

**JUNIOR ACHIEVEMENT AZERBAIJAN**  
**Mid-Term Evaluation Report**  
**SCHOOL ECONOMICS EDUCATION PROGRAM**

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**INTRODUCTION**

Evaluation of School Economics Education (SEE) program implemented by Junior Achievement Azerbaijan (JAA) was initiated with the purpose to assess program's performance and effectiveness and enhance organizational learning. Program evaluation has been a regular part of JAA activities and is used to improve the implementation of projects.

SEE program has been implemented in Azerbaijan under the funding of the United States Agency for International Development and private donors. 230 secondary schools have been covered by the program. The program aims *to bring theoretical and practical knowledge of basic economic and business components to school students as well as to foster entrepreneurship skills and career decisions.*

This report centers on the evaluation questions defined in the Evaluation Terms of Reference (Annex A) through consultations with the management and staff of JAA. Responses to the evaluation questions are provided in the Findings section, followed by Conclusion and Recommendations.

The evaluation has been conducted by an external evaluator with the direct involvement and support of the program staff. Surveys were administered by the contracted interviewers. The author is grateful to all participants of this assessment.

**1. METHODOLOGY**

This evaluation relied on surveys as a primary source of information for the analysis. Data triangulation was achieved through the use of various information sources, such as teachers, administrators, staff and students.

Questionnaires used by JAA in previous evaluations were further developed and improved for the survey (Annex B). Semi-structured questionnaires with a certain space for general comments from the respondents were used.

A fairly representative sample of schools was selected. Number of schools from each region was determined according to the total number of participating schools from that region. 44 schools were covered by the evaluation. To eliminate the bias arising from teacher-nominated respondent selection, interviewers were instructed to randomly select students at each school.

As no longitudinal study was conducted, additional comparison group surveys were administered. Students from 9 schools that had just joined SEE, and had not been exposed to the program before were used as a comparison group.

JA economics teachers who participated at the JA training along with school principals were also surveyed.

Three JAA staff members completed the staff survey and one staff interview was held.

### **Limitations of evaluation**

As demonstrated by the survey results, a candid response to some questions could not be elicited. A few survey questions did not yield any interesting or significant results, demonstrating what is known as the acquiescence response bias, or a tendency of respondents to be very agreeable with the survey questions. In addition, self-assessment of economics knowledge and skills was not particularly useful since most students tended to exaggerate own capacity. At the same time, questions designed to test student's basic economics knowledge were more informative and objective.

One lesson learned from this evaluation is that shorter surveys supplemented by focus group discussions and in-depth interviews, not undertaken within this study due to the time constraint, as well as more questions testing economics knowledge could better inform the evaluation analysis and serve the purpose of the program improvement.

## **2. PROGRAM BACKGROUND**

A subject of economics has become a part of general school curriculum in Azerbaijan since 1999. The course program adopted at that time was based on an outdated textbook and has not been essentially updated ever since. To fill this gap, JAA launched its School Economic Education Program in 2000, aiming to improve the teaching of business and economic, as well as to promote student interest and participation in related activities.

SEE program includes a number of components that vary in terms of coverage, contents, and target group. The following projects are part of the program:

- JA Economics Class
- Teacher Training and Seminars
- Student Companies Project
- Management and Economic Simulation Exercise (MESE)– National Competition
- Hewlett Packard Global Business Challenge – International Competition
- Global Business Ethics – Training Course
- JA Work Experience (Student Internship)
- International Partnership Projects

### **JA Economics Class**

With the approval of the Ministry of Education, this course substitutes the general economics class in secondary schools in 28 different regions of the country. Currently this course is taught at 10th and 11th grades based on an economics textbook published by JAA. The course examines the fundamental concepts of micro-, macro-, and international economics. Annually the program provides 50 schools with 6,500 Economics textbooks and 50 teacher guidelines and currently reaches 94,500 students in 230 schools.

### **Teacher Training and Seminars**

JA Economics class is taught by teachers that participate in an extensive training by JAA. The 30-day training is held in summer and targets teachers from 50 schools annually. The aim of the training is to make teachers closely familiar with the new program and textbook, and to provide them with additional methodological material. JAA also regularly hosts lead teacher conferences.

### **Student Companies Project**

Students work on actual business projects under the guidance of volunteers from the business community. The project aims to provide practical management skills to high school students and help them appreciate and better understand the role of business in the society. The project engages about 85 students each year.

### **Management and Economic Simulation Exercise (MESE)**

Through this interactive simulation students learn how to make critical management decisions. With support from a volunteer or a teacher, students get an opportunity to compete in a fictional industry by making choices on price, production, marketing, capital investment, and research and development that lead directly to the success or failure of each company. This is an annual national competition with over 100 participants.

### **Hewlett Packard Global Business Challenge (HPGBC)**

This is an international competition that gives students an opportunity to steer an international business playing the roles of global corporate leaders. International competition is conducted for 150 students per year. The finalists of this competition are sent to the finals abroad where they compete with their peers from other countries. Azerbaijani team has been quite successful in this competition, winning the first place worldwide in 2007.

### **Global Business Ethics**

This project is designed to promote values and ethical decision-making in students as they prepare to enter the workforce. Students learn to recognize, analyze, and apply basic terminology, theories, and concepts common to the study of ethics. They explore their own ethical values and philosophy, establish ethical priorities, recognize key ethical issues, and learn to evaluate their decision-making process. Business ethics training is provided for 420 students per semester.

### **JA Work Experience (Student Internship)**

The most active and outstanding students get a chance to experience the “real world” business environment through internship at local or central business companies. Annually about 9-13 students participate in the internship project.

### **International Partnership Projects**

This project creates and maintains international partnerships between schools in Azerbaijan and the US through joint online projects.

### 3. FINDINGS

Student, teacher, school administration and staff responses were analyzed with the purpose to answer the questions posed in the evaluation ToR. The following results were obtained.

#### To what extent students' attitude to business and economics has changed?

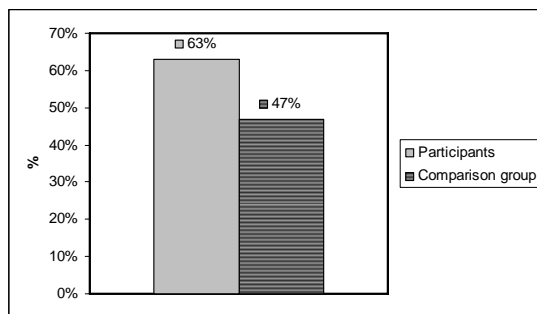
94% percent of participant students report an increase in interest in business and economics after participation in SEE program, with 64% reporting a significant increase in interest. Among the comparison group, 48% report high interest in business and economics.

60% of teachers report that students were interested in business and economics in the beginning of the program, and 98.6% think that students were interested after the participation in the program.

"Learning economics simplifies life of people. Although I don't plan to pursue economics education, I'm interested, because economic development can improve our future."  
*A student's response*

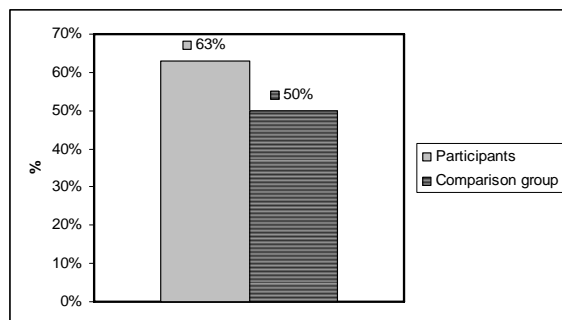
#### Are future education/career preferences influenced by the program?

Program participants express more interest in continuing education in business and economics, although the comparison group also expressed quite high interest. Percentage of the not interested is roughly the same in both groups. Interestingly, there are more undecided students within the comparison group (36% versus 19% of the participants).



**Pic. 1 % interested in business and economics education after finishing school**

Similar results were obtained regarding the future career choice, here again, with more "uncertain" answers within the comparison group.



**Pic. 2 % interested in future career in business and economics**

When compared to boys, girls are slightly less interested in continuing business and economics education, and even less so in future business and economics career (57.3% of girls said yes, versus 69.3% of boys).

92% of surveyed teachers agree that the SEE program affects student education and career preferences.

**What is female to male breakout among program participants?**

53.6% of the survey respondents are female, and 46.4 % are male. Since the respondents were selected randomly, this break-out is expected to closely approximate the total participant gender ratio.

Boys participated in slightly more projects than girls: mean number of projects is 1.82 per male and 1.79 per female.

Respondents' answers to most questions were cross-tabulated with gender and the results are provided under relevant sections.

**To what extent are students benefiting from the program: how successful students are at the course?**

Students, teachers and school administration were all asked questions that aimed to measure student's success at the program.

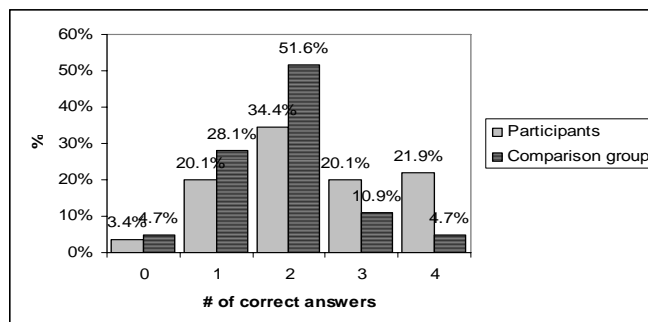
Students were first required to assess their own knowledge and skills, and then 4 questions on business and economics were asked.

98% of participants agreed that the program had affected their understanding of market economy. Majority also think that the business and economics knowledge they receive from the course are either very good or good.

Four questions designed to measure the basic economic knowledge were included in both the participant and comparison group surveys.

Among the program participants, the average number of correct answers to these questions was 2.37. More than 40% of respondents have answered 3 and more questions correctly.

Among the comparison group, the average number of correct answers was 1.83 and only 15% of respondents have answered 3 and more questions correctly.



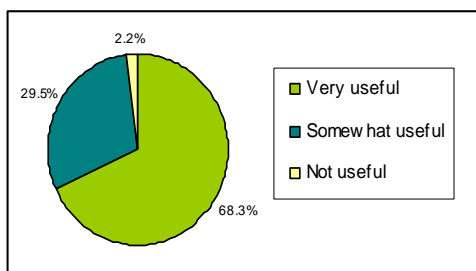
**Pic. 3 % of correct answers to economics questions within the participants and the comparison group**

Among the program participants, the average number of correct answers given by males is slightly higher than that given by females (2.42 for males versus 2.32 by females). Surprisingly, a reverse trend is observed within the comparison group: boys' average of 1.63 is lower than girls' average of 1.97.

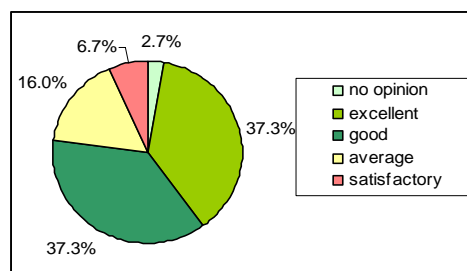
83% of surveyed teachers believe that the program increases students' business and economics skills. 75% of school administrators agree that the program is very effective in developing students' business skills.

### What is the quality of the *JA Economics* textbook?

**Pic. 4 Students' evaluation of the JA economics textbook:**



**Pic. 5 Teachers' evaluation of the JA economics textbook:**



Survey respondents provided a multitude of opinions on the *JA economics* textbook. Majority of respondent teachers and students would like to have more information about Azerbaijani economy, business and companies, as well as more country-related examples in the textbook. According to the program staff, this issue has also been brought up in the previous evaluations and addressed in a new textbook published in 2007. The new edition is distributed only at schools newly covered by JAA, and the majority of the participating schools use the previous version.

A lot of students find the old textbook too complex and would prefer it to be written in simpler language. Both students and teachers would like to have tests, practical exercises, more examples and even games related to each topic. A separate exercise-book and teacher manual was also considered necessary. In fact, currently the textbook covers only the theoretical part and it is planned to publish the second, more applied part of the book.

Other frequent comment was related to the size of the old textbook: students find it too big both physically and content-wise. It was mentioned that the book doesn't fit into the student bags.

### **To what extent are teacher trainings effective?**

More than half of the surveyed teachers have found JA teacher trainings excellent, and 32% rated them as good. At the same time, 8% of respondent teachers rated teacher training and seminars as the least beneficial project of the program.

The most frequent comments by teachers are: organize more frequent trainings, prolong the training period with fewer sessions per day, and conduct follow-up trainings. Conducting trainings for students along with teachers was suggested. Teachers would like to receive more information and support; regular follow-up activities and involvement would be useful.

"I think I need a couple of more training sessions to strengthen my knowledge, to learn and ask about things I don't know."

*A teacher's response*

Selection of participants in the teacher training is done by JAA with help from the school administration. Economics classes are usually taught by geography and history teachers, who often lack necessary mathematical background to fully comprehend the new program.

### **How satisfactory is the curriculum?**

The common state economics program as taught at all schools was adopted by the Ministry of Education in 1999 and has not been changed since that time. It was based on the old-school economics textbook for schools that has been re-published several times without substantial changes to its contents. The program based on this textbook was designed for a twice-a-week economics class that afterwards has been cut down by the Ministry of Education to only one class per week. As a consequence, the class time does not suffice to cover all material. The need to

"This class should be taught starting from lower grades. Economic knowledge should be gained not at once, but gradually."

*A student's response*

increase the number of economics classes was mentioned by many teachers and students. Also, many think that JA Economics should be introduced in the 9<sup>th</sup> grade (currently the class is taught to the 10<sup>th</sup>-11<sup>th</sup> grades, while the general economics class starts from the 9<sup>th</sup> grade). JAA actually plans to extend the coverage to the 9<sup>th</sup> grade.

There is no separate curriculum developed by JAA, but the JA economics class follows the topics as presented in the textbook. Topics of the JA textbook differ in content and organization from the topics offered by the general state economics textbook; this program was rated as significantly better than the common economics curriculum by the vast majority of respondent teachers. However, the comment on the discrepancies between the JA textbook and the program was frequently made by the surveyed teachers. Many would like to have a special calendar plan of classes based on the JA textbook.

"Practical business experience is important for development of economic knowledge. The skills I obtain help me solve problems and promote future leadership, independent work and decision-making."

*A student's response*

### **Cross-regional comparison**

To find out the level of students' knowledge in different regions, the number of correct answers given by the participants to the general economics questions was compared across the cities, and the following results were obtained:

| City             | Mean # of correct answers to 4 | N          | % of 3 and more correct answers |
|------------------|--------------------------------|------------|---------------------------------|
| <b>Ismayilli</b> | <b>3.57</b>                    | <b>21</b>  | <b>90.5%</b>                    |
| <b>Barda</b>     | <b>3.05</b>                    | <b>21</b>  | <b>66.7%</b>                    |
| <b>Sumgayit</b>  | <b>2.93</b>                    | <b>44</b>  | <b>68.2%</b>                    |
| Yevlakh          | 2.57                           | 7          | 28.6%                           |
| Baku             | 2.3                            | 210        | 41.4%                           |
| Genje            | 2.21                           | 42         | 26.1%                           |
| Mingechevir      | 1.86                           | 21         | 23.8%                           |
| Shamakhi         | 1.67                           | 21         | 14.3%                           |
| Ali-Bayramli     | 1.4                            | 20         | 0.0%                            |
| <b>Total:</b>    | <b>2.37</b>                    | <b>407</b> | <b>40%</b>                      |

The program staff believes that student and teacher activism and interest, and school management support are the projects' main success criteria and based on this, staff agreed that Sumgayit and Mingechevir are the most successful program regions. Baku, Ismayilli and Barda were also mentioned as successful regions. The least successful region is apparently Guba, mentioned by all staff members, as well as Kurdemir, Genje and Shamakhi. The need to energize rural schools was also emphasized.

The discrepancy between the results of economic test per region and staff rating of the participant regions is not surprising due to the fact that, as already mentioned, staff measured success mostly according to the level of activism of participants, and not their economic knowledge.

#### **Strengths and weaknesses of the program: staff's perspective**

In the opinion of the program staff, the strengths of the SEE projects are the following:

- Provides basic modern economics knowledge to students through a new textbook
- Teaches appropriate business behavior standards and promotes values and ethics
- Helps get practical business skills and experience a real work environment
- Encourages student interest, participation and initiative
- Advanced and extensive teacher training program
- Gives students an opportunity to work together with their peers from abroad.

When asked to provide the good practice examples, the program staff mentioned new edition of the textbook and its free distribution at the program schools, an opportunity for students to participate in the "real life" projects, successful participation in the national and international competitions.

The following weaknesses and challenges were mentioned:

- Unclear continuation of initiatives
- Limited number of participants in some projects
- Lack of ICT
- Teacher participation is limited by their schedules and personal circumstances
- Lack of teachers with required background and skills
- Lack of motivation of the school administration
- Insufficient number of economics classes in the school program.

## 4. CONCLUSION

The overall question guiding this evaluation is whether the program contributes towards its goals. As stated, the general objective of the program is to bring theoretical and practical knowledge of basic economic and business components to school students as well as to foster entrepreneurship skills and career decisions.

The program undoubtedly succeeds in providing *theoretical knowledge* through the JA economics class supported with an updated textbook and advanced teacher training. JA textbook is a great source of up-to-date and relevant economic knowledge for school teachers and children, distributed free-of-charge at the participating schools. The text was further developed in the latest edition that addressed several shortcomings, including the lack of information about Azerbaijani economy and business. The practical part is still missing though, and the book does not include any exercises or tests.

*JA teacher training* is apparently the only functioning capacity-building resource for the secondary school economics teachers, with the mandatory trainings provided by the Ministry of Education having a formal character and outdated program. The JA trainings were very positively evaluated by teachers, most of whom would like to attend more sessions and participate in the follow-up activities.

JA students have better theoretical knowledge of economics as measured by four economics test questions included in the survey. The comparison group shows lower results than the participants of the SEE program.

When it comes to the *practical skills*, since the JA economics class is centered on a theory-based textbook, for most participant students hands-on activities are totally dependant on the individual teacher initiatives.

Student practical skills are effectively boosted through the program's *hands-on projects* – student companies, MESE, HPGBC and work experience. Such projects generate high interest and are indispensable from the point of view of creating “real-life” business environment for school children. Naturally, their impact is limited to a small number of participants. Participants of applied projects are selected among the most active schools and students, and there is a risk that such approach fails to energize and engage less motivated or “uninformed” teachers and students.

*Gender analysis* provided interesting results by demonstrating that among the program participants boys did better on the economics test, while girls did better among the comparison group. An expected outcome is that girls are less interested in continuing business and economics education and in pursuing career in this field. Apparently, such gender bias is related to culture, traditions and social expectations, but nonetheless must be addressed by the program designers and implementers.

The program influences *future career and education choices* of the participants as demonstrated by the difference between the results of the comparison group and participant student survey.

Not surprisingly, the program is not equally successful *across all regions*. This fact could be explained by the geographical remoteness, different technical capacity of schools, as well as personalities of school directors/teachers (absence of the program champions and leaders).

*JA economics* is an indisputable favorite of both teachers and students. As staff members put it, “it is a basis of all projects” and “a source of economic knowledge for students”. As such, this project warrants closer attention and any improvements made to its design could bring about significant positive effects for the program participants.

## 5. SUGGESTIONS FOR THE PROGRAM IMPROVEMENT

Based on the evaluation findings the following recommendations may be considered:

### JA Economics textbook

- Although a new, improved edition of *JA economics* has been prepared, it is available only to new participants of the program. One solution could be to publish a supplement that would include Azerbaijan-related material for users of the previous editions of *JA economics*.

### Depth versus breadth

- JAA may want to modify its strategy to cover 50 additional schools annually by transferring this task to the Ministry of Education and focusing instead on the deeper and closer cooperation with the current participating schools, teachers and students. This would help further improve the quality of economics teaching and learning.

### Policy advocacy

- The breadth of reach could be achieved through more active advocacy with the Ministry of Education towards the adoption of a new economics curriculum based on JA economics program and introduction of JA textbooks for all schools. This would ensure that the program's impact lasts even after the program is complete.
- Since the Ministry-published economics textbooks, unlike all other school books, are sold to students, *JA economics* could also be introduced on a paid basis at all schools.
- Advocacy for more hours for economics class at schools should also be intensified.

### Focus on gender

- An extra effort must be made to involve and motivate girls to actively participate in JAA projects, especially in rural areas.

## Annex A. JUNIOR ACHIEVEMENT AZERBAIJAN

### EVALUATION OF SCHOOL ECONOMICS EDUCATION PROGRAM

#### Terms of Reference

#### 1. Program Background and Logic Model

The School Economics Education (SEE) program is funded by USAID and implemented by Junior Achievement Azerbaijan. The program extension started in February 2005 and continues up to now. The objective of the program is to bring theoretical and practical knowledge of basic economic and business components to school students as well as fosters entrepreneurship skills and career decisions.

#### Program Logic Model

Inputs → Activities → Outputs → Outcomes

| Resources dedicated to the program:  | What the program does with the inputs to fulfill its mission:   | The direct products of program activities:  | Benefits for participants during and after program activities (observable change):  |
|--|---|---|---|
| <ul style="list-style-type: none"> <li>1. Grant Funds</li> <li>2. Staff time</li> <li>3. Facilities</li> <li>4. Transportation</li> <li>5. Volunteers from business community</li> <li>6. Partnership with government, organizations and business companies</li> </ul> | <ul style="list-style-type: none"> <li>1. Conducts trainings for teachers</li> <li>2. Conducts national and international student competitions</li> <li>3. Works with MOE to improve the curriculum and engage new schools into the program</li> <li>4. Translates, develops and publishes</li> </ul> | <ul style="list-style-type: none"> <li>1. Extended one-month Training of Trainers for teachers from 50 schools is conducted once a year</li> <li>2. National competition on economics and management is conducted once a year for minimum 100 students. International competition is conducted for 150 students per year. The finalists of the international competition</li> </ul> | <ul style="list-style-type: none"> <li>1. Improve teachers' capacity for teaching the program's Economics curriculum</li> <li>2. Help students to apply knowledge and skills gained in theory in practice</li> <li>3. Expand the number of schools engaged in the program.</li> <li>4. Introduce up-to-date scientific</li> </ul> |

|  |  |  |  |
|--|--|--|--|
|  | <p>textbooks and manuals</p> <p>5. Engages students in creating their businesses</p> <p>6. Creates internship opportunities for students with business companies</p> <p>7. Creates and maintains international partnership between schools in Azerbaijan and the US</p> <p>8. Provides JA Economics classes for students</p> <p>9. Provides training for students to appreciate the role of ethics in business</p> | <p>are sent to the finals abroad.</p> <p>3. The program works with MoE to substitute state economics curriculum with the program's and engages 50 schools annually.</p> <p>4. Annually the program provides 50 schools with 6,500 Economics textbooks and 50 teacher guidelines.</p> <p>5. Annually the program helps 85 students to create business plans within the Student Companies program.</p> <p>6. Annually the program sends 9-13 students to the companies for internship program.</p> <p>7. The program engages students from Azerbaijan and the US to participate in joint online projects.</p> <p>8. Provides theoretical and practical JA Economics class for students in all program schools – currently reaches 94,500 students in 230 schools.</p> <p>9. Provides business ethics training for 420 students per semester.</p> | <p>background and economic notions to economics classes.</p> <p>5. Teach students entrepreneurship and encourage future business activity.</p> <p>6. Teach students career requirements and jobs and help students to identify their future career goals</p> <p>7. Provide opportunity for international exchange of economic knowledge and practice</p> <p>8. Teach students basic Economics (micro- and macro-economics)</p> <p>9. Train students to value the role of ethics in business.</p> |
|--|--|--|--|

## 2. Purpose of Evaluation

The purpose of the evaluation is to provide an assessment of the performance and effectiveness of USAID-funded SEE program, which is implemented by Junior Achievement Azerbaijan. The evaluation will assess each component of the program and identify its strengths and weaknesses.

SEE Program consists of the following components:

- Teacher Training and Seminars

- JA Economics Class
- Student Companies Project
- Management and Economic Simulation Exercise – National Competition
- Hewlett Packard Global Business Challenge – International Competition
- Global Business Ethics – Training Course
- Student Internship Project
- International Partnership Projects

### **3. Suggested Evaluation Questions**

#### **Impact questions:**

Does the program contribute towards the stated goals/outcomes?

To what extent students' attitude to business and economics has changed?

Are future education/career preferences influenced by the program?

What is female to male breakout among program participants?

To what extent are students benefiting from the program: how successful students are at the course?

#### **Implementation questions:**

To what extent is the quality of the textbooks/manuals satisfactory?

To what extent are teacher trainings effective?

How satisfactory is the curriculum?

What component of the program doesn't not work and why?

#### **Learning Questions:**

Which project components work better?

Which areas/projects need improvement?

What are the program's strengths and weaknesses?

What could have been done differently?

What are the good practice examples?

### **4. Methodology**

The purposes of the evaluation and the characteristics of the program determine the selection of methodology. Information will be collected through the following methods:

- Review of project documentation
- Program staff survey
- School administrators survey
- Teachers survey
- Student survey

Triangulation of data will be achieved through using various sources of information, such as teachers, administrators, staff and students. Semi-structured questionnaires will be used that also provide a certain space for general comments from the respondents. The information thus collected will be analyzed with the aim to answer the evaluation questions.

## **5. Evaluation Outputs**

Data for the evaluation will be collected by the JA contractors. Evaluation consultant will make input to the survey design and data collection. The consultant will also analyze the data with the help from JA staff. The consultant will be responsible for the primary final product of the evaluation - a report of approximately 10 pages in length summarizing the key findings of the surveys as well as other available information and providing answers to the evaluation questions.

