehension of the *JA Finance Park* curriculum after the completion of curriculum instruction and before they received the simulation component of the program (a copy can be found in **Appendix A**). The pre-simulation test included items that tap into the most salient concepts of the *Finance Park* curriculum including personal finance and budget, credits cards and interest, market reports, income and tax deductions, and career choices.

To supplement the collection of ongoing feedback and to collect overall reactions to the simulation experience, students also completed a final post-program survey after the last simulation session (a copy can be found in **Appendix B**). Survey items explored various aspects of the simulation component, including students' reaction to the classroom lessons, ease of navigation, graphic design and flow of the sessions, pacing, content difficulty, volunteer effectiveness, and overall likes, dislikes and level of satisfaction.

Teachers, Volunteers, and JA Member Office Staff

Teachers, volunteers, and JA staff played an active role in the implementation of the *FPV* program and were able to provide valuable information for ongoing improvement of the simulation component. Each stakeholder group completed a post-program survey at the end of the last session to collect their overall reactions to the simulation component

and to elicit recommendations for improvement (a copy of each survey can be found in **Appendices C**, **D** and **E**). The post-program surveys captured quantitative data and gave adult stakeholders the opportunity to react to the topic areas listed below:

- Ease of use and navigation of the simulation component
- Successes and challenges of the simulation component as a teaching tool
- Impression of students' overall reactions (including student engagement) to the simulation component
- Highlights of student learning achieved during the simulations
- Extent to which the simulation component successfully conveyed program concepts
- Extent to which the simulation component was relevant to overall program objectives
- Extent to which the simulation experience exposed students to concepts important for the future with regard to personal finance and work experience
- Extent to which the simulation component contributed to the personal financial development of students
- Recommendations for improving the simulation component
- Reactions to the level of volunteer participation, if applicable
- Reactions to the role of a volunteer in facilitating the simulations

In addition to completing evaluation surveys, JA Member Office Staff were encouraged to observe the implementation of simulation sessions in multiple classrooms. JA staff provided their reactions and feedback to the implementation of each session in an observation protocol created by ETI (a copy can be found in **Appendix F**). The protocol was designed to capture data in the following areas:

- Classroom activities and dynamics
- Teacher/volunteer behaviors
- Aspects of the simulation
- Successes or highlights
- Challenges
- Student behaviors including level of student engagement

Data Analysis

Analyses of data collected over the course of the evaluation, culminating in this final report, were driven by core research questions (see above). Throughout the ongoing reporting process, ETI submitted bi-weekly "snapshots" of the successes and challenges of the simulation component. The final report builds on these findings to present a more fully formed picture of the way the simulation component was implemented, as well as stakeholder responses to their experience. Our methods of analysis are presented by stakeholder group below.

Student Data Analysis

In order to explore the relationship between pre-test scores and overall reactions to the program, students completed the pre-test immediately following the completion of curriculum lessons and before the start of the simulation component. Results from the pre-simulation test serve as a "baseline" record of students' understanding and

comprehension of program content. Using the distribution of correct pre-test answers, students were divided into two groups: 1) students who correctly answered 0-74% of questions or "low scoring" students, and 2) students who correctly answered 75% or more questions or "high scoring" students. The breakdown of low and high scoring students used in comparison analyses is presented in **Table 1** below[1].

Table 1
n=574

Breakdown of low and high scoring students	
Low Scoring	*49%*
High Scoring	*51%*

A detailed analysis of post-program surveys items which yielded statistically significant group differences (using a chi-square test of significance) between low and high scoring students is presented in the **Findings** section below. Findings for non-significant group differences are included in **Appendix G** for reference.

Students' reactions to the simulation component were also analyzed in the aggregate and findings for the total sample (n= 1,024) are outlined in the **Findings** section. Quantitative data were analyzed using descriptive statistics, namely frequencies and qualitative data from students' open-ended survey responses were synthesized to discern the underlying successes and challenges of the simulation component of *JA Virtual Finance Park*. These findings are interwoven with aggregate post-program item results to add context and to present a full picture of students' overall experience. Findings for aggregate pre-test scores are included in **Appendix G** for reference.

Adult Data Analysis

Quantitative and qualitative data from teacher, volunteer and JA staff post-program surveys were analyzed to provide an overview of respondents' impressions of the simulation component. Quantitative data were analyzed using descriptive statistics, namely frequencies. These findings have been integrated with more rich and nuanced open-ended findings pertaining to specific elements of the program, the overall value of the experience, and recommendations for program improvement.

In order to provide additional perspective about the successes and challenges of the simulation sessions in the classroom, JA staff members were asked to conduct classroom observations and report their findings according to a set of observation measures. JA staff provided feedback about the simulation as a whole as well as student behaviors. The classroom observation protocol was designed by ETI to capture the following types of responses:

[1] Note: For group comparisons, students who met the following criteria were included in the sample used for analysis: 1. completed all items on the pre-test (n=849 of 1,190 or 71% of total sample), 2. submitted both a pre-test and post-program survey (n=574), and 3. matched on unique IDs (six cases with duplicate IDs removed).

- Open-ended responses about what is working and not working in the session; student rapport with the simulation facilitator, and the flow and organization of the session.
- Ratings and supporting comments about the simulation overall and student learning and engagement

We have analyzed and presented the aforementioned data in the **Findings** section, broken out by stakeholder group and aggregated across *JA FPV* sites.

Participant Demographics

JA Finance Park Virtual was implemented by classroom teachers, JA volunteers, and, in some cases, JA Member Office Staff between August and November 2010. Over 80 middle and high school classrooms completed the program across 14 JA Member Offices (see **Table 2** below for a list of Offices) across the United States.

Table 2

Participating JA Member Offices by City/State	
Atlanta, GA	*Minneapolis, MN*
Baltimore, MD	*New Jersey*
Beaumont, TX	*Richmond, VA*
Denver, CO	*St. Louis, MO*
Fort Worth, TX	*San Diego, CA*
Houston, TX	*South Dakota*
Lafayette, LA	*Washington, D.C.*

Over 1,000 students completed pre-simulation tests and post-program surveys (see **Table 3** below). Based on original projections of the number of student participants (n=1,904), student post-program survey submissions represent a 54% response rate. A total of 23 teachers (*53% response rate*), 31 JA volunteers (*56% response rate*), and 11 JA staff members (*79% response rate*) submitted a post-program survey[2].

Table 3
No. of Participants by Stakeholder Group

Stakeholder Group	Total N[3]
Students	*1,024*[4]
Teachers	*23*
Volunteers	*31*
JA Member Office Staff	*11*

[2] Original projections for adult participants were as follows: 43 teachers, 55 volunteers, and 14 JA staff members.

[3] Total N's and all demographics were calculated based on the number of submitted post-program surveys from all stakeholder groups. Sample sizes may have been higher throughout ongoing data collection.

[4] 1,190 students completed the pre-simulation test.

The majority of evaluation participants, from students (at 53 percent) to JA staff (at 91 percent), are female (see **Table 4** below).

Table 4
Evaluation Participants' Gender

Stakeholder Group	N	Male	Female
Students	*1,024*	*47%*	*53%*
Teachers	*23*	*43*	*57*
Volunteers	*11*	*35*	*65*
JA Member Office Staff	*31*	*9*	*91*

Participating teachers have spent an average of 12 years in the profession and eight years as a teacher in their current school. JA volunteers represented a variety of job titles including, but not limited to the following: banking officer, project manager, business development manager, systems developer, business analyst, and audit manager. Finally, participating JA staff members have been employed by JA Worldwide for an average of six years.

The majority of participating students are in the 8th grade (at 57 percent), followed by 12th graders at 13 percent and 10th graders at 11 percent. The most frequently selected ethnic background was "White/Caucasian," followed by "Black/African American." See **Figures 1** and **2** below and on the following page for additional details.

Figure 1
Student Grade Level (n= 1,024)

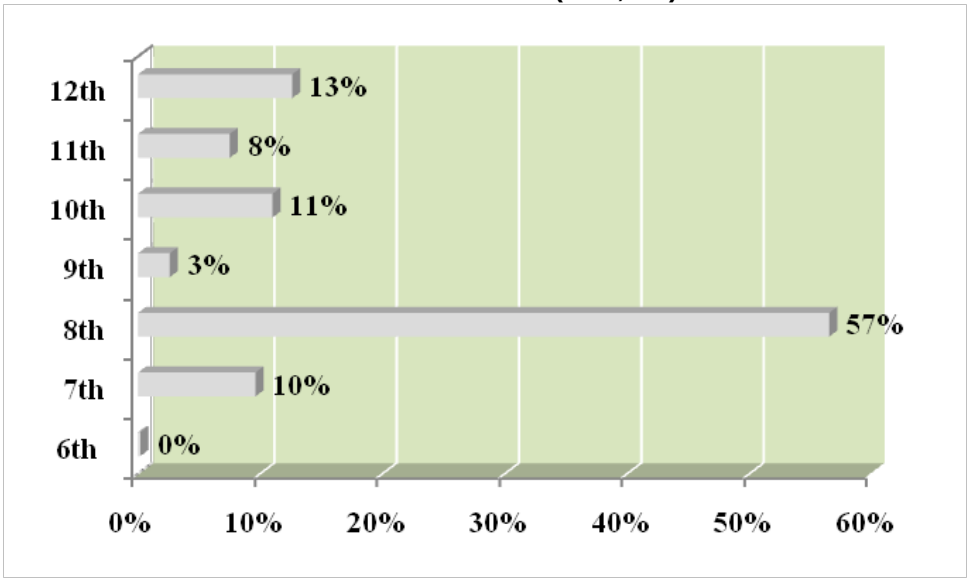
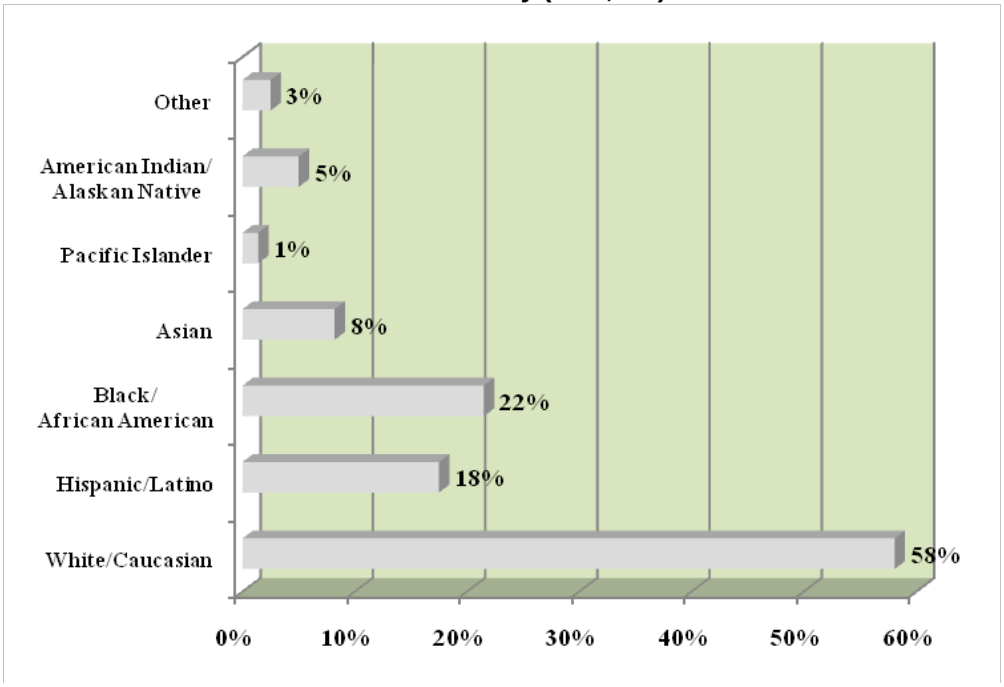


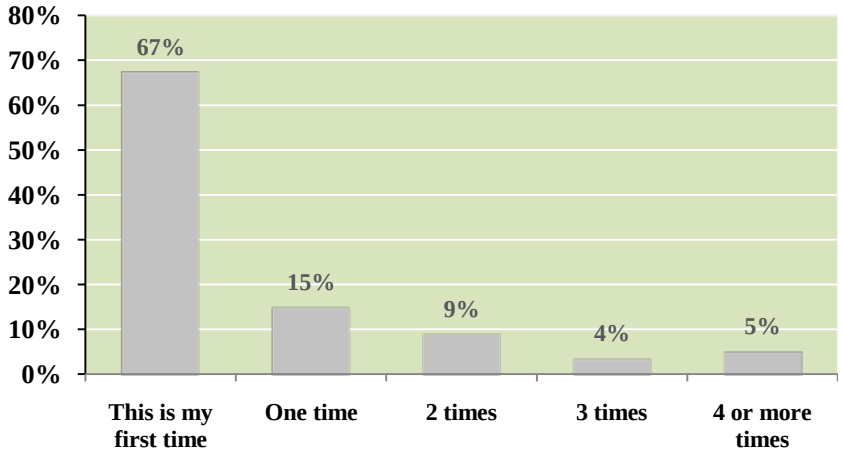
Figure 2
Student Ethnicity (n= 1,024)*



**Students were instructed to "check all that apply."*

Most students (67 percent) indicated that the *JA Finance Park Virtual* program was the first JA program in which they have participated. Only 15 percent have participated in one previous JA program, while 18 percent have participated two or more times (see **Figure 3** below).

Figure 3
Students' Previous JA Experience (n= 1,024)



Findings

Student Findings

As the recipients of the *JA FPV*, students played a key role in the evaluation and provided important feedback for ongoing improvement. Over 1,000 students submitted pre-simulation tests and post-program surveys. The following section includes an analysis of post-program survey items that yielded statistically significant differences between low and high scoring students, followed by a synthesis of aggregate post-survey data.

Post-Surveys Results by Student Content Mastery Level

Student content mastery level (i.e. low versus high scoring) yielded significantly different results among students for six post-survey items (n= 574). Cross-tabulations by mastery level and response for these six items are presented below. While we have provided possible explanations for the variation in students' answers, additional questioning and testing is required to determine the exact source and nature of these differences.

As evidenced by **Table 5** below, students who displayed a higher level of content mastery were significantly more likely to agree that what they "learned during the simulation sessions built on what they learned during the classroom lessons," $\chi^2(3, n=553)=10.05$, $p=.02$. One can speculate that students with a better grasp of the classroom material were more likely to recognize the transition of program content from the classroom lessons into the simulation component.

Table 5
What I learned during the simulation sessions built on what I learned during the classroom lessons.

	Strongly Disagree	Disagree	Agree	Strongly Agree
Low scoring	n=12	n=35	n=181	n=42
	4%	13%	67%	16%
High scoring	n=5	n=25	n=186	n=67
	2%	9%	66%	24%

$\chi^2(3, n=553)=10.05$, $p=.02$

Students who displayed a higher level of content mastery were also significantly more likely to agree that the "simulation part of the program was fun," $\chi^2(3, n=567)=8.99$, $p=.03$. One can speculate that students who struggled with program content may have, as a result, had less fun during the simulation component (see **Table 6** on the following page).

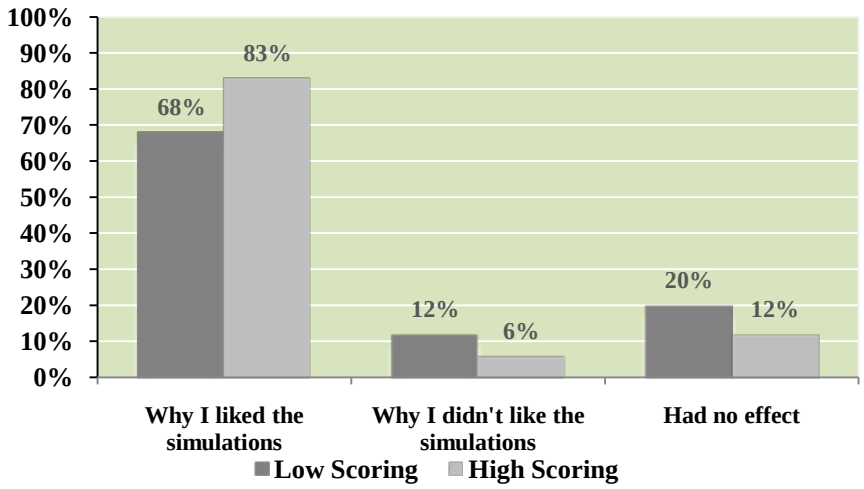
Table 6
The simulation part of the program was fun.

	Strongly Disagree	Disagree	Agree	Strongly Agree
Low scoring	n=19	n=42	n=147	n=72
	7%	15%	53%	26%
High scoring	n=18	n=29	n=135	n=105
	6%	10%	47%	37%

$\chi^2(3, n=567)=8.99$, $p=.03$

Figure 4 below indicates that students who displayed a higher level of content mastery were significantly more likely to report that they liked the sessions because they "were interactive and hands-on," χ^2 (2, n=561)=16.32, p=.00.

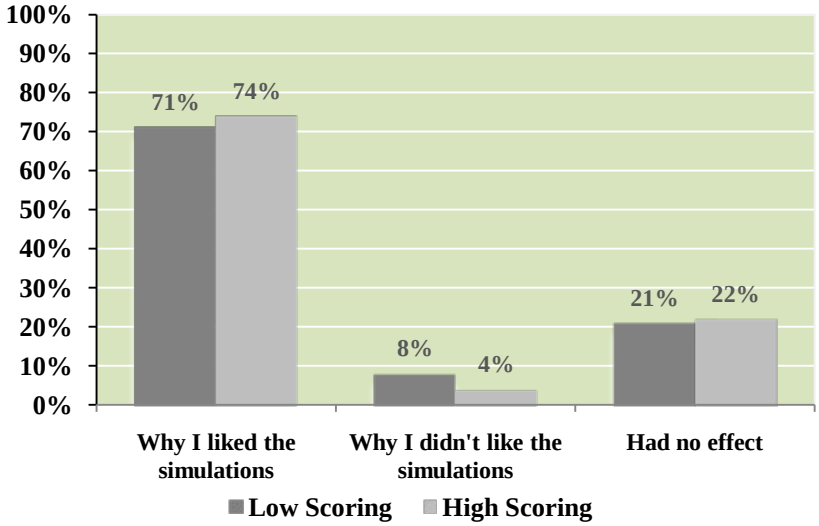
Figure 4
The simulation sessions were interactive and hands-on.



$\chi^2(2, n=561)=16.32$, $p=.00$

As evidenced by **Figure 5** on the following page, students who displayed a lower level of content mastery were significantly more likely to report that they liked the sessions because they were able to create their own avatar, χ^2 (2, n=561)=6.00, $p=.05$.

Figure 5
I was able to create my own avatar in the simulation program.



$\chi^2(2, n=561)=6.00$, $p=.05$

Students who displayed a lower level of content mastery were significantly more likely to report that they liked the sessions because a teacher and/or JA volunteer was available to help them, χ^2 (2, n=560)=23.47, p=.00 (see **Figure 6** below).

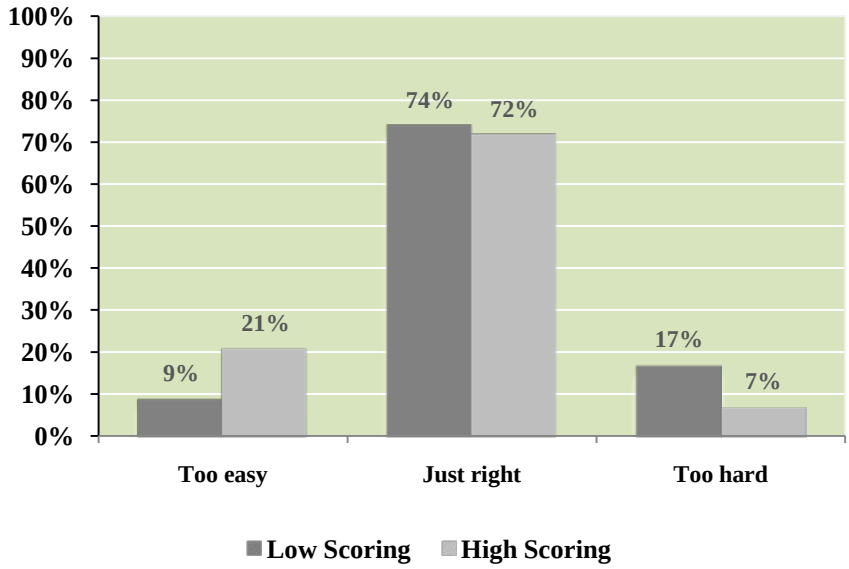
One can argue that low scoring students required greater help than their high scoring counterparts and, therefore, were more likely to appreciate the presence of a teacher and/or volunteer during the sessions. This is further supported by the fact that high scoring students were more likely to report that the presence of a teacher and/or volunteer "had no effect."

Figure 6
A teacher and/or JA volunteer was available to help me during the simulation sessions.

$\chi^2(2, n=560)=23.47, p=.00$

Finally, students who displayed a higher level of content mastery were significantly more likely to report that they thought the information they learned was "too easy," while low scoring students were more likely to report it was "too hard," χ^2 (2, n=563)=24.16, *p*=.00 (see **Figure 7** below).

Figure 7
What did you think about the information you learned during the simulations sessions overall?



$\chi^2(2, n=563)=24.16, p=.00$

Overall, analyses of statistically significant group differences indicate that mastery of the in-class curriculum is likely to influence low and high scoring students' experiences, and their subsequent reactions, differently. High scoring students, for example, were more likely to report that the simulation component was fun and that they liked the sessions because they were interactive and hands-on.

Their low scoring counterparts, on the other hand, were more likely to report that they liked the sessions because they were able to create their own avatar and because they had the assistance of a teacher and/or volunteer. They were also more likely to find that the information they learned was "too hard." These findings substantiate the value of the in-class curriculum in ensuring that students develop the foundational knowledge needed both to effectively complete the simulation component and to enjoy the experience.

Aggregate Post-Surveys Results

The following section presents analyses of quantitative and qualitative post-program data for 1,024 participating students, representing 12 of the 14 participating JA Member Offices.

JA Finance Park Classroom Lessons

Students provided mostly positive feedback about their experience during the in-class curriculum portion of *JA FPV*. Between 56 and 60 percent of students "agreed" that the classroom lessons were enjoyable, taught valuable information, and helped to prepare them for the simulation sessions. Some students, however, were less favorable when asked if the lessons made them excited to complete the simulation sessions. Only 20 percent of the sample "strongly agreed" with this statement, while 35 percent "disagreed" or "strongly disagreed" (see **Table 7** below).

Table 7
Total Student Feedback about Classroom Lessons

Rate your level of agreement with the following statements:	Strongly Disagree	Disagree	Agree	Strongly Agree
I enjoyed the classroom lessons. (n=1014)	9%	18%	60%	14%
I learned a lot of valuable information during the classroom lessons. (n=1010)	4	10	56	30
The classroom lessons helped to prepare me for the simulation sessions. (n=1012)	5	10	59	27
The classroom lessons made me excited to complete the simulation sessions. (n=1010)	10	25	46	20

Volunteer Involvement

Students across participating locations were exposed to varying levels of volunteer involvement. Sixty-nine percent (n=671) of students indicated that a JA volunteer helped to facilitate at least one their simulation sessions. Over 80 percent of these students reported that the volunteer was helpful and 76 percent agreed that having a volunteer during the sessions made their experience better overall (see **Table 8** below). These findings indicate that a volunteer's involvement positively influenced students' overall experience in the program.

Table 8
Total Student Feedback about Volunteer

Rate your level of agreement with the following statements about the JA volunteer:	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A: I did not interact with the volunteer
The volunteer was helpful during the simulation sessions. (n=771)	3%	3%	42%	40%	12%
Having a volunteer during the simulation sessions made the experience better overall. (n=771)	3	10	43	33	12

Virtual Simulation Sessions

Students were asked to respond to a range of statements relating to the simulation sessions and how they translated core program objectives (see **Table 9** on the following page). Almost 90 percent of students agreed that the sessions taught them valuable lessons for their financial and work future. Seventy-eight percent of students also

reported, that as a result of their participation in *FPV,* they understood that their role in their community makes a difference.

Students overwhelmingly agreed (at 87 percent) that the content of the simulation sessions built on the classroom lessons and over 80 percent agreed that the simulation component was fun. Finally, nine out of 10 students reported that they liked using a computer during the sessions.

Table 9
Total Student Feedback about Simulation Sessions

Rate your level of agreement with the following statements about the simulation sessions:	Strongly Disagree	Disagree	Agree	Strongly Agree
What I learned during the simulation sessions built on what I learned during the classroom lessons. (n=972)	3%	11%	68%	19%
The simulation sessions taught me about valuable lessons for my financial future. (n=1008)	3	9	57	32
The simulation sessions taught me valuable lessons for my work future. (n=1005)	3	12	54	32
As a result of participating in the simulation sessions, I understand that what I do as part of my community makes a difference. (n=1007)	4	18	59	19
The simulation part of the program was fun. (n=1002)	7	10	51	33
I liked using a computer during the simulation sessions. (n=999)	3	4	48	45

Students indicated a greater range of opinion when asked for feedback about various features or elements of the simulation sessions (see **Table 10** below). Less than 35 percent of students rated the ease of navigation, setting design, color and graphics, and their interaction with Casey the Park Guide as “excellent.” Students were most critical of the ease of navigation, or moving from one setting or activity to the next, and of their interaction with Casey the Park Guide, with over 30 percent rating both as “poor” or “fair.”

Table 10
Total Student Feedback about Simulation Design

Rate the following aspects of the four simulation sessions overall:	Poor	Fair	Good	Excellent
Ease of navigation – moving from one setting or activity to the next. (n=1002)	6%	26%	49%	19%
The design of the settings. (n=1003)	4	18	47	31
The color of the settings. (n=997)	2	14	46	38
The graphics of the settings. (n=1001)	5	19	45	32
Interacting with Casey the Park Guide. (n=1002)	12	24	39	26

When asked to elaborate on their ratings, students cited the limitations to choose options, technical elements that did not perform as quickly as they wanted, Casey the Park Guide, and the scavenger hunt. They said:

- *"I didn't like that I couldn't pick out my situation and job*[5]*."*
- *"I would've liked to dress up my avatar more."*
- *"Audio took forever to load."*
- *"What I didn't like was how long it took the characters to give directions."*
- *"The calculator moved too slow."*
- *"The calculator and the pen you use to write the check were hard to use."*
- *"At one part the program froze and refused to unfreeze forcing me to start over."*
- *"I did not like how Casey was talking so much because I can read faster."*
- *"Finding the stars had nothing to do with finance."*

Students were more complimentary of the design, color and graphics of the various settings, with over 75 percent of students rating them as "good" or "excellent." When asked to identify stand out elements of the simulation's appearance or user-friendliness, students were most enthusiastic about the "real life" aspects of learning, the straightforward, easy to use interface, the computer based game, the ability to make choices, and opportunities to compete and interact with friends and classmates. Their specific comments included:

- *"I really like how realistic this simulation was to give me an idea how I will finance my life in a few years."*
- *"I really liked how easy it was to use the program. Everything was explained really well and it was simple to do every task."*
- *"The learning was fun because it was fun to compete with my friends."*
- *"I liked that you could earn points and battle with our friends."*
- *"I liked how we got to choose how we looked and where we lived and shopping for clothes and food."*
- *"I liked that we were able to message each other."*
- *"I liked that you could live near your friends and see what they were doing."*

In order to identify the leading reasons for why students liked the simulation component overall, students were asked to rate the statements in **Table 11** on the following page by choosing one of the following options: it was a reason they liked the simulation sessions, it was a reason they did not like the simulation sessions, or it had no effect in either direction.

[5] All quotes have been edited for grammar, spelling and readability.

Seventy-three percent of students cited the fact that the simulation sessions were interactive and hands-on and that they were able to create their own avatar as the leading reasons for why the liked the sessions. Students were especially favorable of the fact that they were able to use a computer, with almost 80 percent of students citing this feature as one of their likes. While no feature garnered a majority rating of "had no effect," 30 percent of students indicated that the fact that the sessions taught the same concepts from the classroom lessons in a different way did not impact their experience negatively or positively.

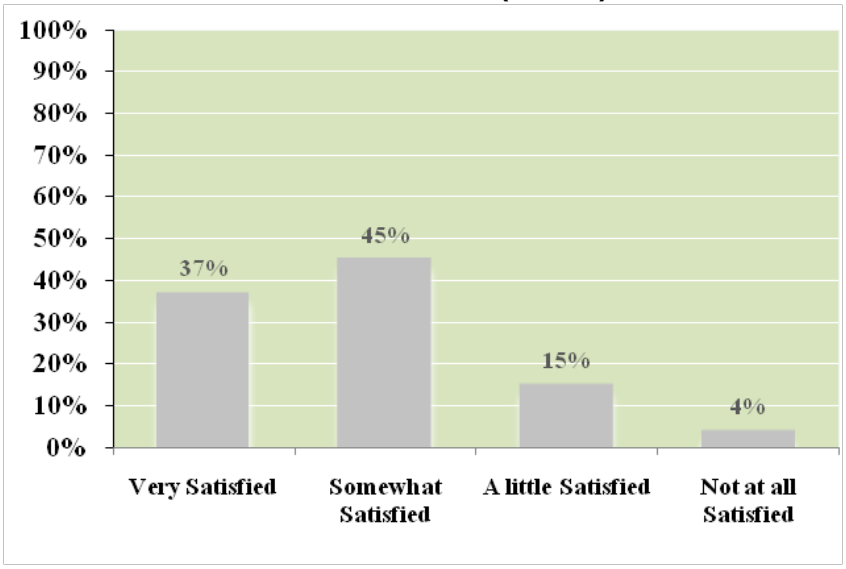
Table 11
Total Student Feedback about Simulation Features

For each statement, tell us if this was a reason you liked the simulation, a reason you didn't, or if it had no effect on your experience.	Why I liked the simulations	Why I didn't like the simulations	Had no effect
The sessions taught me the same concepts from the classroom lessons in a different way. (n=991)	60%	11%	30%
The simulation sessions were interactive and hands-on. (n=991)	73	10	17
I was able to work independently during the sessions. (n=982)	67	14	18
I was able to use a computer during the sessions. (n=987)	78	7	14
I was able to create my own avatar in the simulation program. (n=991)	73	7	21
A teacher and/or JA volunteer was available to help me during the simulation sessions. (n=988)	61	8	31

Overall Experience

Over 80 percent of students reported that they were "somewhat" or "very" satisfied with the tasks they were asked to complete in the four simulation sessions overall (see **Figure 8** on the following page). On a scale from one to 10, with one being "totally unsatisfied" and 10 being" completely satisfied, students (n= 974) reported a mean rating of 7.10.

Figure 8
Level of Satisfaction (n=1003)



When asked about the overall pacing of the simulation sessions, 62 percent of students (n=993) rated it as "just right," while 23 percent felt it was "slow" and only 15 percent felt it was "rushed." In terms of the difficulty of the information, 73 percent of students (n= 994) rated the content as "just right," and less than 30 percent felt it was "too easy" or "too hard."

The elements of *Finance Park Virtual* that students said they most liked echoed comments provided in their ongoing feedback. Namely they enjoyed the real world learning that allowed them to behave as an adult. Typical comments included, "*I liked how this made me feel all grown up*," "*Overall I liked how it taught us about budgeting and how we can use it in real life*," and "*I liked how it was preparing us for the future*."

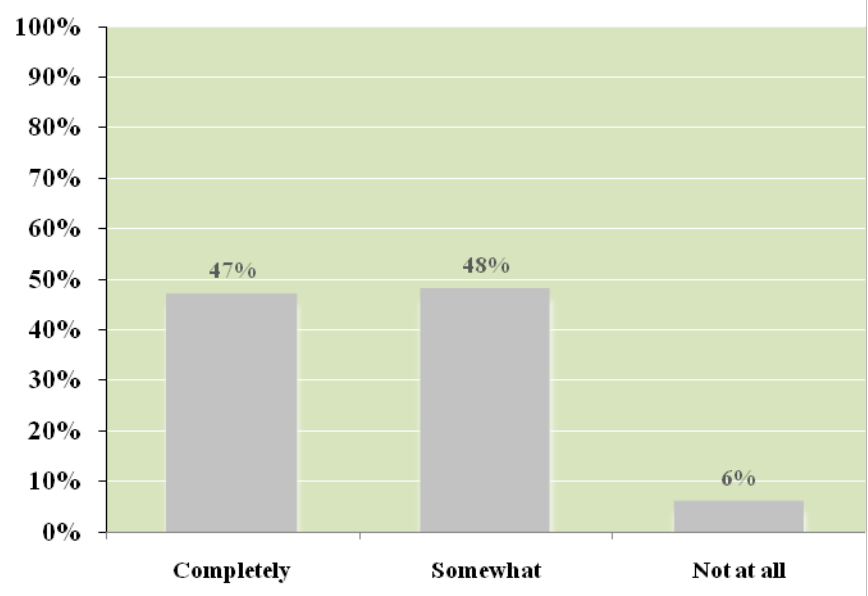
Students also liked the non-traditional, fun approach to learning that allowed them to learn hands on in an interactive environment. They said: "*It was an educational game*," "*I liked how we got to do everything rather than just reading about it*," "*It gave us a chance to use what we learned*," and "*It was on the computer and hands on. You could go at your own pace*."

They were positive about the elements of choice and the opportunity to exercise individual options in creating an avatar, buying a home and car, shopping, and in choosing the method they used to pay bills. "*I liked making my life situation, creating my avatar, choosing my home base and buying my house, car, TV package, and phone*," "*I liked the part where I could choose from the debit or check in paying the bills*," and "*Being able to personalize it. Make our house and create and avatar*," were typical remarks.
Students also enjoyed the competitive aspects of the simulation and the ability to communicate with and monitor the progress of friends. As one student said, "*You could complete your tasks and see who had the most points.*"

Some students also responded quite positively to the math and budgeting activities. These feelings were reflected in comments such as, "*I like calculation of monthly expenses*" and "*I got to see if I could balance my income and expenses*." Finally, students enjoyed the distraction of the scavenger hunt and the ability to earn points for finding the stars. According to one student, "*I liked earning points by collecting stars*."

Students' overwhelmingly positive experience was reinforced by the fact that 75 percent of them (n=744) said they would recommend the program to a friend. When asked how much their recommendation would be based on the simulation sessions, students were almost evenly split with 47 and 48 percent reporting that their recommendation would be "completely" or "somewhat" based on the sessions, respectively. Only six percent of students reported that their recommendation would "not at all" be based on the simulation component (see **Figure 9**).

Figure 9
Recommendation Based on Simulation (n=822)



Students who said they would not recommend *JA Finance Park Virtual* to a friend did so because they disliked the amount of math, were frustrated by computer and technical issues like freezing and slowness, disliked the in-class curriculum and workbooks, and said the teacher could make the learning more interesting than the simulation. They also felt the learning was not appropriate for their grade level and that their friends would not be interested in the subject matter. Finally they said they would have preferred to go on an actual field trip rather than participate in the sessions. Exemplary comments follow:

- *"It is kind of hard and tedious."*
- *"It goes way too slow and gets boring very fast."*

- *"I didn't really like doing all the math."*
- *"I don't think any of my friends would enjoy learning about finances in their spare time."*
- *"It was helpful but the class lessons were boring."*
- *"Because kids our age don't enjoy this. Wish we would have gone on a real field trip."*
- *"It was boring, especially the work book. It wasted time. Our teacher could just tell us about budgeting in a lot more fun way and in a way we can comprehend."*
- *"Because we 8th graders don't need to know this when we're 13. Seniors need to know."*

Students least liked several other elements of the simulation. They disliked the length of the sessions and said, "*It was a long process and slow only because of the calculations*" and "*The budget session 3 became rather lengthy and difficult and I and many of my classmates became frustrated*." They expressed frustration over technical and computer issues that affected downloading, navigation, and calculator speed. "*The simulation experience overall was slow. It froze a lot so I got kind of annoyed*" and "*I did not like how slow the server was. I also didn't like the lag and the calculator*," for example.

Students remarked on the repetitive nature and amount of math calculations. Their comments included: "*It was pretty much just doing math. It wasn't hard but that part was boring*" and "*I didn't like how many percentage calculations you had to deal with. They got really old really fast*." They also wanted greater choice options in some areas including avatar creation, life choice options, and in making purchases to satisfy budgeting requirements. Their remarks included: "*You couldn't customize the avatar enough*," "*I did not like how you had to spend 100% of your money*," "*I think we should be able to pick how many kids, money…*" and "*I wish we could have used the opportunity cost on some of the categories…*"

Some felt the navigation was "*confusing*" and commented "*I didn't like how sometimes it wasn't clear about what you were doing or you didn't know where to go*." Students found the classroom curriculum "*very slow and boring*" when compared to the actual simulation and some were critical of the scavenger hunt and of Casey the Park Guide. Their comments follow:

- *"What I didn't like was finding the stars. I did it to get more points but it was a waste of time."*
- *"I hated Casey the Park Guide. She was too loud and talked to me like I was four."*
- *"I didn't like Casey's lack of direction and help."*

When asked what one thing they would change about the simulation given the opportunity, most student responses fell into three main categories. They wanted more options to personalize and make individualized choices during the sessions; they wanted greater functionality to enhance the interactivity of sessions; and they requested shorter sessions with less math and calculations.

Less frequently, students commented about the slow pace of downloading and said the calculator "*was too slow*." One student's comment captured a handful of remarks regarding difficult navigation. This student requested "*an easier way to navigate to the next session*." Some requested help features, such as a button that is readily available "*so you aren't stuck for a long time*." They also suggested having "*an option for Casey not to talk*" and to change her voice to one that is "*less robotic*." More specific comments have been included below and are broken out by major response categories.

They wanted more options to personalize and make individualized choices during the session:

- *"I would like to have more choices for what my avatar looks like."*
- *"To change the stocks where you get to choose your virtual simulation stock."*
- *"You get to choose how much money you get to spend, like on the food I wanted to use some of that money for clothing."*
- *"If you could change your life/life situation."*
- *"I would like to be able to choose my job and the money I make."*

They wanted greater functionality to enhance the interactivity of the sessions:

- *"You should let us design and decorate our houses."*
- *"I would make it so you can walk around and drive and in stores go up to something and buy it."*
- *"We should be able to go inside the buildings and watch your avatar eat."*
- *"I think I'd make some way to interact more with the other people in my class."*
- *"We get to message people for real."*
- *"Be able to make the avatars walk around."*

They requested shorter sessions with less math and calculations:

- *"I would take away having to add so much up on the calculator."*
- *"Calculations, there should be a lot less. They took forever."*

Despite these limitations, student comments overall clearly indicate that they benefited from the *Finance Park Virtual* simulation sessions. They not only learned the specific

elements of budgeting and finance, but their remarks made clear they took away larger life lessons as well. The following represent typical student remarks about core lessons they learned from the sessions:

- *"I learned just how important budgeting is."*
- *"I learned the importance of budgeting and stocks."*
- *"I learned all the things that grownups had to pay for and what they go through."*
- *"I learned that keeping track of your expenditures is a lot more difficult than it looks."*
- *"Sometimes you have to live without some things to have the things you really need."*

Adult Post-Program Findings

Adults stakeholders played an integral role in the implementation of *JA Finance Park Virtual* and were in a unique position to both influence and witness students' overall experiences. In post-program surveys tailored for each stakeholder group, teachers, volunteers and JA staff provided their reactions to their students' overall experience, the simulation sessions and associated instructional strategies, and overall volunteer effectiveness and level of volunteer involvement. Adult stakeholders also provided detailed feedback about overall highlights, challenges, and recommendations for program improvement. Teacher, volunteer, and JA staff post-program feedback is presented below and organized by the aforementioned areas of inquiry.

Adult Reactions to Student Experience

Teachers, volunteers, and JA staff who submitted a post-program survey responded positively to items about students' level of enjoyment and engagement (see **Tables 12** and **13** below and on the following page). Most teachers and JA staff members "strongly agreed" that students enjoyed (57 and 73 percent, respectively) and were engaged during the simulations sessions (61 and 91 percent, respectively).

Table 12
Teacher Post-Program Reactions to Student Experience

n= 23	Disagreement[6]	Agree	Strongly Agree
My students enjoyed the simulation sessions.	0%	43%	57%
My students were engaged during the simulation sessions.	0	39	61
My students were appropriately challenged during the simulation sessions.	0	48	52

[6] Due to the low percentage of "strongly disagree" and "disagree" responses, percentages for both options are presented collectively as "disagreement."

Table 13
JA Staff Post-Program Reactions to Student Experience

n=11	Disagreement	Agree	Strongly Agree
The students enjoyed the simulation sessions.	--	27%	73%
The students were engaged during the simulation sessions.	--	9	91
The students were appropriately challenged during the simulation sessions.	--	9	91

Almost 90 percent of JA volunteers agreed with the statement, "The students were appropriately challenged during the simulation sessions," while 10 percent disagreed and 3 percent were not able to respond to this item (see **Table 14** below).

Table 14
Volunteer Post-Program Reactions to Student Experience

n=31	Disagreement	Agree	Strongly Agree	NA[7]
The students enjoyed the simulation sessions.	3%	45%	48%	3%
The students were engaged during the simulation sessions.	3	39	55	3
The students were appropriately challenged during the simulation sessions.	10	45	42	3

In general, JA staff members were most favorable about students' overall experience, while volunteers expressed greater variation in agreement to these items.

Adult Reactions to Simulation Sessions

Teachers, volunteers and JA staff provided feedback about various aspects of the simulation component, including its design features, its connection to the classroom lessons and program concepts, relevance to program objectives, and its effectiveness in exposing students to important concepts[8].

As evidenced by **Table 15** on the following page, teachers, volunteers, and JA staff largely agreed that the simulation sessions were easy to navigate, accommodated for a range of students' abilities and provided clear instructions. Perhaps as a result of having observed the simulation sessions from an outsider's perspective, JA staff were less inclined to "strongly agree" with these statements. For example, 18 percent of staff members disagreed that the instructions were clear and that the sessions were easy to navigate.

[7] Adult stakeholders were given the option to select "NA- I was not able to gauge this during the sessions" for most survey items. Percentages for "NA" are only included in tables where at least one respondent selected that option.

[8] Additional adult post-program tables of findings can be found in **Appendix G**.

Table 15
Adult Post-Program Reactions to Simulation Sessions

		Disagreement	Agree	Strongly Agree
The simulation sessions were easy to navigate.	Teachers	8%	52%	39%
	Volunteers	3	65	32
	Staff	18	55	27
The simulation sessions accommodated for a range of students' abilities in terms of using a computer-based program.	Teachers	4	48	48
	Volunteers	3	48	48
	Staff	--	73	27
The simulation sessions provided clear instructions.	Teachers	9	61	30
	Volunteers	6	48	45
	Staff	18	82	--

Adults stakeholders overwhelmingly agreed that the sessions taught students skills and exposed them to concepts that are important to their finance and work futures (see **Table 16** below).

Table 16
Adult Post-Program Reactions to Simulation Sessions II

		Disagreement	Agree	Strongly Agree
The simulation sessions exposed students to concepts important for their finance and work futures.	Teachers	0%	35%	65%
	Volunteers	--	32	68
	Staff	--	9	91
The simulation sessions taught students skills important to their finance and work futures.	Teachers	0	35	65
	Volunteers	--	32	68
	Staff	--	--	100

Built-in Calculator

The simulation component of the program included various elements designed to aid students in their understanding of the content, as well as their navigation of the sessions. One such component was a built-in calculator that students could access when completing mathematical equations. Adult stakeholders were asked if the built-in calculator should include a percentage symbol. Teachers had mixed feelings about the calculator and its functionality. Some teachers said a percentage symbol was not necessary since its absence required students to master the math skills to calculate percentages on their own. One teacher said, "*No - if the point is to reinforce learning then they need to have the opportunity to make mistakes*."

Other teachers were of the opinion that calculating percentages was too advanced or distracting for their students and that the calculator should absolutely include a percentage key. As one teacher said, "*Yes, my students struggle with math and trying to get them to convert the percent to a decimal was difficult. I ended up borrowing calculators from the math dept for them to be able to use the percent key*."

Volunteers echoed teacher sentiments. Some said it was not necessary since students should already have or must acquire the ability to convert decimals to percentages. Others said it would be helpful and streamline the calculations required of students, particularly those in lower grade levels. One volunteer said, "*Yes. While it is a great learning point to talk to them about converting % to a decimal, that really shouldn't be*

the responsibility of the volunteer. It would be nice to have a % available to the students."

As with other stakeholder groups, JA staff members were split as to whether to incorporate a percentage symbol on the built-in calculator. Most said it was not needed and that students benefit from the doing the calculations to learn how to or reinforce prior knowledge of how to convert decimal figures to percentages. On the other hand, those who said a percentage key was necessary largely did so as they felt providing a percentage key would speed up the math calculations and overall pacing of the sessions.

Additional Reference Materials

Adult stakeholders also provided their thoughts as to whether students would benefit from the inclusion of a glossary, dictionary or other reference tool. Most teachers were skeptical that additional resources such as a glossary or dictionary would add value for students. Largely this was for two main reasons: 1. They believed students were already familiar with the vocabulary and terms as a result of previous lessons and learning, and 2. Some students were already put off by the amount of reading and would not take the time to read additional information provided by either a glossary or dictionary. As one teacher said, "*This could help, but I am not sure a lot of the students would actually use the resource*."

Some teachers reported that some students – especially those at lower grade levels or less proficiency - would benefit from a reference guide that would allow them to refresh their knowledge of key terms, particularly acronyms used in the sessions. Teachers said:

- *"For the group that I taught (low 8th grade), easier to read instructions would be more valuable than a glossary tool, but, for older, more advanced students, this would be a good idea."*
- *"Maybe a dictionary for the words like NMI, and GMI. I think they forget what the initials stand for."*
- *"A glossary would be helpful. LEP students had more questions about the meaning of some words."*

Some volunteers, on the other hand, felt students would benefit from a reference tool allowing them to look up the meaning of words which they did not understand – philanthropy, for example- and as a quick reference to explain budgeting terms, and spell out the process for converting decimals to percentages. Other volunteers said the simulation instructions were very thorough and complete and that additional clarification was not needed, particularly if the teacher/instructor takes the time to adequately prepare to lead the sessions. Others also pointed out that, given the limited amount of time to complete sessions with a large volume of interactions, most students simply would not have the time to avail themselves of a dictionary or other reference tool.

As with teachers and volunteers, some JA staff said additional reference tools were not needed for the simulation sessions. A JA staff member said, "*This area did not create an area of concern*." Others felt a glossary or dictionary would be helpful to students especially if it were to include reminder instructions about calculating percentages. As one staff member explained, *"Yes, I don't think it could hurt and would definitely help. I think a glossary would be very helpful. I heard many students asking for the meaning of philanthropy."*

Availability of In-Class Curriculum

When asked if any pieces from the in-class curriculum should be made available to students for reference, most teachers did not see the need for students to access this information. They said the current flow – from class curriculum to simulation sessions- worked just as it is and provided a seamless learning experience for students. As one teacher said, "*I think the curriculum was very helpful and led to smooth game play. I think the game on its own without pieces from the curriculum is fine*."

A few teachers, however, provided suggestions about specific content that students should be able to access during the simulations sessions, namely budgeting and numerical data. Finally, one teacher recommended reducing or eliminating parts of the in-class curriculum because the simulation component was so comprehensive. According to this teacher, "*95% of the in-class curriculum should be eliminated."*

Similarly, most volunteers did not see the need to include elements from the in-class curriculum, saying the simulation was all inclusive and worked well just as it is. They also said students who were engaged in the simulation sessions would not distract themselves by referring to materials they used in the classroom. Others remarked that they were not in a position to make the determination as they were not exposed to the classroom instruction that preceded the sessions.

As with some teachers, a small number of volunteers did request specific budget items or calculations be made available to students. They said,

- *"Maybe the pie chart that students used during the in class portions to remind them that each category is a portion of the whole NMI."*
- *"I think the process of taking a sale price of a car and converting it into monthly payments was beneficial during the curriculum piece of the lesson. This could be a helpful part in the virtual portion of the program as well."*
- *"It would be nice to give them a copy of their budget sheets so they could go home and try to do the budgets with their parents."*

While some staff felt ill-equipped to make decisions about the inclusion of elements of classroom instruction to which they had not been exposed, some said students would benefit from access to workbooks or by breaking sessions into two parts to allow teachers to re-teach concepts immediately before beginning a session. One staff

member recommended including more information on the stock market or a stock market report since this was an area of interest to students.

Instructional Strategies, Pacing and Content

The simulation component of the *FPV* program featured a number of instructional strategies designed to *"reach and engage a variety of learners*[9]*."* In order to assess if and to what extent these instructional strategies were successful, adult stakeholders were asked to rate each strategy, listed below[10]:

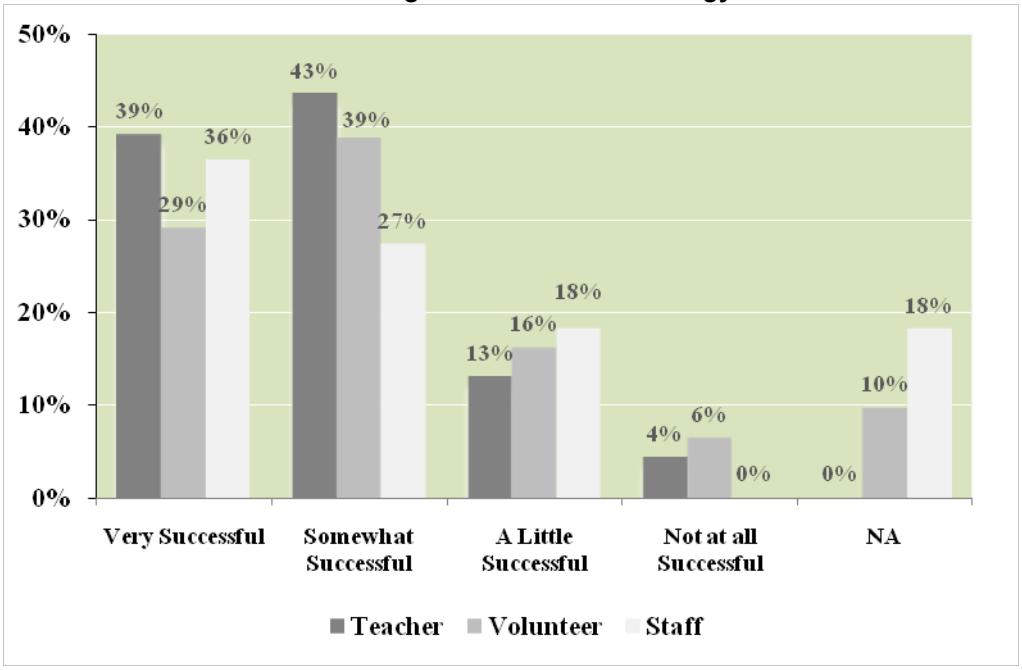
1. *Session 1 only: "Designed Failure" where students are encouraged to spend impulsively so as to provide initial motivation for the rest of the course.*
2. *Students develop a personal investment by creating a representational avatar and use it throughout the sessions.*
3. *Students are challenged throughout the game experience and forced to re-engage an idea until they succeed.*
4. *Students' use of social media elements makes the experience dynamic and fun.*
5. *A leader board is displayed and an award system is used to create a fun level of competition and recognition.*

Teachers, volunteers, and JA staff overwhelmingly reported that the strategy to encourage impulsive spending in the first session was "very" or "somewhat successful" (see **Figure 10** on the following page). Teachers responded most favorably to this instructional strategy, while relatively more JA staff members felt the strategy was "a little successful" and/or they were not able to gauge the effectiveness of this strategy.

[9] Enspire Learning, *Finance Park Design Document.*

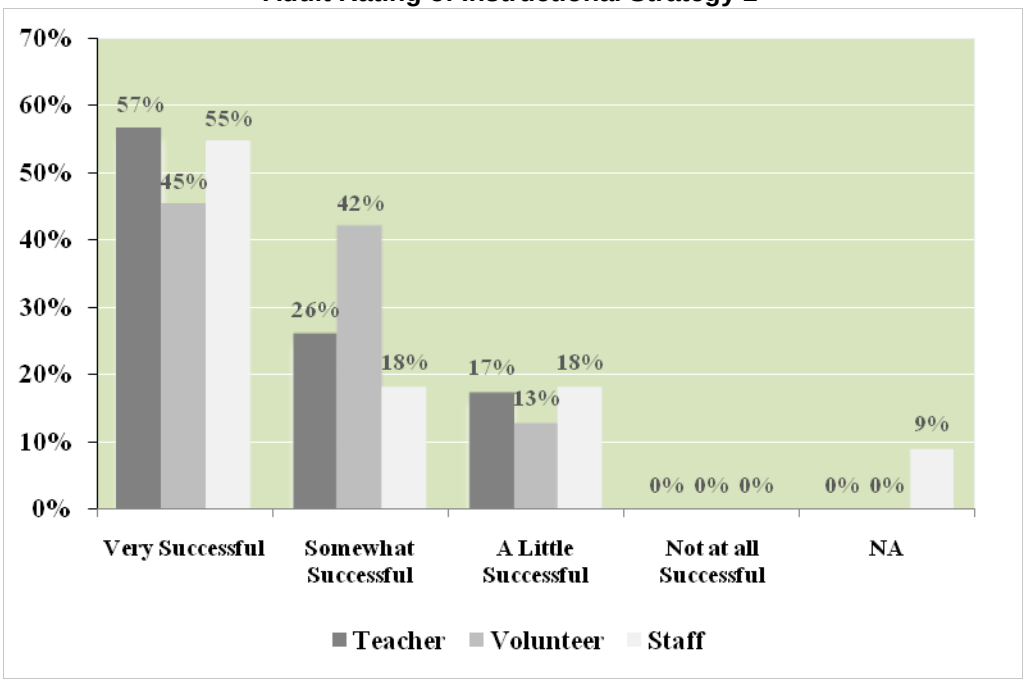
[10] Sample sizes for the tables on the following pages were as follows: teachers = 23, volunteers = 31 and JA staff= 11.

Figure 10
Adult Rating of Instructional Strategy 1



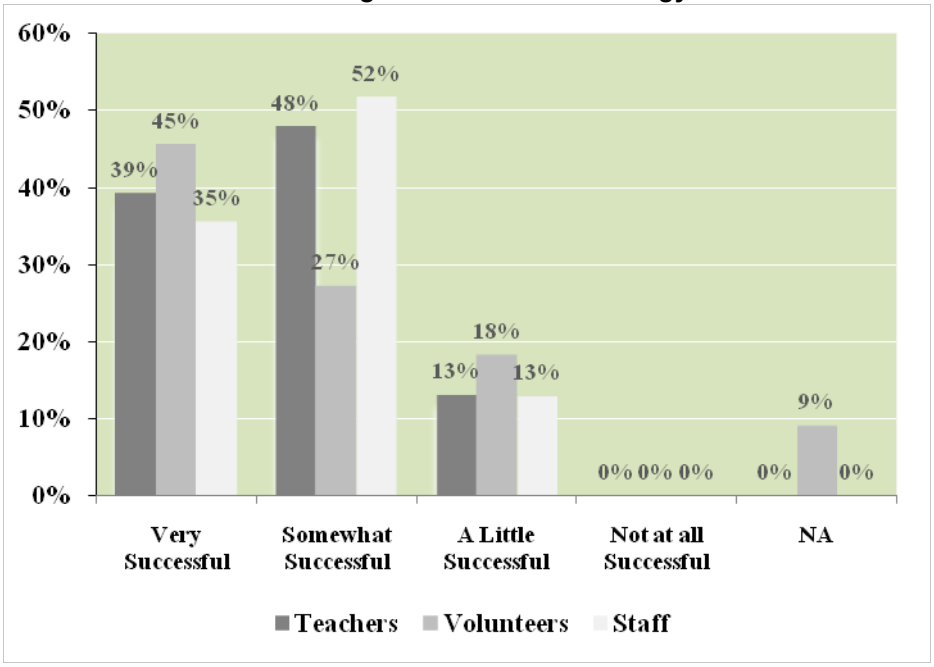
As evidenced by **Figure 11** below, the majority of teachers (57 percent) and JA staff (55 percent) rated the use of a representational avatar as a "very successful" instructional strategy. Forty-five percent of volunteers felt the same, while another 42 percent felt it was "somewhat successful."

Figure 11
Adult Rating of Instructional Strategy 2



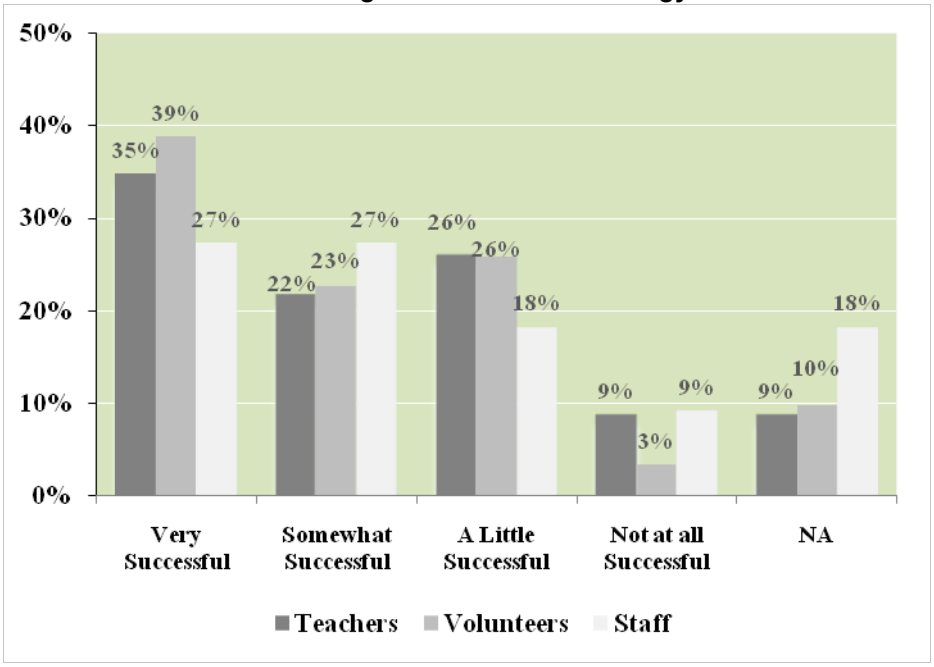
Adult stakeholders responded positively to the fact that students were challenged throughout the simulation session and forced to re-engage an idea until they succeeded, as seen in **Figure 12** below. Most staff, at 52 percent, rated the strategy as "somewhat successful," while no adult stakeholder group rated it as "not at all successful."

Figure 12
Adult Rating of Instructional Strategy 3



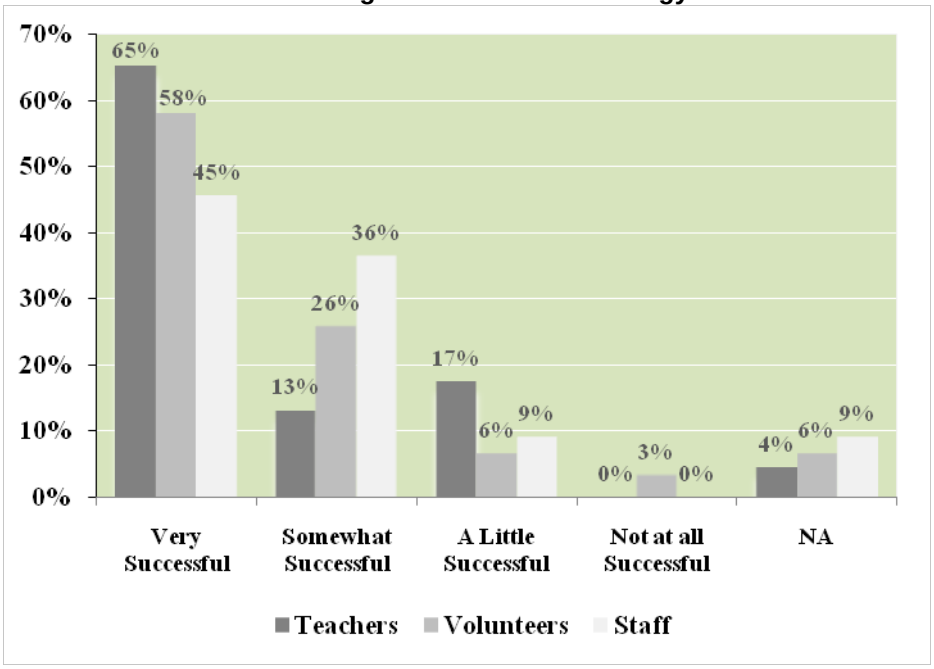
Adult stakeholders provided greater variation in their ratings of the social media elements of the simulation component (see **Figure 13** on the following page). While some adults were not able to gauge whether this feature made the experience dynamic or fun, most felt the strategy was "somewhat" or "a little successful." Volunteers responded most favorably to this strategy, with 39 percent rating it as "very successful."

Figure 13
Adult Rating of Instructional Strategy 4



Teachers, volunteers, and JA staff largely agreed that the use of a leader board and award system was "very successful," as evidenced by **Figure 14** below. Sixty-five percent of teachers and 58 percent of volunteers gave the strategy the highest rating, while over 80 percent of staff said it was "very" or "somewhat successful."

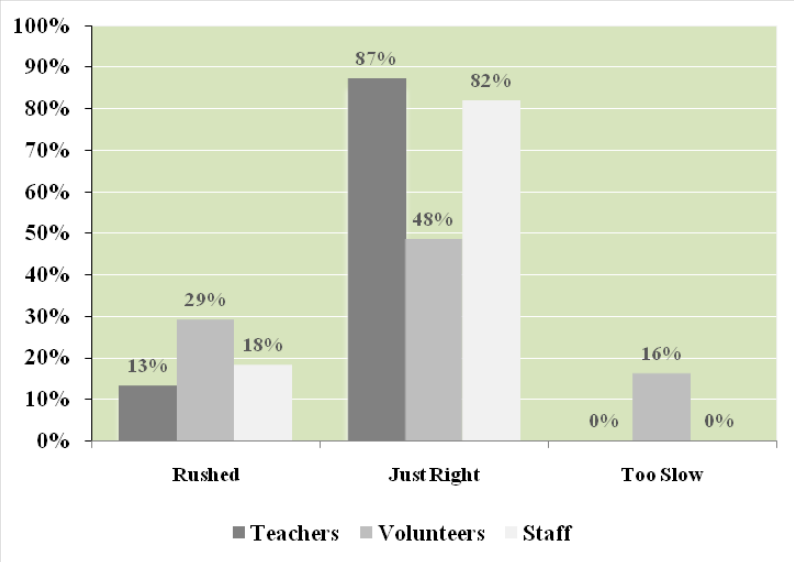
Figure 14
Adult Rating of Instructional Strategy 5



Overall Pacing

Teachers and JA staff responded positively to the overall pacing of the four simulation sessions, with almost 90 percent of teachers and over 80 percent of JA staff members rating it as "just right." Volunteers, on the other hand, were divided in their ratings. While 48 percent rated it as "just right," 29 percent felt it was "rushed" and 16 percent felt it was "too slow" (see **Figure 15** below).

Figure 15
Adult Rating of Overall Pacing



Overall Content Difficulty

As evidenced by **Figure 16** below, the overwhelming majority of adult stakeholders rated the overall content of the simulation sessions as "just right" for students. Only 9 percent of JA staff felt it was "too hard," while only 10 percent of volunteers felt it was "too easy."

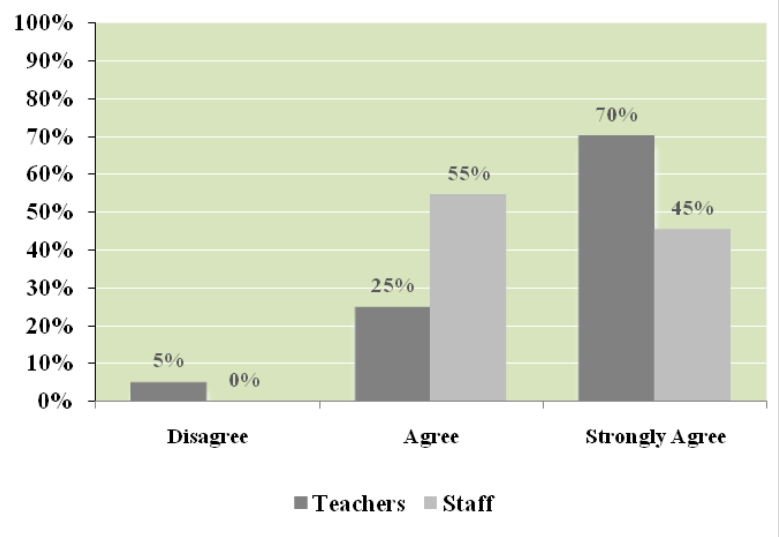
Figure 16
Adult Rating of Overall Content Difficulty

Volunteer Involvement

JA volunteers participated in the curriculum and simulation component of the *JA FPV* program to varying degrees, from helping to facilitate a maximum of seven curriculum and simulation sessions to none at all. Teachers and JA staff members who co-taught and/or observed a JA volunteer during at least one simulation session were asked to provide feedback about the volunteer's helpfulness and how he/she impacted students' overall experience.

The majority of teachers (at 95 percent; n=20) and all JA staff members (n=11) "strongly agreed" or "agreed" that the volunteer was helpful during the simulation session(s) (see **Figure 17** below).

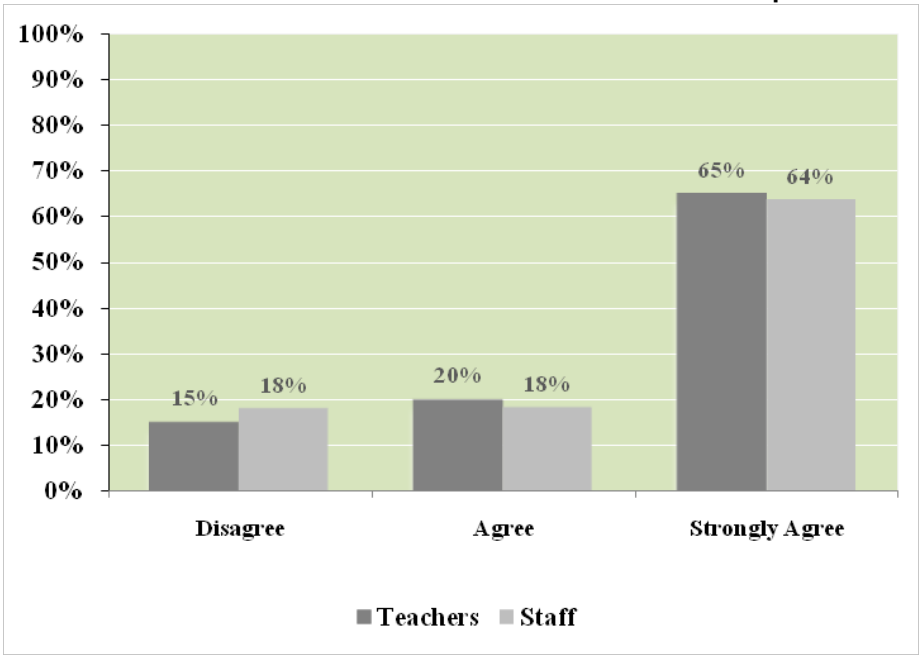
Figure 17
Teacher and Staff Feedback about Volunteer and Helpfulness



In open-ended responses, teachers acknowledged the contribution that volunteers made to the *Finance Park Virtual* experience. Not only did teachers say the volunteers provided additional assistance in the classroom, but teachers recognized the value of the volunteers' real-world experience in engaging students and advancing the connection between students and the program content. As one teacher said, "*Just having another adult in the room to be available for student questions frees up the teacher to spend more time with struggling students and allows students to be more productive*."

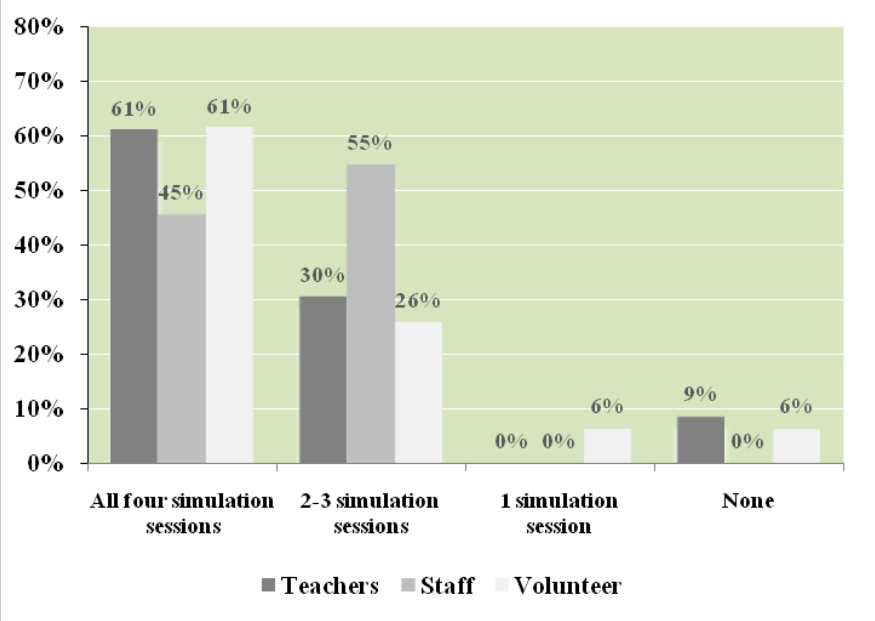
When asked if having a volunteer during the simulation session(s) enhanced students' overall experience, teachers and JA staff again responded favorably, with over 60 percent of both groups "strongly agreeing" with this statement (see **Figure 18** on the following page).

Figure 18
Teacher and Staff Feedback about Volunteer & Student Experience



Teachers, volunteers, and JA staff were asked to report how many simulation sessions they felt a JA volunteer should facilitate (see **Figure 19** below). The majority of teachers and volunteers (at 61 percent each) reported that a JA volunteer should help to facilitate all four simulation sessions, while 55 percent of JA staff reported that they should facilitate just two-three sessions.

Figure 19
Adult Feedback about Level of Volunteer Involvement



In their comments, teachers explained that the volunteer added value to their students' overall experience because they served as real-world role models. Teachers said:

- *"The students learn well from community business people. These volunteers are speaking from real life experience. The students enjoy having someone besides the teacher come into the classroom and teach or share information with them. The volunteers we had were very good!"*
- *"The students benefit from people in the community taking the time to come in and work with them."*
- *"The volunteers can share real life experiences with the students and relate it to the curriculum."*

Most staff members felt volunteers were an essential, integral part of the sessions, specifically, and of JA overall. They said teachers and students benefited from the volunteers' assistance, perspective, and knowledge about the individual sessions. One staff member said, *"I feel the teachers loved having another person that the students knew and felt confident to ask them questions. If the volunteer was not there I feel the class would not have finished within a week and we would have run out of time."* Another staff member explained, "*Volunteers are the heart of JA and it's so important to have them there to reinforce the concepts to the students. I also think that it's a great opportunity to introduce volunteers to the other programs that we do. This is a great way to get new people involved with JA."*

Many volunteers echoed the sentiments of teachers and staff members and felt volunteers added value to the simulation sessions by providing an additional resource to assist and engage students, bringing another perspective into the classroom, and allowing the simulation sessions to stay on pace. They made the following comments:

- *"The students had too many questions for just one teacher to cover. I also believe that the students appreciated the business outlook I was able to give them and a different voice. "*
- *"There were different situations in each class that required teacher/volunteer assistance, and with both of us there each day, no student had to wait for assistance."*
- *"I think it's important for the volunteer to be involved throughout the whole process. This allows the volunteer to get to know the students better, and the students get to know the volunteer better and are more likely to open up and participate more. "*

If faced with a limited number of volunteers and the need to maximize resources, teachers identified sessions 1 and 3 as those most in need of volunteer assistance due to the volume of calculations inherent in both sessions. At the same time, they said session 2 was least likely to require a volunteer because the session was self-paced and incorporated a significant amount of reading or listening on the part of students.

Some of the volunteers said they are needed in some, but not all, simulation sessions. In particular, volunteers identified sessions 2 and 4 as those that may not require volunteer input. However, they agreed with teacher that volunteers were needed during sessions 1 and 3 in which students are acclimated to the simulations and perform numerous budgeting calculations. As one volunteer explained, "*I think the most important session is the one where they are using the worksheet to balance the budget - I think that was 3? That is the one I know I had to do a few times, so I'm sure the students did too. They could benefit from volunteers in this session. They do not need volunteers in session 4 (which is the one I did)*."

Some staff provided an alternative scenario in which simulation sessions are extended or broken into additional classroom sessions in order to give the full benefit of the volunteers' experience. Specifically, they said that sessions 1 and 3 should be expanded to allow for more teaching opportunities and input from the volunteers.

Overall Program Highlights

Teacher Feedback

Teachers praised *Finance Park Virtual* as an engaging, interactive, and fun learning experience for students. They reported high levels of student involvement during the sessions and noted that students were engrossed in simulation activities, including taking advantage of opportunities to compete with, monitor progress of, and send messages to classmates. Teachers said:

- *"Students were engaged and excited to complete the simulation!!"*
- *"I have never seen the students so engaged!"*
- *"The computer-based approach got kids excited...they adapt to it very quickly with little instruction."*
- *"Overall the students enjoyed the competition and learned some things about budgeting and spending money."*
- *"Students as a whole were engaged from the first question. They really enjoyed their avatars, high score board, message board. They even enjoyed the math in the context of their "life."*
- *"The students really liked making the avatar of themselves. They liked being able to see where others in the room were at on the session and what their score was."*

One teacher commented positively about the recreational elements of *Finance Park Virtual* saying they provided opportunities to reward students who worked more quickly while allowing those who progressed more slowly the chance to learn at their own pace. The teacher said, *"I liked how the students had scavenger hunts to work on and games to play when the lesson was finished. This helped with the students who were a little slower and didn't make them feel like they were being singled out because they couldn't finish as quickly."*

Volunteer Feedback

Volunteers were similarly positive about the program overall. Volunteers said *FPV* was an educational, stimulating, and engaging experience that allowed students to learn about the real world in tangible and unexpected ways. They noted student choice and the fun, game-like atmosphere of the simulation as standout elements of the sessions. They provided the following comments:

- *"I think the whole program is an eye opening experience for the students and it was well put together.*
- *The students were educated, engaged and very focused on the game. All seemed to enjoy the game and were making smart choices."*
- *"I think the kids really enjoyed this program and learned a lot. I think all kids should go through this program before they get out on their own, I know I wish I would have."*
- *"Most students seemed engaged in the material and took the opportunity to interact with the simulation with effort. They were motivated to "win" a spot on the leader board."*
- *"Kids were very excited about their situations and the choices they got to make. They grasped the concept of a budget and the expenses that they will incur some day."*
- *"It was really cool that students were bringing home examples and that the teacher received feedback from parents and students that was really positive."*

JA Staff Feedback

According to JA staff members, *FPV* offered students a fun, engaging, and interactive method of learning about the financial and budgeting aspects of the real world. From their perspective, the greatest benefit of the sessions was that they provided students with exposure to the financial realities of life after school in a palatable and friendly interface.

- *"Kids loved it!"*
- *"The competition added a great piece by keeping the kids more engaged because it felt like a game."*
- *"The overall interaction with the program is AWESOME technology. It is cutting edge classroom instructional materials."*
- *"One student said she was so poor and couldn't afford her child and wanted to know if anyone would adopt her child. She understood how hard it is to live in the real word plus how important continued education is."*
- *"In a de-brief of several classes, the students did share what they had learned and it was very evident that they had really begun to think about how important financial planning and budgeting are."*

- *"All in all I believe the game is successful and the kids learned a lot and enjoyed the experience."*

Overall Program Challenges

Teacher Feedback

Teachers most frequently cited specific and general technical issues as challenges faced by students throughout the simulation sessions. While many of these technical difficulties were reported in an ongoing reports, additional comments were included herein in an effort to provide comprehensive participant feedback in the final report. Teachers said:

- *"The sound files did not work in session 2 on the first day of the simulation, but this was fixed quickly."*
- *"Program errors prevented some of my students from completing the simulation."*
- *"Session 4's Account Budget would not let the students enter the total even if it was correct. I think this was only a problem for the students who started the session the day before and did not finish."*
- *"Had problems with the computers either freezing up and not letting the students submit and answer or the session would kick them off and make them go back to the previous session they had just finished."*
- *"Some of the accounts froze and would not let the students continue on with the simulation."*

Teachers also explained that some content (i.e. the volume of calculations) was difficult for some students, especially those with special needs or learning disabilities. They added that directions were not explicit enough at times, causing student confusion.

- *"We had a bunch of computer issues on day 4 and 5 in the lab and several of my students are special ed, life skills, or esl, so they struggled with trying to read and calculate."*
- *"With all the numbers to add up on the calculator in session 3, some students, prone to mistakes, had to do it over and over and over, which got them behind."*
- *"Sometimes there was information on the screen which wasn't pertinent to the task at hand. Although this information might have been interesting for older students, it confused my low 8th graders."*
- *"The directions were not always explicit which confused students. [For example] if the simulation wants the kids to monitor their stock portfolio, then take them there rather than hoping they find the stock exchange and click on it. "*

- *"Not all of the instructions are clearly stated, and if they are, it takes Casey so long the kids tune her out."*

Some teachers provided a handful of very specific suggestions to address some student challenges encountered in their classrooms. They said:

- *"Budget categories with lots of calculations were hard to see sometimes if they could be presented on a full screen I think there would have been less errors."*
- *"The calculator could be upgraded; many of the students used their own."*
- *"I have several very smart shoppers who wanted to use coupons and allow themselves to have a balance remaining and they were disappointed to have to spend everything.*

Teachers also cited several specific challenges faced by students throughout the simulation sessions, including the following: a lack of clarity in some of the instructions (navigating and using the stock market, rounding to nearest whole dollar, converting decimals to percentages); overall difficulty with math, particularly in balancing the budget; pacing issues; and technical and computer problems.

Their comments seemed to indicate a need for greater specificity or more streamlined instructions in portions of some sessions. In particular students seemed to have difficulty calculating individual budget categories and balancing the budget, navigating and completing stock market tasks, and correctly performing math calculations such as rounding numbers to the nearest whole dollar, and calculating percentages. Teachers provided the following examples:

- *"Getting NMI to zero was a challenge for many and did not grasp right away how to adjust."*
- *"Moving to the stock market was not clear; how to complete this exercise was not clear. which was probably due to the fact we did not have time to go through it before the virtual simulation. More instructions the first time to explain the ticker tape and what to do would help (like a pop up box they could close if they don't need the help.)"*
- *"Finding the arrow for the "stock round". This needs to be bigger."*
- *"They didn't always read the directions carefully. For example, I had to point out several times in the first session that they needed to round to the nearest whole dollar."*
- *"Trying to get to a zero balance caused numerous kids issues. "*
- *"The students were having troubles getting through the calculations in lesson 1 and 3. The calculations were overly detailed in some sections."*

Volunteer Feedback

Volunteers cited pacing as a major obstacle in the implementation of simulation sessions. They said the sessions were not evenly paced, making it difficult for some students to finish the work in some of the sessions, while other sessions did not use enough classroom time. More specifically, they said sessions 1 and 3 – and in particular session 3 - was time consuming and difficult to complete during one class session. On the other hand, they indicated that sessions 2 and 4 were too short and did not engage students throughout an entire class period. They provided the following comments:

- *"Classes are not evenly paced. The 2nd session allows much time for stock and stars, the others do not."*
- *"Some of the more advanced students would finish early and have nothing JA related to do until the next session. If there were some sort of extra activities that would help."*
- *"Session 3 presented challenges in completing the session in the allotted time."*
- *"Doing all the math, keeping up if they missed a session (or part of a session), keeping busy in the short sessions (2 & 4), completing the work in sessions 1 & 3."*
- *"In session 3 the grocery list should have a running grand total not just subtotal by food category. This took up a lot of class time."*
- *"Class 2 and 4 were short and 3 was too long....the math in 3 was counterproductive."*

JA Staff Feedback

Finally, JA staff provided very specific comments when asked to comment on challenges faced by students during the simulation sessions. For example, they said the sheer volume of math in session 3 and the percentage calculations in session 1 were daunting for some students. Beyond this, specific remarks were aimed at grocery shopping, the stock market, technical issues, Casey the Park Guide. The following comments serve as examples:

- *"Session 3 is a challenge for the students. It requires a little more time and the process can be even slower when experiencing computer glitches. Issues do occur and we need to know how to address them."*
- *"Understanding percentages was a big challenge in session 1."*
- *"The calculations are the real issue. I can't stress that enough."*
- *"It was hard for them to buy enough groceries to reach even their minimum. I felt that it was unrealistic to have a family of two spend $780 on groceries per month."*
- *"Stock portion of the activity needs clearer instructions on how to access their stocks."*

- *"The overall understanding of the option sheets, they had questions about how to operate the stocks and how to figure out percentage plus rounding to the nearest dollar.*
- *"Understanding of option worksheets mainly the water and sewer. Some had questions with rounding up or down and understanding some how to read and figure out the answers."*
- *"The computers in the lab were a little slow."*
- *"The 7th grade class was running the program on Macs and the program was extremely slow."*

Overall Program Suggestions

Teacher Feedback

Teacher suggestions to improve *Finance Park Virtual* fell into four general categories – make specific aspects of the simulation more like real life; allow greater flexibility in individualizing implementation in the classroom; modify sessions for students with special needs; and revise session 2.

Teacher comments aimed at enhancing the real-life components of *Finance Park Virtual* were straight forward and are included below:

- *"Somehow allow students to live their lives, like maybe they push a button and watch their Avatar go through a week (represented by moving along a timeline of some sort) and then they see their food dwindling, their car needs gas, they have to pay certain bills that come due, etc. Also, then they could be allowed to buy "extra" stuff they may not need and have to face the consequences at the end of the month (or perhaps at the end of a few months, such as getting their car repossessed)."*
- *"Have a cell phone only option for the phone service (fewer people have landlines these days)."*
- *"I would like to see them get to pick their stocks."*
- *"Some students would like to have had more choices in their selections of cars, groceries, etc.*
- *"At the end it would be good for the students to see a summary of their choices and how they spent their money. "*
- *"There should be some emphasis on saving money in a savings account as well as in investments."*
- *"Supply a "good," "ok," or "poor" service to determine the tip amount."*

Teachers who requested the ability to adapt implementation in the classroom wanted greater flexibility in pacing classroom content to facilitate the varied learning styles of students in their classroom. Their typical comments follow:

- *"Session three is REALLY long! If there was more specific help provided when a mistake was made, it might make it go faster. If there were other options (a pre-packaged grocery list) that would make it faster as well."*
- *"Find a way to make it easier to total and re-total each category in session 3 while students are building their budgets."*
- *"Provide a way to restart or re-do a particular session with teacher permission rather than having to start at the beginning."*
- *"Allow students to return to the stock market portion if they missed it initially."*

Some teachers felt the *FPV* simulation was too difficult for students with special needs. At the same time, they wanted all students to have the ability to engage in and learn from the sessions. As a result, they suggested modifications that would enable exceptional students to participate in the sessions alongside their classmates.

- *"Maybe make two versions of the game. One being easier with less math for the students that might be classified as special needs. Some of these kids have IEP's (Individual Education Plans) that say in their paperwork, they need less questions or have difficulty in reading, writing, or math."*
- *"I would like to see some "no calculator" parts obviously with "friendly" numbers."*

Some teachers commented that session 2 moved too quickly and did not engage students in the same manner as the other sessions. They suggested enhancing the session to require similar levels of effort and diligence as other simulation sessions. As one teacher said, *"Session 2 was a little easy and went very fast with time left over."*

Volunteer Feedback

Volunteer suggestions to improve *FPV* sessions targeted three key ideas – reduce the volume of math and calculations in some sessions, combine elements of the sessions to sustain evenly paced sessions that focus on the teaching of concepts rather than completion of discrete tasks, and enhance the real world feel of certain game elements. The following comments exemplify these key ideas:

- *"For calculating NMI, have not as many categories to calculate. For buying things, streamline the screens."*
- *"Groceries took a long time. Maybe have the computer subtotal the amounts. That way the students can still feel what it's like to buy stuff for a month."*
- *"Minimize repeat work -- doing the same thing over and over again (like in sessions 2 and 4) and add other challenging activities."*
- *"Less math, more conceptual learning opportunities, like why it is important to spend less than you make, to budget, etc. The math took the longest, and*

this is not a math lesson. They need financial concepts repeated to them. Tools to speed up the math part would be recommended."

- *"Merge some concepts and activities to make each session more varied (i.e. go to the store, set your budget, then spend that amount). Make the spending not come out even (or allow students to over/under spend their budget) for more realistic scenario."*
- *"Combine sessions two and three somehow. Make there be a reason to want to search for stars."*
- *"The "5th", classroom session has four concepts. Each of those could be integrated with one of the simulation sessions with the 5th session tying them together with career choices. A list of careers based on ability, interest, preference and values (like in previous curriculum) will be helpful to the students.*
- *"In the session 1&2, have more interaction by the students such as games to play that will help them through the game. Such as ask what would they buy in this store, what is the average cost (guess and then give them the answer), who in their family needs this good, is this a want or need, etc."*
- *"Make it as realistic as possible in terms of the costs."*
- *"I think the stock part needs to have more interaction. The students seemed like they felt they were just copying numbers over. If there is a way to allow them to pick their own stocks and go and find how much they are worth, it would prove beneficial."*
- *"Savings needs to include options on how to save (savings account, money market, CD, etc.). Students should be allowed to select their stock investments."*
- *"The part about "required expenses" and "nice to have expenses," (not sure if that's the right terminology), does not allow you the freedom to make your own choices. It tells you that everyone will think of it differently, but then tells you that you're either right or wrong."*

JA Staff Feedback

Staff members said that session 3 was too long to complete in one class meeting. They suggested breaking session 3 in two parts to allow all students to complete the session without feeling rushed. As one staff member said, *"I felt with Session 3 it took longer to complete and may want to extend the time. It really was hard for all grade levels and when I observed the kids felt rushed."*

One staff member suggested reducing the number of lessons teachers are required to teach prior to implementing the simulation sessions to make it more feasible for teachers to use the simulation component. According to the staff member, *"Our teachers do not have time to do all those lessons and they do not see the value in all of*

them. Most classes where this program would be placed have its own curriculum that the teachers much teach and having to do 19 lessons on top of that is just not feasible."

Final staff feedback included a request to provide a cheat sheet that teachers can use to solve technical problems, a request to eliminate the minimum spending requirement for the monthly budget, and a suggestion to include a line item for gas in the monthly budget.

Classroom Observations

JA Member Office staff were encouraged to observe every simulation session at least once and to complete an accompanying observation protocol for each. The following narrative includes session highlights and challenges as well as recurring feedback based on JA staff member open-ended feedback. In addition, we have included tables (**Tables 17 – 24**) containing a mean ranking for items based on a scale of 1 to 10 where 10 is the highest rating. To explain each item rating, we have included representative comments chosen from staff member feedback. In some cases the comments are directly aligned with the rating and in other cases the comments show the range of opinion from different staff members and classrooms.

While the feedback provided below was detailed and helpful for presenting a well-rounded picture of the simulation's successes and challenges, one of its limitations is the fact that it does not include observation data from all participating sites. The majority of the observation feedback was received from only three of the 14 sites including San Diego, CA; Fort Worth, TX, and St Louis MO. In addition, ETI received one observation from Princeton, NJ and one observation from Houston, TX.

Session 1

JA staff members reported on observations for nine session 1 classrooms. These classrooms represented four different JA sites including Princeton, NJ; Fort Worth, TX; St Louis, MO, and San Diego, CA. Observations spanned grades 7 – 12 including two Grade 7 classes, five Grade 8 classes, and two Grade 9-12 classes. Class sizes ranged from 12 – 24 with the average class size at 20 students. Most classes were assisted by a volunteer during the observation (8 of 9 classes). The level of volunteer participation in these classes was high overall with six of the eight volunteers participating five times, one volunteer participating in the classroom three times, and one volunteer participating one time.

Simulation Overview

Overall session implementation ran smoothly according to staff feedback. JA staff noted that the volunteers were valuable for helping to facilitate the class. In particular they were helpful in working with students on the content of the program. One staff member, for example, noted that *"The volunteer did a great job of introducing the topics of the game."* Another staff member noted that *"The volunteer had to stop and go over how to calculate percentages in the Budget Worksheet multiple times"* and recommended that

"It may be good to have at least two volunteers per classroom so they can work together helping the students."

Other staff members, however, noted that the value of the volunteer was undermined by several factors, namely the limited time and the pacing of the session. One staff member wrote, for example, *"There is very little time for the volunteer to actually 'teach' the lesson particularly if the class is only 50 minutes."* In additional feedback a staff member noted that *"the volunteers tried to keep all students at the same points in the game,"* explaining that *"this made it easier to explain concepts to the group."* With the varying abilities of the group, however, the staff member explained that eventually *"the volunteers just let some students move on in the game so they were not sitting and waiting for other students to finish."*

JA staff members also noted minor difficulties with volunteers maintaining students' attention. This was due, in part, to the nature of the simulation, i.e. student gave their full attention to the screen as opposed to the volunteer. In addition, the fact that students used headphones made communicating with students *"a little challenging for the volunteer."* The volunteer's solution was to have students *"leave one ear bud out so they could hear him."*

JA staff members also contributed observations regarding areas of the software that they thought could be improved. In two comments, JA staff members suggested that having a way to pause the game would be helpful so that students did not get penalized if they took a break. In another comment, a staff member reported that *"Students all noticed that the Go Wild calculations all come out the same no matter what they chose."* A few comments reflected glitches with the budget worksheet. These occurred with Life Situations 93 and 156. In other technical feedback, JA staff members noted that the logging on process was time consuming.

Table 17 below and on the following page presents the ratings and supporting comments for the simulation overall. The ratings and comments below substantiate the observation feedback included above. As depicted in **Table 17** the simulation ran smoothly overall. Students were receptive of the technology and engaged by the program. The success of pacing the program, however, seemed to be the factor that varied the most across classrooms.

Table 17
Simulation Program Measures
N=7-9

Measures	Mean Rank	Supporting Examples/Comments
The simulation runs smoothly (i.e. students log on without trouble).	8.1	• *Took students awhile to get settled and logged on.* • *Simulation went like clockwork. They loved it.*

Measures	Mean Rank	Supporting Examples/Comments
Students move through simulation steps smoothly.	9.1	• *They were in their zone playing the game and asked very few questions.* • *Moved very smoothly until Budget Worksheet—once volunteers explained everything it started going well again.*
Session ends smoothly.	7.3	• *Since we had extra time all the students completed the lesson and got all the way through the stocks and hidden stars round. Definitely would not have finished with only 45 minutes.* • *3-4 students did not complete budget guidelines before end of class period.*
Students are receptive of the technology (i.e. computer simulation format.	9.8	• *Students are used to using a computer.* • *Absolutely.*
The simulation is effective in facilitating learning.	8.7	• *Yes the students understand what they are doing.* • *There was definitely a need for a volunteer/teacher to help the students figure out the NMI and Budget Worksheet.* • *This is great especially for students whose learning style lends itself to online learning.*
The simulation is interactive for participating students.	9.3	• *Many students commented on how they wanted to mute Casey and just read the descriptions.* • *There were typical student complaints about a lot of math, but students were otherwise engaged.*
Leaders are able to troubleshoot technology problems.	9.6	• *We were not able to correct the issue with the student who had profile 156. The only thing we could do to fix this problem was create a new account for her.* • *The teacher was very familiar with and knowledgeable about technology and effectively problem solved the issues that arose.*
Students work together effectively (i.e. positive group work interactions).	9.6	• *Most of the time they worked independently but they were all positive in playing the game.* • *Students were helping each other which was neat to see.* • *There wasn't a lot of team or group work opportunities during the session. Most students worked individually or talked to the student next to them.*

Student Learning and Engagement

According to JA staff members, students were highly engaged in the simulation session. In addition, JA staff members reported that the rapport between students and volunteers was high. The quality of the interactions, however, was an issue that JA staff members raised. One staff member noted, *"They really don't have time to share much about themselves with the students or relate what they do at their company with the program since the students are listening to the game and focused on calculations."* While engagement levels were high, the level of success experienced by students in completing the activities and grasping the program concepts varied (**Table 18**).

Table 18
Student Behavior Measures
N=9

Measures	Mean Rank	Representative Examples/Comments
Overall, the students are engaged in the simulation session.	9.6	• *The students really enjoyed the game and were excited to move on to each activity.*
Students are able to successfully complete the activities required during the simulation.	5.8	• *Most students were ready to move on to session 2.* • *None of the students completed the Budget Worksheet.* • *All of the students completed session 1 since there were so many volunteers present to work with the students on-on-one.*
The students seem to grasp the skills and ideas presented.	7.7	• *Most of the students grasped the concept but there are too many calculations to make in 45 minutes.* • *Most of the students grasped the concept but there were a couple who did not. There was a disparity in abilities.*

Session 2

JA staff members reported on observations for three session 2 classrooms. These classrooms represented three different JA sites including Princeton, NJ; Forth Worth, TX, and St Louis, MO. Observations spanned grades 7-12 including one Grade 7 class, one Grade 8 class, and one Grade 9-12 class. Two classes had class sizes of 24 students, and one class had 25 students. One of the three classes was assisted by volunteers. This class had four volunteers who participated in the classroom five times over the course of the program.

Simulation Overview

The session 2 observations conducted indicate session 2 classrooms that were organized and facilitated smoothly. One staff member noted that the teacher gave great instructions and that the classroom logistics and implementation went well. Another staff member noted that the classroom was well organized with computers for everyone and that the log in went smoothly since the teachers had had students practice this aspect the day before. In addition, staff members pointed out that students are savvy with technology, a fact that made the activities of the day go smoothly.

For the one class with a volunteer, the staff member noted that there was little communication between the volunteers and students and expressed the opinion that *"There is not really a need for a volunteer in this session since the students are listening to all the store owners."* Any difficulties that occurred during the session were primarily due to technical difficulties. Specifically, one staff member noted that the audio was slow to load, a factor that caused the entire session to run behind schedule. Another staff member reported that a few students had difficulty loading the program because of a problem with loading the images.

Table 19 below and on the following page presents the ratings and supporting comments for the simulation overall. The ratings and comments below substantiate the observation feedback included above. As depicted in **Table 19** the simulation ran smoothly overall. Students were receptive of the technology and engaged by the

program. The success of pacing the program, however, seemed to be the factor that varied the most across classrooms.

The feedback in **Table 19** below similarly indicates that overall the simulation ran smoothly and successfully. According to the feedback below the pacing of the session was appropriate with most students completing the session. The exception was in the class where there were problems with the audio loading. As noted above, the below ratings and comments also indicate that overall students understood the concepts and were comfortable with the technology.

Table 19
Simulation Program Measures
N=3

Measures	Mean Rank	Supporting Examples/Comments
The simulation runs smoothly (i.e. students log on without trouble).	9.0	• *The students went right into the session and kept working.* • *It took students awhile to get settled and logged on.*
Students move through simulation steps smoothly.	6.3	• *Students just had a few questions with the water and sewer option sheet.* • *An audio delay prevented students from advancing through the stress in a timely manner.*
Session ends smoothly.	6.0	• *Yes, the kids were close to starting session 3.* • *Not all students completed the session due to audio issues.*
Students are receptive of the technology (i.e. computer simulation format.	8.7	• *Students understand technology to a T.* • *Students enjoyed the game but got bored with the Big Search in this session.*
The simulation is effective in facilitating learning.	7.7	• *Yes the students get and understand what they are doing. They understand what grown-ups do on a daily basis.* • *Students wanted to go through the stores faster and kinda zoned out listening to the audio when it finally came up.* • *Taking time to read and process what was read was a challenge.*
The simulation is interactive for participating students.	8.0	• *There were typical student complaints about a lot of math, but students were otherwise engaged.*
Leaders are able to troubleshoot technology problems.	8.5	• *The volunteers just told the students to sit and wait patiently for the audio to load. It took over three minutes for many of the stores' audio to load.* • *The teacher was very familiar with and knowledgeable about technology and effectively problem solved issues that arose.*
Students work together effectively (i.e. positive group work interactions).	7.0	• *Most of the time they worked independently, but they were all positive in playing the game.* • *Not a lot of group work for this session.*

Student Learning and Engagement

As depicted by **Table 20** below and on the following page students were engaged by the simulation and, more importantly, appeared to grasp the concepts. The challenges

students did experience were technical. In addition, one staff member noted that the audio for the store owners did not engage students and suggested making *"the audio optional or [getting] rid of it altogether"* since *"some students read the information faster than the audio."*

Table 20
Student Behavior Measures
N=3

Measures	Mean Rank	Representative Examples/Comments
Overall, the students are engaged in the simulation session.	8.7	• *The students were getting bored listening to all the store owners.* • *The majority of students were focused on their tasks and re-engaged with the simulation automatically after lunch without prompt.*
Students are able to successfully complete the activities required during the simulation.	8.0	• *The students would have completed had the audio not taken so long to load.* • *The group moved through all the components quickly, many completing the budget guidelines in about 20 minutes.*
The students seem to grasp the skills and ideas presented.	8.7	• *The kids were really into the game and asked very few questions.* • *They remembered doing similar exercises in class—students made the connection.*

Session 3

JA staff members reported on observations for eight session 3 classrooms. These classrooms represented three different JA sites including San Diego, CA; Fort Worth, TX, and St Louis, MO. Observations spanned grades 7-12 including one Grade 7 class, one Grade 7/8 class, five Grade 8 classes, and one Grade 9-12. Class sizes ranged from 12-23 with the average class size at 19 students. The classes had a high level of volunteer participation with seven of the eight classes having a volunteer to help facilitate the lessons. Of these classes five of the volunteers had participated in the classroom five times and one volunteer had participated three times.

Simulation Overview

Much of the feedback from JA staff members for session 3 focused on the high level of math content in the session and the role of the volunteer. While staff members felt that volunteers had the potential to be valuable, with the current format of *JA FPV*, staff members were of the opinion that the volunteers' value was not being maximized. In one representative comment a staff member noted that *"The students didn't really seem to have a connection to the volunteer. This was, in my opinion, due strictly to the nature of the program set-up. The volunteer is consumed with helping with math issues and never has time to help students draw correlations to the 'real' world."*

Several staff members noted that the quantity of calculations required during the session limited meaningful interactions and learning from occurring during the session. For example, one staff member wrote, *"Is there any way to have the subtotals for the Option Sheets auto calculate for the students? Having them go back and scroll through*

and add up all the subtotals really takes a lot of time. I understand they need to do math, but I think this program should be more about learning the concepts of budgeting and personal financial management rather than calculator skills." In addition, the volume of calculations required necessitated that the volunteers are *"consumed with helping with math issues"* as opposed to leaving room for the volunteer *"to relate any of the topics in the lesson to the real-world or share work and personal experiences with the students."*

Reflective of several comments, one staff member recommended that the volunteer teach the curriculum lessons instead of helping with the simulation in order to provide more opportunity for meaningful interactions with the students. In addition, staff members pointed out that the nature of the simulation where students work independently on a computer was not conducive to meaningful interactions with the volunteer. Finally, one staff member voiced concerns about the rules for budgeting in the simulation, noting, *"I wonder why some of the secondary expenses have required minimums. For example, entertainment and dining out should be set to a minimum of zero. This especially comes into play when students have to reduce expenses. Instead of taking money out of savings they should be able to take money out of secondary expenses."* The staff member also voiced the opinion that students should not have to reach a balance of zero in their bank account.

As depicted in **Table 21** below and on the following page, students were comfortable with the program's technology and generally able to navigate the simulation smoothly. The main challenge of the session was in having students complete the session. In addition, staff members noted that while the session seemed to be effective for facilitating student learning, this was hard to discern since there was no discussion or debriefing incorporated into the session.

Table 21
Simulation Program Measures
N=4-8

Measures	Mean Rank	Supporting Examples/Comments
The simulation runs smoothly (i.e. students log on without trouble).	8.8	• *There were no major challenges when I was there.* • *There were several problems with logging on and lessons not being saved.*
Student move through simulation steps smoothly.	7.8	• *Students seemed to understand the instructions on the screen though there was sometimes confusion about what the next steps were in the sessions.* • *They understand the flow and are able to operate the simulation on their own.*
Session ends smoothly.	5.4	• *None completed the session.* • *Most students took part in survey and had time to search for stars. Some students did not complete due to difficulty in logging on.* • *They were flustered because they were unable to finish. They felt rushed.*
Students are receptive of the technology (i.e. computer simulation format.	9.5	• *The kids are so used to using computers that using the program didn't pose any challenges.*

Measures	Mean Rank	Supporting Examples/Comments
The simulation is effective in facilitating learning.	7.3	• *The simulation compliments the topics that are presented in the curriculum.* • *Teacher commented that discussion taking place in classes in between the simulations shows they are understanding.* • *Since no debrief is held, hard to tell whether the students see this as a game or can relate it to the real world.*
The simulation is interactive for participating students.	7.8	• *The simulation is interactive for the students with the computer, not so much with the volunteer.* • *If you mean interactive as in with other students—no. If you mean interactive as in the students are focused on the simulation—yes.*
Leaders are able to troubleshoot technology problems.	7.8	• *There weren't any technology problems, and the leaders were able to answer the minor questions that came up.* • *We were able to fix some problems, but there were some students that were forced to redo an entire lesson because it was not saved.*
Students work together effectively (i.e. positive group work interactions).	7.8	• *The kids worked together well, and when one student finished she was able to help the others when they had questions.* • *There really aren't opportunities for group interaction. Some students discuss their situations with the students next to them, but that's the extent that they communicate with one another during the session.*

Student Learning and Engagement

In feedback consistent with the simulation overview presented above, the findings in **Table 22** below indicate that students were engaged by the simulation. However, the extent to which students grasped the skills and ideas presented was unclear, according to staff feedback, since there was no discussion built into the lessons. In addition, students had difficulty successfully completing all of the activities required by the session.

Table 22
Student Behavior Measures
N=8

Measures	Mean Rank	Representative Examples/Comments
Overall, the students are engaged in the simulation session.	8.6	• *The students really enjoyed the game and were excited to move on to each activity.* • *No wandering around the classroom; quiet, appropriate conversation with their neighbors, regular requests for help specific to the task at hand.*
Students are able to successfully complete the activities required during the simulation.	3.9	• *None of the students were able to complete the Option Sheet activity in session 3.* • *There are too many calculations for the students and too many sections within each lesson.*
The students seem to grasp the	6.6	• *Many students seemed to make the connection.*

skills and ideas presented.		• *I believe the students were learning, but they were more concerned that they did not finish the lesson. They focused on quantity over quality.* • *It is hard to tell if they are getting the concepts of budgeting and financial responsibility since there is no opportunity for wrap-up and summary at the end of each session as we do with other JA programs. The teacher did say that students have made comments or asked questions at other times in her class about budgeting and they seem to be understanding how important this is.*

Session 4

JA staff members reported on observation for three session 4 classrooms. These classrooms represented two different JA sites including Fort Worth, TX, and Houston, TX. Observations included two Grade 7 classes and one Grade 12 class. Class sizes ranged from 18-25 with the average class size at 23 students. The classes had a high level of volunteer participation with all three classes having a volunteer to help facilitate the lessons. Of these classes five of the volunteers had participated in the classroom five times and one volunteer had participated four times.

Simulation Overview

As evidenced by **Table 23** below and on the following page, JA staff member open-ended responses, the simulation session ran smoothly. Students were receptive of the technology and moved through the simulation steps without difficulties. In at least one instance, however, the game crashed and facilitators were not able to get it up and running again. As with the feedback from session 3, most of the feedback focused on the role of the volunteer.

Overall, the feedback indicated JA staff felt that a volunteer was not necessary for this session with one staff member noting, *"The students appreciate the volunteers' help but there was little interaction since the students were able to play this session mostly on their own without assistance. The volunteers would walk around and make comments to the students, but there were no real 'teaching moment' opportunities for the volunteers."* In addition, staff comments pointed to the lack of opportunity for student group interaction during this session (**Table 23**).

Table 23
Simulation Program Measures
N=2-3

Measures	Mean Rank	Supporting Examples/Comments
The simulation runs smoothly (i.e. students log on without trouble).	9.7	• *No comments available.*
Student move through simulation steps smoothly.	10	• *No comments available.*
Session ends smoothly.	9.7	• *Yes with the exception of the game crashing at the end.*

Measures	Mean Rank	Supporting Examples/Comments
Students are receptive of the technology (i.e. computer simulation format.	10	• *No comments available.*
The simulation is effective in facilitating learning.	8.3	• *No comments available.*
The simulation is interactive for participating students.	10	• *No comments available.*
Leaders are able to troubleshoot technology problems.	7.5	• *We were not able to get the game back up and running.*
Students work together effectively (i.e. positive group work interactions).	5.3	• *Not a lot of group work for this session although the students did discuss the game and helped each other out if they were at neighboring computers.* • *The students all worked individually—no group work.*

Student Learning and Engagement

As depicted in **Table 24** below students were engaged in the session, able to successfully complete the activities, and seemed to grasp the skills and ideas presented. The ratings for each of the three student measures were high indicating that the session was successful for students overall.

Table 24
Student Behavior Measures
N=3

Measures	Mean Rank	Representative Examples/Comments
Overall, the students are engaged in the simulation session.	10	• *They really like signing the checks and swiping the credit cards.*
Students are able to successfully complete the activities required during the simulation.	9.7	• *No comments available.*
The students seem to grasp the skills and ideas presented.	10	• *No comments available.*

Summary & Recommendations

Summary

Ongoing and final reporting of data collected from student and adults stakeholders strongly indicate that the pilot implementation of *JA Finance Park Virtual* across 14 JA Member Offices was largely successful. According to teachers, volunteers, JA staff and students themselves, students enjoyed the overall experience, were engaged throughout the sessions and learned both specific program content and more globally relevant lessons for adulthood.

Specifically, students' reactions show that core program objectives were successfully communicated through the simulations sessions. For example, almost nine out of 10

students agreed that the sessions taught them valuable lessons for their financial and work future. The majority of adult stakeholders echoed these sentiments and felt that the sessions taught students skills and exposed them to concepts that are important for their future.

In terms of the simulation itself, students were impressed by the design, color and graphics of the settings, calling the simulation experience realistic and fun. Students cited the interactive and hands-on nature of the simulation, as well as the fact that they were able to work on a computer, as leading reasons for why they liked the simulation overall. They also liked that they could make their own choices in the simulation, especially in terms of their representational avatar. In fact, many students sought even greater choice selection in terms of avatar customization, life choice options, and in making purchases to satisfy budgeting requirements.

Overall, adult stakeholders praised *FPV* as an engaging, interactive and fun learning experience that allowed students to learn about the real world in tangible and unexpected ways. They attributed the appeal of the simulation to various elements. For example, teachers, volunteers and JA staff noted that the design feature that forced students to re-engage an idea until they succeeded and a leader board that encouraged friendly competition were successful instructional strategies employed by the simulation developers.

JA FPV, as with many JA programs, utilized volunteers to enhance classroom dynamics and instruction by providing a real-world role model from the local business community. In their feedback, the majority of students indicated that the volunteer was helpful and that his/her presence during the simulation session(s) enhanced their experience overall. Adult stakeholders recommended that a volunteer assist in at least two simulation sessions if not all four. They noted that a volunteer served as an additional resource to assist and engage students, helped the teacher in facilitating the session, brought another perspective into the classroom and, perhaps most importantly, acted as a real-life role model to whom students could look up.

While the pilot implementation of *FPV* produced significant highlights across participating locations, our evaluation generated valuable feedback from participants as to how the program can be improved to better suit the expectations and abilities of students, as well as the needs of teachers and volunteers.

When asked what one thing they would change about the simulation given the opportunity, most student responses fell into three main categories. They wanted more options to personalize and make individualized choices during the sessions; they wanted greater functionality to enhance the interactivity of sessions; and they requested shorter sessions with less math and calculations. In terms of consistent challenges, students, as well as adult stakeholders, most often cited technical and/or computer problems which caused the simulation to stall or freeze completely. These technical interruptions negatively impacted how well students navigated through the sessions, as well as the teacher and/or volunteer's ability to complete the sessions on time.

Students were split in how helpful they found Casey the Park Guide. Some students, perhaps those more adept in independent reading, did not find her to be as helpful as other students who benefitted from her guidance throughout the sessions. On the other hand, students demonstrated greater consensus in their general disapproval of Casey's voice, commenting most frequently that it was "too loud" and "annoying."

Many students indicated that they generally did not like math, that they found the math to be too difficult, or that they did not like the volume of calculations required in some sessions. While math is clearly integral to the *Finance Park* curriculum and cannot be completely eliminated, adult stakeholders also found the level and/or volume of the math to be challenging. From the adults' perspective, students struggled with converting decimals to percentages, calculating individual budget categories, balancing their overall budget, and rounding numbers to the nearest whole dollar. Volunteers and teachers cited the volume of math, as well as the difficulty of the calculations in session 3, in particular, as the main reason they could not finish the session.

Furthermore, adult stakeholders suggested that volunteer involvement would be most helpful during sessions 1 and 3. The difficulty and volume of math content, as well as pacing, were noted to be major obstacles in the implementation of these sessions. In fact, staff intimated that students were unduly challenged by the volume of math in session 3 and the amount of calculations in session 1. In their classroom observations, some JA staff noted that the volunteer's value was not maximized due to the high level of math content. That is, the review of basic mathematical steps limited meaningful interactions and learning between volunteers and students.

While the content and structure of sessions 1 and 3 gave cause for volunteer involvement, adult stakeholders suggested that volunteers are not necessarily needed during sessions 2 and 4. Volunteers, for example, reported that these sessions were more evenly paced and incorporated a significant amount of reading and listening on the part of students. JA staff echoed these opinions in their classroom observations of session 4, in particular.

Pacing in general was a major obstacle in successful implementation, as most frequently cited by JA volunteers and JA staff members in their observation notes. While most students rated the pacing of simulation sessions overall as "just right," adult stakeholders highlighted the difficulty they experienced in staying on track during the sessions, especially during session 1 and 3.

Recommendations

The following section outlines recommendations as culled from evaluation participants' feedback, collected on an ongoing and post-program basis, as well as ETI's independent recommendations as observed throughout the evaluation process.

- Identify the **technical/computer problems** most frequently cited during the pilot and institute a protocol for troubleshooting these problems as they arise in the classroom.
- **Alter the voice and look of Casey the Park Guide** to make her more appealing to the age groups targeted by *FPV*.
- Make **specific aspects of the simulation** (e.g. the Life Situation scenarios) **more realistic and applicable** to the various locales and demographic (i.e. ethnic and socioeconomic) groups targeted throughout the country. Also, consider eliminating the requirement that students' budget equal a zero balance or create a line item for savings.
- Allow **greater flexibility in individualizing implementation of sessions** in the classroom (e.g. add a pause button and allow teachers to return to previous sessions for debriefing and review). Also, ensure that students are able to "save" their work, especially in instances where students are working from home or progressing faster than their classmates.
- **Reduce the volume of math and mathematical calculations** in sessions 1 and 3. Where this is not feasible, include reference guides or "cheat sheets" for teachers and students for the most frequently cited challenges (e.g. rounding numbers, converting decimals to percentages, etc.).
- **Combine elements of the sessions** overall to sustain evenly paced sessions that focus on the teaching of concepts rather than the completion of discrete tasks. Alternatively, for session 3, in particular, break it into two sessions so that tasks can be completed without undermining learning.
- To **maximize the role of the volunteer and to take full advantage of what a volunteer can offer**, consider providing time before or during simulation sessions for volunteers to share their background and knowledge. Instead of acting as math tutors, volunteers should engage in meaningful interactions with students, as is the hallmark of all JA programs.

Appendices

Appendix A: Student Pre-Simulation Test

JA Finance Park Virtual™
Student Pre-Simulation Test of In-Class Curriculum

Student Information

1. What are the first **two letters** of your **first** name? | | |

2. What are the first **two letters** of your **last** name? | | |

3. When were you born?

Month			**Day**			**Year**			

4. What is your gender? *(please check only one)***:** ❑ Female ❑ Male

5. What grade are you in? ***(Please check only one.)***
❑ 6th ❑ 7th ❑ 8th ❑ 9th ❑ 10th ❑ 11th ❑ 12th ❑ Other_____

6. What is your ethnic background? ***(Please check all that apply.)***
❑ White/Caucasian ❑ Hispanic/Latino ❑ Black/African American
❑ Asian ❑ Pacific Islander ❑ American Indian/Alaskan Native
❑ Other ***(please specify)***: _____

7. What is the name of the teacher in whose class you received the *JA Finance Park* lessons?

First Name: _____ Last Name: _____

8. What is the name of your school? _____

9. NOT including this program, how many times have you participated in Junior Achievement?

❑ This is my first time ❑ One time ❑ 2 times
❑ 3 times ❑ 4 or more times

Understanding and Comprehension of Program Content

The following questions ask about various topics and terms related to the content you learned in the *JA Finance Park* program. Please do your best and answer each question. Choose the *best* answer for each question.

10. An example of a financial institution is _____
a. a department store.
b. a bank.
c. a school.
d. an ATM machine.

11. When you use a debit card, you _____
a. buy now, pay later.
b. buy now, pay now.
c. buy now, pay never.
d. buy now, pay forever.

12. Which of the following are **true** statements about debit cards?
a. Businesses are more likely to accept a debit card than a check
b. It is important to track debit card purchases from your account
c. Use of a debit card takes money directly from a person's bank account
d. All of the above are true
e. None of the above are true

13. Which of the following is the **best** definition of credit?
a. The amount of financial trust extended to a person or business by a lender
b. The amount of money you have in a checking account
c. The amount of interest you receive from a savings account
d. None of the above

14. A disadvantage of credit is that_____
a. it allows you to track expenditure s.
b. it encourages impulse spending.
c. it allows you to establish credit.
d. it allows you to buy now and pay later.

Review the table below and then answer Question 15.

Interest Rate: 17% Minimum Payment: 2.5% of outstanding balance or $10/month			
Balance	**Time to Pay Off**	**Interest Charged**	**Total Paid**
$1,000	12 years	$1,349.97	$2,349.97
$2,500	19 years	$5,915.53	$8,415.53
$5,000	24 years	$15,761.21	$20, 761.21

15. What does the table above demonstrate about using a credit card?

a. That it is more difficult to get out of debt than it is to get in debt
b. That interest payments can work against you in the long-term
c. That it is possible to pay more in interest than the cost of the original balance
d. All of the above are demonstrated by the table

16. A record of spending or of probable expenditures and income for a given period of time is called_____

a. interest.
b. credit.
c. investments.
d. a budget.

17. Three variables that affect saving money are_____

a. amount, interest and credit.
b. amount, interest, and time.
c. amount, stocks, and time.
d. interest, stocks, and time.

18. If you are saving a small amount of money regularly, which of the following is the best policy to follow to save as much as possible?

a. Shop for the highest interest rate
b. Save for a longer period of time
c. Find a way to reduce expenses to save a larger amount
d. All of the above

19. Stocks, bonds and mutual funds are all examples of_____

a. fixed expenses.
b. credit.
c. investments.
d. opportunity costs.

Market Report: Use the market report below to answer questions 20 and 21.

HIGH	LOW	STOCK	SALES (100'S)	CLOSE	NET
51	34	AAPL	1589	50	3
36	14	DIS	689	15	-2
88	44	RJF	123568	78	1
67	38	HD	86245	43	NC

20. Which stock had the highest closing price?

a. AAPL
b. DIS
c. RJF
d. HD

21. Which stock had the largest increase in value from the previous day?

a. AAPL
b. DIS
c. RJF
d. HD

22. What are the three main types of taxes?

a. Income tax, sales tax, and property tax
b. Unemployment tax, sales tax, and property tax
c. Federal income tax, unemployment tax, and state income tax
d. Sales tax, property tax, and unemployment tax

23. The purpose of taxes is_____

a. to improve roads.
b. to support government.
c. to pay retirement benefits.
d. all of the above.

24. In the space provided, please write the letter of the definition that **best** corresponds to the terms on the left (*use each letter only once*).

____	Tax
____	Secondary Expenses
____	Rate of Return
____	Net Monthly Income

A. A social insurance program that extends health coverage to almost all Americans age 65 and over.
B. Expenses for lower-priority goods and services.
C. An investment's percentage change, factoring in dividends, capital gains, and reinvestment of distributions.
D. Amount of income remaining to spend in a month, after all deductions have been made.

____	Medicare	**E.** A required payment to the government.

Read the profile below and then answer Questions 25-29.

Asa is a single man who lives by himself and is a regional manager for a chain of computer hardware stores. He earns an annual salary of $60,000. However, he pays $1,060 a month for *federal incomes taxes*, $485 a month for *Social Security*, and $210 a month for *Medicare*.

Asa also has several monthly *fixed expenses*. He drives a 2008 vehicle and his payment is $366 per month. He also pays $120 per month for car insurance. Asa currently rents an apartment for $995 per month. His health insurance is $85 per month, and he puts $300 a month into his savings account.

Asa also has several regular *variables expenses*. One of these is his food bill, which normally runs about $259 a month. He also spends about $145 a month on gasoline for his car. Approximately $260 per month is spent on entertainment.

Asa is currently considering the purchase of a new camera and a new refrigerator for his apartment. Eventually, he hopes to save enough money to take a month-long tour of Europe.

Asa decides to buy the camera now, and save up for the refrigerator. He spends $220 on the camera. He knows the refrigerator he wants will cost $1,000. He decides to buy the refrigerator in six months.

25. What is Asa's gross annual income?

a. $56,015
b. $60,000
c. $23,500
d. $58,245

26. What is Asa's net monthly income?

a. $3, 345
b. $3,245
c. $3,550
d. $3,445

27. How much in taxes is taken from Asa's monthly pay?

a. $1,755
b. $1,840
c. $1,060
d. $1,545

28. After Asa has paid his fixed expenses, how much money does he have left over for monthly variable and other expenses?

a. $725
b. $925
c. $1,479
d. $1,379

29. How much does Asa need to save each month to buy the refrigerator he wants in six months?

a. $167.66
b. $166.76
c. $166.77
d. $177.66

30. Setting short- and long-term goals, figuring your monthly incomes, categorizing spending, and projecting how much you will spend in each category are all steps in creating a successful _____

a. budget.
b. stock report.
c. savings account.
d. mutual fund.

31. In what area of a typical family budget do people spend most of their money?

a. Housing
b. Food
c. Transportation
d. Entertainment

32. Opportunity cost is best defined as which of the following?

a. The cost associated with investing in a new business opportunity
b. The amount of money you have per month to spend on entertainment
c. The cost of basic necessities in your budget
d. The next best alternative given up when making a choice

33. What is Social Security?

a. A private insurance system used only by select groups of people.
b. A social insurance system to support current workers.
c. The amount of money someone has secured.
d. A social insurance system to support retired workers.

Thank You!

Appendix B: Student Post-Program Survey

JA Finance Park Virtual™
Student Post-Program Survey

Student Information

1. What are the first **two letters** of your **first** name? | | |

2. What are the first **two letters** of your **last** name? | | |

3. When were you born? | | | | | | | | | | |

Month **Day** **Year**

4. What is your gender? *(please check only one)***:** ❑ Female ❑ Male

5. What grade are you in? ***(Please check only one.)***
❑ 6th ❑ 7th ❑ 8th ❑ 9th ❑ 10th ❑ 11th ❑ 12th ❑ Other_____

6. What is your ethnic background? ***(Please check all that apply.)***
❑ White/Caucasian ❑ Hispanic/Latino ❑ Black/African American
❑ Asian ❑ Pacific Islander ❑ American Indian/Alaskan Native
❑ Other ***(please specify)***: _____

7. What is the name of the teacher in whose class you received the *JA Finance Park* lessons?

First Name: _____ Last Name: _____

8. What is the name of your school? _____

9. **NOT** including this program, how many times have you participated in Junior Achievement?
❑ This is my first time ❑ One time ❑ 2 times
❑ 3 times ❑ 4 or more times

We are interested in learning about your experience with *JA Finance Park- Virtual*! The questions below ask about your experience during the classroom lessons, the virtual simulation sessions, and your overall experience.

We appreciate your honest answers. Thank you!

JA Finance Park Classroom Lessons

Rate your level of agreement with the following statements:

	Strongly Disagree	Disagree	Agree	Strongly Agree
10. I enjoyed the classroom lessons.	❑	❑	❑	❑
11. I learned a lot of valuable information during the classroom lessons.	❑	❑	❑	❑
12. The classroom lessons helped to prepare me for the simulation sessions.	❑	❑	❑	❑
13. The classroom lessons made me excited to complete the simulation sessions.	❑	❑	❑	❑

14. If you have any comments or feedback about the classroom lessons, please tell us here:

_____
_____
_____
_____

Virtual Simulation Sessions

Many Junior Achievement programs include volunteers from the business community who help deliver the curriculum and share their experiences with students.

15. Did a JA volunteer help to teach any of your simulation sessions?

❑ **NO *(if checked, skip to Question 18)***
❑ **YES**

Rate your level of agreement with the following statements about the JA volunteer:

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A: I did not interact with the volunteer
16. The volunteer was helpful during the simulation sessions.	❑	❑	❑	❑	❑
17. Having a volunteer during the simulation sessions made the experience better overall.	❑	❑	❑	❑	❑

Rate your level of agreement with the following statements about the simulation sessions:

	Strongly Disagree	Disagree	Agree	Strongly Agree
18. What I learned during the simulation sessions built on what I learned during the classroom lessons.	❑	❑	❑	❑
19. The simulation sessions taught me valuable lessons for my financial future.	❑	❑	❑	❑
20. The simulation sessions taught me valuable lessons for my work future.	❑	❑	❑	❑
21. As a result of participating in the simulation sessions, I understand that what I do as part of my community makes a difference.	❑	❑	❑	❑
22. The simulation part of the program was fun.	❑	❑	❑	❑
23. I liked using a computer during the simulation sessions.	❑	❑	❑	❑

Rate the following aspects of the four simulation sessions overall:

	Poor	Fair	Good	Excellent
24. Ease of navigation- moving from one setting or activity to the next.	❑	❑	❑	❑
25. The design of the settings.	❑	❑	❑	❑
26. The color of the settings.	❑	❑	❑	❑
27. The graphics of the settings.	❑	❑	❑	❑
28. Interacting with Casey the Park Guide	❑	❑	❑	❑

29. Please describe something you especially liked or especially didn't like about the look or user-friendliness of the simulation.

_____

_____

_____

_____

30. Please rate your level of satisfaction with the tasks you were asked to complete in the four simulation sessions overall:

❑ Very satisfied
❑ Somewhat satisfied
❑ A little satisfied
❑ Not at all satisfied

We would like to understand how you felt about the different parts of the simulation sessions. For each statement on the left, tell us if this was a reason you liked the simulation, a reason you didn't, or if it had no effect on your experience.

	Why I liked the simulations	Why I didn't like the simulations	Had no effect
31. The sessions taught me the same concepts from the classroom lessons in a different way.	❑	❑	❑
32. The simulation sessions were interactive and hands-on.	❑	❑	❑
33. I was able to work independently during the sessions.	❑	❑	❑
34. I was able to use a computer during the sessions.	❑	❑	❑
35. I was able to create my own avatar in the simulation program.	❑	❑	❑
36. A teacher and/or JA volunteer was available to help me during the simulation sessions.	❑	❑	❑

Overall Experience

37. What did you think about the pace of each simulation session? *(please check only one)*

❑ Rushed
❑ Just right
❑ Slow

38. What did you think about the information you learned during the simulations sessions overall? *(please check only one)*

❑ Too easy
❑ Just right
❑ Too hard

39. On a scale from 1 to 10, with 1 being *totally unsatisfied* and 10 being *completely satisfied*, how satisfied were you with the virtual experience **overall**?

_____

40. Would you recommend the *JA Finance Park* program to a friend?

❑ Yes
❑ No

40a. If **yes**, how much would your recommendation be based on the simulation sessions?

- ❑ Completely
- ❑ Somewhat
- ❑ Not at all

40b. If **no**, why not?

_____
_____
_____
_____

41. What did you like **most** about the simulation experience overall?

_____
_____
_____
_____

42. What did you like **least** about the simulation experience overall?

_____
_____
_____
_____

43. Tell us about one thing you **learned** during the simulation sessions that you thought was important.

_____
_____
_____
_____

44. If there is one thing you could change about the simulation experience overall, what would it be?

_____
_____
_____
_____

Thank you!

Appendix C: Teacher Post-Program Survey

JA Finance Park Virtual™
Teacher Post-Program Survey

Teacher Information

1. What are the first **two letters** of your **first** name? | | |

2. What are the first **two letters** of your **last** name? | | |

3. Please select your JA Member Office from this list:

- Atlanta, GA
- Baltimore, MD
- Beaumont, TX
- Denver, CO
- Fort Worth, TX
- Houston, TX
- Lafayette, LA
- Lake Charles, TX
- Minneapolis, MN
- New Jersey
- Richmond, VA
- Saint Louis, MO
- San Diego, CA
- South Dakota
- Washington, D.C.

4. What is your gender? *(please check only one)***:** ❑ Female ❑ Male

5. How many years have you been a teacher? _____

6. How many years have you been a teacher at your current school? _____

7. What grade level participated in the simulation sessions?
❑ 6th ❑ 7th ❑ 8th ❑ 9th ❑ 10th ❑ 11th ❑ 12th ❑ Other_____

Based on your observation of and interaction with students throughout the simulation sessions, please rate your level of agreement with the following statements:

My students….	Strongly Disagree	Disagree	Agree	Strongly Agree	I was not able to gauge this during the sessions
8. enjoyed the simulation sessions.	❑	❑	❑	❑	❑
9. were engaged during the simulation sessions.	❑	❑	❑	❑	❑
10. were appropriately challenged during the simulation sessions.	❑	❑	❑	❑	❑

Based on your observation of and interaction with students, as well as your review of the simulation sessions, please rate your level of agreement with the following statements:

The simulation sessions…	Strongly Disagree	Disagree	Agree	Strongly Agree	I was not able to gauge this during the sessions
11. were easy to navigate.	❑	❑	❑	❑	❑
12. accommodated for a range of students' abilities in terms of using a computer-based program.	❑	❑	❑	❑	❑
13. provided clear instructions.	❑	❑	❑	❑	❑
14. successfully built upon the classroom lessons.	❑	❑	❑	❑	❑
15. successfully conveyed program concepts.	❑	❑	❑	❑	❑
16. were relevant to overall program objectives.	❑	❑	❑	❑	❑
17. exposed students to concepts important for their finance and work futures.	❑	❑	❑	❑	❑
18. taught students skills important to their finance and work futures.	❑	❑	❑	❑	❑

19. *The simulation sessions employed several instructional strategies designed to enhance students' overall experience and maintain student engagement.*

Please rate the overall success of these instructional strategies by rating them below:

- Session 1 **only**: "Designed Failure" where students are encouraged to spend impulsively so as to provide initial motivation for the rest of the course.

  ❑ Very successful
  ❑ Somewhat successful
  ❑ A little successful
  ❑ Not at all successful

- Students develop a personal investment by creating a representational avatar and use it throughout the sessions.

  ❑ Very successful
  ❑ Somewhat successful
  ❑ A little successful
  ❑ Not at all successful

- Students are challenged throughout the game experience and forced to re-engage an idea until they succeed.

  ❑ Very successful
  ❑ Somewhat successful
  ❑ A little successful
  ❑ Not at all successful

- Students use of social media elements (leave messages for one another and view other avatars) makes the experience dynamic and fun.

  ❑ Very successful
  ❑ Somewhat successful
  ❑ A little successful
  ❑ Not at all successful

- A leader board is displayed and an award system is used to create a fun level of competition and recognition.

  ❑ Very successful
  ❑ Somewhat successful
  ❑ A little successful
  ❑ Not at all successful

20. *Please answer the following questions about specific features of the simulation sessions:*

a. Does the built-in calculator students used to complete math problems need a percentage (%) button? Why or why not?

_____
_____
_____
_____

- Would students benefit from the inclusion of a glossary, dictionary or other reference tool? Which tool? Why or why not?

_____
_____
_____
_____

- Are there any pieces from the in-class curriculum that should be made available for students for reference during the sessions? Which pieces? Why or why not?

_____
_____
_____
_____

21. What did you think about the pace of this simulation sessions overall? *(please check only one)*

- ❑ Rushed
- ❑ Just right
- ❑ Slow

22. What did you think about the information students learned during the simulation sessions overall? *(please check only one)*

- ❑ Too easy
- ❑ Just right
- ❑ Too hard

Many Junior Achievement programs include volunteers from the business community who help deliver the curriculum and share their experiences with students.

23. Did a JA volunteer help to facilitate any of your simulation sessions?

- ❑ **NO** ***(if checked, skip to Question 30)***
- ❑ **YES**

Rate your level of agreement with the following statements about the JA volunteer overall:

	Strongly Disagree	Disagree	Agree	Strongly Agree
24. The volunteer was helpful during the simulation sessions.	❑	❑	❑	❑
25. Having a volunteer during the simulation sessions enhanced students' overall experience.	❑	❑	❑	❑

26. Regardless of whether or not your classroom had a JA volunteer, how many simulation sessions should a JA volunteer help to facilitate?

- ❑ All four simulation sessions.
- ❑ 2-3 simulation sessions.
- ❑ One simulation session.
- ❑ None.

25a. Please explain your answer to Question 25 in the space provided:

_____
_____
_____
_____

27. Briefly describe any challenges experienced by students during the sessions overall *(e.g. as related to the content, computer use, engagement, instructions, activities, etc.)*

_____
_____
_____
_____

28. Briefly describe any overall session highlights *(Please be as specific as possible).*

_____
_____
_____
_____

29. Provide any suggestions for how to improve the simulation sessions overall here *(Please be as specific as possible).*

_____
_____
_____
_____

Appendix D: Volunteer Post-Program Survey

JA Finance Park Virtual™
Volunteer Post-Program Survey

Volunteer Information

1. What are the first **two letters** of your **first** name? | | |

2. What are the first **two letters** of your **last** name? | | |

3. Please select your JA Member Office from this list:

- Atlanta, GA
- Baltimore, MD
- Beaumont, TX
- Denver, CO
- Fort Worth, TX
- Houston, TX
- Lafayette, LA
- Lake Charles, TX
- Minneapolis, MN
- New Jersey
- Richmond, VA
- Saint Louis, MO
- San Diego, CA
- South Dakota
- Washington, D.C.

4. What is your gender? *(please check only one)***:** ❑ Female ❑ Male

5. What is your job title?_____

6. What grade level participated in the simulation sessions?
❑ 6th ❑ 7th ❑ 8th ❑ 9th ❑ 10th ❑ 11th ❑ 12th ❑ Other_____

Based on your observation of and interaction with students throughout the simulation sessions, please rate your level of agreement with the following statements:

The students….	Strongly Disagree	Disagree	Agree	Strongly Agree	I was not able to gauge this during the sessions
7. enjoyed the simulation sessions.	❑	❑	❑	❑	❑
8. were engaged during the simulation sessions.	❑	❑	❑	❑	❑
9. were appropriately challenged during the simulation sessions.	❑	❑	❑	❑	❑

Based on your observation of and interaction with students, as well as your review of the simulation sessions, please rate your level of agreement with the following statements:

The simulation sessions…	Strongly Disagree	Disagree	Agree	Strongly Agree	I was not able to gauge this during the sessions
10. were easy to navigate.	❑	❑	❑	❑	❑
11. accommodated for a range of students' abilities in terms of using a computer-based program.	❑	❑	❑	❑	❑
12. provided clear instructions.	❑	❑	❑	❑	❑
13. exposed students to concepts important for their finance and work futures.	❑	❑	❑	❑	❑
14. taught students skills important to their finance and work futures.	❑	❑	❑	❑	❑

15. *The simulation sessions employed several instructional strategies designed to enhance students' overall experience and maintain student engagement.*

Please rate the overall success of these instructional strategies by rating them below:

- Session 1 **only**: "Designed Failure" where students are encouraged to spend impulsively so as to provide initial motivation for the rest of the course.

  ❑ Very successful
  ❑ Somewhat successful
  ❑ A little successful
  ❑ Not at all successful
  ❑ N/A I was not able to gauge this

- Students develop a personal investment by creating a representational avatar and use it throughout the sessions.

  - ❑ Very successful
  - ❑ Somewhat successful
  - ❑ A little successful
  - ❑ Not at all successful
  - ❑ N/A I was not able to gauge this

- Students are challenged throughout the game experience and forced to re-engage an idea until they succeed.

  - ❑ Very successful
  - ❑ Somewhat successful
  - ❑ A little successful
  - ❑ Not at all successful
  - ❑ N/A I was not able to gauge this

- Students use of social media elements (leave messages for one another and view other avatars) makes the experience dynamic and fun.

  - ❑ Very successful
  - ❑ Somewhat successful
  - ❑ A little successful
  - ❑ Not at all successful
  - ❑ N/A I was not able to gauge this

- A leader board is displayed and an award system is used to create a fun level of competition and recognition.

  - ❑ Very successful
  - ❑ Somewhat successful
  - ❑ A little successful
  - ❑ Not at all successful
  - ❑ N/A I was not able to gauge this

16. *Please answer the following questions about specific features of the simulation sessions:*

a. Does the built-in calculator students used to complete math problems need a percentage (%) button? Why or why not?

_____
_____
_____
_____

- Would students benefit from the inclusion of a glossary, dictionary or other reference tool? Which tool? Why or why not?

_____
_____
_____
_____

- Are there any pieces from the in-class curriculum that should be made available for students for reference during the sessions? Which pieces? Why or why not?

_____
_____
_____
_____

17. What did you think about the pace of the simulation sessions overall? *(please check only one)*

- ❑ Rushed
- ❑ Just right
- ❑ Slow
- ❑ N/A I was not able to gauge this

18. What did you think about the information students learned during the simulation sessions overall? *(please check only one)*

- ❑ Too easy
- ❑ Just right
- ❑ Too hard
- ❑ N/A I was not able to gauge this

Please answer the following questions related to the role of a JA volunteer *(i.e. an individual from the business community).*

19. Based on your experience, how many simulation sessions should a JA volunteer help to facilitate?

- ❑ All four simulation sessions.
- ❑ 2-3 simulation sessions.
- ❑ One simulation session.
- ❑ None.

18a. Please explain your answer to Question 18 in the space provided:

_____
_____
_____
_____

20. Briefly describe any challenges experienced by students during the sessions overall *(e.g. as related to the content, computer use, engagement, instructions, activities, etc.)*

_____
_____
_____
_____

21. Briefly describe any overall session highlights *(Please be as specific as possible).*

_____
_____
_____
_____

22. Provide any suggestions for how to improve the simulation sessions overall here *(Please be as specific as possible).*

_____
_____
_____
_____

Appendix E: JA Member Office Staff Post-Program Survey

JA Finance Park Virtual™
JA Member Office Staff Post-Program Survey

JA Staff Information

1. What are the first **two letters** of your **first** name? | | |

2. What are the first **two letters** of your **last** name? | | |

3. Please select your JA Member Office from this list:

- Atlanta, GA
- Baltimore, MD
- Beaumont, TX
- Denver, CO
- Fort Worth, TX
- Houston, TX
- Lafayette, LA
- Lake Charles, TX
- Minneapolis, MN
- New Jersey
- Richmond, VA
- Saint Louis, MO
- San Diego, CA
- South Dakota
- Washington, D.C.

4. What is your gender? *(please check only one)***:** ❑ Female ❑ Male

5. How many years have you worked for JA? _____

6. What grade levels participated in the simulation sessions that you observed? *(check all that apply)*

❑ 6th ❑ 7th ❑ 8th ❑ 9th ❑ 10th ❑ 11th ❑ 12th ❑ Other_____

7. Which simulation sessions did you observe? *(check all that apply)*

❑ Session 1
❑ Session 2
❑ Session 3
❑ Session 4

Based on your observation of the classroom, as well as your review of the simulation sessions, please rate your level of agreement with the following statements:

The students….	Strongly Disagree	Disagree	Agree	Strongly Agree	I was not able to gauge this during the sessions
8. enjoyed the simulation sessions.	❑	❑	❑	❑	❑
9. were engaged during the simulation sessions.	❑	❑	❑	❑	❑
10. were appropriately challenged during the simulation sessions.	❑	❑	❑	❑	❑

Based on your observation of the classroom, as well as your review of the simulation sessions, please rate your level of agreement with the following statements:

The simulation sessions…	Strongly Disagree	Disagree	Agree	Strongly Agree	I was not able to gauge this during the sessions
11. were easy to navigate.	❑	❑	❑	❑	❑
12. accommodated for a range of students' abilities in terms of using a computer-based program.	❑	❑	❑	❑	❑
13. provided clear instructions.	❑	❑	❑	❑	❑
14. successfully built upon the classroom lessons.	❑	❑	❑	❑	❑
15. successfully conveyed program concepts.	❑	❑	❑	❑	❑
16. were relevant to overall program objectives.	❑	❑	❑	❑	❑
17. exposed students to concepts important for their finance and work futures.	❑	❑	❑	❑	❑
18. taught students skills important to their finance and work futures.	❑	❑	❑	❑	❑

19. *The simulation sessions employed several instructional strategies designed to enhance students' overall experience and maintain student engagement.*

Please rate the overall success of these instructional strategies by rating them below:

- Session 1 **only**: "Designed Failure" where students are encouraged to spend impulsively so as to provide initial motivation for the rest of the course.

  ❑ Very successful
  ❑ Somewhat successful
  ❑ A little successful
  ❑ Not at all successful
  ❑ N/A I was not able to gauge this

- Students develop a personal investment by creating a representational avatar and use it throughout the sessions.

  ❑ Very successful
  ❑ Somewhat successful
  ❑ A little successful
  ❑ Not at all successful
  ❑ N/A I was not able to gauge this

- Students are challenged throughout the game experience and forced to re-engage an idea until they succeed.

  ❑ Very successful
  ❑ Somewhat successful
  ❑ A little successful
  ❑ Not at all successful
  ❑ N/A I was not able to gauge this

- Students use of social media elements (leave messages for one another and view other avatars) makes the experience dynamic and fun.

  ❑ Very successful
  ❑ Somewhat successful
  ❑ A little successful
  ❑ Not at all successful
  ❑ N/A I was not able to gauge this

- A leader board is displayed and an award system is used to create a fun level of competition and recognition.

  - ❑ Very successful
  - ❑ Somewhat successful
  - ❑ A little successful
  - ❑ Not at all successful
  - ❑ N/A I was not able to gauge this

20. *Please answer the following questions about specific features of the simulation sessions:*

a. Does the built-in calculator students used to complete math problems need a percentage (%) button? Why or why not?

_____
_____
_____
_____

- Would students benefit from the inclusion of a glossary, dictionary or other reference tool? Which tool? Why or why not?

_____
_____
_____
_____

- Are there any pieces from the in-class curriculum that should be made available for students for reference during the sessions? Which pieces? Why or why not?

_____
_____
_____
_____

21. What did you think about the pace of the simulation sessions overall? *(please check only one)*

- ❑ Rushed
- ❑ Just right
- ❑ Slow
- ❑ N/A I was not able to gauge this

22. What did you think about the information students learned during the simulation sessions overall? *(please check only one)*

- ❑ Too easy
- ❑ Just right
- ❑ Too hard
- ❑ N/A I was not able to gauge this

Many Junior Achievement programs include volunteers from the business community who help deliver the curriculum and share their experiences with students.

23. Did a JA volunteer help to facilitate any of the simulation sessions you observed?

- ❑ **NO** ***(if checked, skip to Question 20)***
- ❑ **YES**

Rate your level of agreement with the following statements about the JA volunteer overall:

	Strongly Disagree	Disagree	Agree	Strongly Agree
24. The volunteer was helpful during the simulation sessions.	❑	❑	❑	❑
25. Having a volunteer during the simulation sessions enhanced students' overall experience.	❑	❑	❑	❑

26. Regardless of whether or not the classrooms you observed had a JA volunteer, how many simulation sessions should a JA volunteer help to facilitate?

- ❑ All four simulation sessions.
- ❑ 2-3 simulation sessions.
- ❑ One simulation session.
- ❑ None.

16a. Please explain your answer to Question 16 in the space provided:

_____
_____
_____
_____

27. Briefly describe any challenges experienced by students during the sessions overall *(e.g. as related to the content, computer use, engagement, instructions, activities, etc.)*

_____
_____
_____
_____

28. Briefly describe any overall session highlights *(Please be as specific as possible).*

_____
_____
_____
_____

29. Provide any suggestions for how to improve the simulation sessions overall here *(Please be as specific as possible).*

_____
_____
_____
_____

Appendix F: Sample JA Member Office Staff Observation Guide

JA *Virtual Finance Park*
Observation Guide
Simulation Session

Please complete a simulation session observation for each session of *Virtual Finance Park* observed. Use the following as a guide during your observation.

General Information

1. Observation Date:
2. Observation Start Time: Observation End Time:
3. Name of School:
4. Name of Teacher:
5. Grade level:
6. Number of students:
7. Name of Volunteer (if applicable):
8. Level of Volunteer participation (number of times volunteering this classroom over course of program):

Simulation Overview

1. Note the following observations for the simulation session:
   - What is working and what is not working including:
     - Teaching strategies
     - Simulation facets
     - Classroom logistics and implementation

   - Any problems the students are experiencing;

   - Describe the rapport between the students and the simulation leader (i.e. ease of communication; comfort level; quality and relevance of exchanges or discussion, etc.)

2. Pease complete the following table. On a scale of 1 – 10, where 1 is defined as "not at all" and 10 is "extremely," please rate the extent to which the following "Leader" (i.e. teacher, JA volunteer) behaviors are observed . Add relevant comments for each activity in the comments section specifying whether they refer to teacher, volunteer or both.

Teacher/ Volunteer – "Leader" Behaviors		
Measures	**Rank or N/A**	**Supporting Examples/Comments**
a. The leader is prepared and organized.		
b. The leader appears comfortable facilitating the session.		
c. The leader is enthusiastic when interacting with the students.		
d. The directions given by the leader are clear and easy to follow.		
e. The leader encourages questions and discussion about lesson/activity.		
f. The leader clearly and thoroughly answers the students' questions.		

3. Pease complete the following table. On a scale of 1 – 10, where 1 is defined as "not at all" and 10 is "extremely," please rate the extent to which the following student behaviors are observed. Add relevant comments for each activity in the comments section.

Student Behaviors		
Measures	**Rank or N/A**	**Supporting Examples/Comments**
a. Overall, the students are engaged in the simulation session.		
b. Students are able to successfully complete the activities required during the simulation.		
c. The students are enthusiastic when interacting with the leader.		

Student Behaviors		
Measures	**Rank or N/A**	**Supporting Examples/Comments**
d. The students ask the leader questions about the simulation.		
e. The students seem to grasp the skills and ideas presented.		
f. The students respect the leader and follow his or her instructions.		
g. The students are comfortable with the leader.		

4. Other observations, such as the flow of the session, level of organization and coordination of activities, ability to adjust program activities as needed (i.e. in response to unforeseen problems, poor student behavior, other).

5. Pease complete the following table. On a scale of 1 – 10, where 1 is defined as "not at all" and 10 is "extremely," please rate the extent to which each description is observed. Add relevant comments for each activity in the comments section.

Simulation Program		
Measures	**Rank or N/A**	**Supporting Examples/Comments**
a. Simulation initiation runs smoothly (i.e. students log on without trouble).		
b. Students move through simulation steps smoothly.		
c. Session ends smoothly.		
d. Students are receptive of the technology (i.e. computer simulation format).		

Simulation Program		
Measures	**Rank or N/A**	**Supporting Examples/Comments**
e. The simulation is effective in facilitating learning.		
f. The simulation is interactive for participating students.		
g. Leaders are able to troubleshoot technology problems.		
h. Students work together effectively (i.e. positive group work interactions).		

Appendix G: Additional Student and Adult Findings

Table of Student Pre-Simulation Test Score (%Correct and % Incorrect by Item)

Table 1
Total Student Pre-Simulation Test Scores

	% Correct	% Incorrect
Q10 (n=1179)	86%	14%
Q11 (n=1189)	84	16
Q12 (n=1170)	73	27
Q13 (n=1186)	55	45
Q14 (n=1181)	82	19
Q15 (n=1172)	64	36
Q16 (n=1175)	55	45
Q17 (n=1180)	65	35
Q18 (n=1175)	56	44
Q19 (n=1175)	72	28
Q20 (n=1175)	88	12
Q21 (n=1164)	40	60
Q22 (n=1181)	87	13
Q23 (n=1176)	84	16
Q24_A (n=1074)	92	8
Q24_B (n=1166)	82	18
Q24_C (n=1166)	80	20
Q24_D (n=1167)	86	14
Q24_E (n=1169)	95	5
Q25 (n=1174)	84	16
Q26 (n=1151)	54	46
Q27 (n=1165)	52	48
Q28 (n=1146)	41	59
Q29 (n=1131)	40	60
Q30 (n=964)	72	28
Q31 (n=966)	63	37
Q32 (n=962)	34	66
Q33 (n=965)	53	47

Post-Survey Results for Student Non-Significant Group Differences

JA Finance Park Classroom Lessons

Table 2
Non-Significant Group Differences by Test Score & Survey Item

Rate your level of agreement with the following statements:		Strongly Disagree	Disagree	Agree	Strongly Agree
I enjoyed the classroom lessons. (n=574)	Low Scoring	13%	19%	52%	17%
	High Scoring	9	19	59	12
I learned a lot of valuable information during the classroom lessons. (n=570)	Low Scoring	5	15	52	28
	High Scoring	4	12	59	26
The classroom lessons helped to prepare me for the simulation sessions. (n=573)	Low Scoring	7	12	56	25
	High Scoring	4	11	60	26
The classroom lessons made me excited to complete the simulation sessions. (n=570)	Low Scoring	12	27	43	18
	High Scoring	9	27	46	18

Volunteer Involvement

Table 3
Non-Significant Group Differences by Test Score & Survey Item

Rate your level of agreement with the following statements about the JA volunteer:		Strongly Disagree	Disagree	Agree	Strongly Agree
The volunteer was helpful during the simulation sessions. (n=348)	Low Scoring	4%	5%	49%	43%
	High Scoring	2	4	54	40
Having a volunteer during the simulation sessions made the experience better overall. (n=351)	Low Scoring	5	9	51	35
	High Scoring	2	14	52	32

Virtual Simulation Sessions

Table 3
Non-Significant Group Differences by Test Score & Survey Item

Rate your level of agreement with the following statements about the simulation sessions:		Strongly Disagree	Disagree	Agree	Strongly Agree
The simulation sessions taught me about valuable lessons for my financial future. (n=571)	Low Scoring	3	11	57	28
	High Scoring	2	8	60	31
The simulation sessions taught me valuable lessons for my work future. (n=570)	Low Scoring	3	15	53	30
	High Scoring	2	16	51	30
As a result of participating in the simulation sessions, I understand that what I do as part of my community makes a difference. (n=570)	Low Scoring	4	18	60	19
	High Scoring	5	24	57	15
I liked using a computer during the simulation sessions. (n=566)	Low Scoring	3	7	48	41
	High Scoring	2	3	51	43

Table 4
Non-Significant Group Differences by Test Score & Survey Item

Rate the following aspects of the four simulation sessions overall:		Poor	Fair	Good	Excellent
Ease of navigation – moving from one setting or activity to the next. (n=569)	Low Scoring	9%	29%	47%	16%
	High Scoring	6	25	50	19
The design of the settings. (n=568)	Low Scoring	5	22	44	29
	High Scoring	2	18	50	30
The color of the settings. (n=562)	Low Scoring	3	17	44	37
	High Scoring	1	12	52	35
The graphics of the settings. (n=567)	Low Scoring	6	21	44	30
	High Scoring	4	18	49	29
Interacting with Casey the Park Guide. (n=566)	Low Scoring	12	23	36	29
	High Scoring	15	30	34	21

Table 5
Non-Significant Group Differences by Test Score & Survey Item

Please rate your level of satisfaction with the tasks you were asked to complete in the four simulation sessions overall: (n=569)	Very Satisfied	Somewhat Satisfied	A Little Satisfied	Not at all Satisfied
Low Scoring	30%	44%	20%	6%
High Scoring	35	47	14	4

Table 6
Non-Significant Group Differences by Test Score & Survey Item

For each statement, tell us if this was a reason you liked the simulation, a reason you didn't, or if it had no effect on your experience.		Why I liked the simulations	Why I didn't like the simulations	Had no effect
The sessions taught me the same concepts from the classroom lessons in a different way. (n=560)	Low Scoring	56%	13%	31%
	High Scoring	63	8	29
I was able to work independently during the sessions. (n=557)	Low Scoring	65	18	18
	High Scoring	72	12	16
I was able to use a computer during the sessions. (n=557)	Low Scoring	78	8	15
	High Scoring	83	4	13

Overall Experience

Table 7
Non-Significant Group Differences by Test Score & Survey Item

What did you think about the pace of each simulation session? (n=561)	Rushed	Just Right	Slow
Low Scoring	18%	62%	20%
High Scoring	15	62	23

Table 8
Non-Significant Group Differences by Test Score & Survey Item

On a scale from 1 to 10, how satisfied were you with the virtual experience overall? (n=554)	1-3[11]	4-7	8-10
Low Scoring	10%	42%	49%
High Scoring	7	43	50

Table 9
Non-Significant Group Differences by Test Score & Survey Item

Would you recommend the *JA Finance Park* program to a friend? (n=564)	Yes	No
Low Scoring	73%	27%
High Scoring	72	28

Table 10
Non-Significant Group Differences by Test Score & Survey Item

How much would your recommendation be based on the simulation session? (n=451)	Completely	Somewhat	Not at all
Low Scoring	41%	52%	8%
High Scoring	44	52	4

Adult Post-Program Survey Results

Table 11
Teacher Post-Program Reactions to Simulation Sessions

n= 23	Disagreement	Agree	Strongly Agree	NA
The simulation sessions successfully built upon the classroom lessons.	0	48	48	4
The simulation sessions successfully conveyed program concepts.	0	48	52	0
The simulation sessions were relevant to overall program objectives.	0	43	57	0

Table 12
JA Staff Post-Program Reactions to Simulation Sessions

n=11	Disagreement	Agree	Strongly Agree	NA
The simulation sessions successfully built upon the classroom lessons.	--	45	27	27
The simulation sessions successfully conveyed program concepts.	9	45	36	9
The simulation sessions were relevant to overall program objectives.	--	45	45	9

[11] Satisfaction scale was re-coded as follows: 0-3= 1 (9 percent), 4-7= 2 (42 percent) and 8-10= 3 (49 percent).