

Gyan Shala's experience of Adolescent Girls Education Program (AGP)



Program Duration: Year 2009-2015

Education Support Organization, Ahmedabad

Funding Partner: Packard Foundation, New Delhi

Gyan Shala Adolescent Girls Program of Education Support Organization, Ahmedabad:

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Executive Summary

Education Support Organization (ESO) launched **Gyan Shala Adolescent Girls Program (AGP)** in 2009 for the adolescent girls in urban slums of Ahmedabad city who either did not go to school or either dropped out of school without basic literacy and numeracy. The program started with a funding support from Packard Foundation. Initially the program was meant to enable the girls to either re-start their school education as per Indian school policy in grade 7-8, or improve their life prospect, particularly Reproductive and Child Health (RCH) outcomes due to improved education. The program also had a provision of 6 months of skill training, which would help in improving their earning potential.

After the completion of first three year cycle, the program review had been carried out by Gyan Shala and Packard team with the support of an independent expert Ms. Shireen Jijeebhoy.

This review, appreciated the efforts of the Gyan Shala program in terms of providing platform for sharing and discussion for the target group girls.

Ms. Jijeebhoy also shared that these girls staying in slums communities do not have their voice even in the families, and that is why the sharing platform provided at Gyan Shala classroom has major impact in their lives.

She had brought three more insights for the program. It has been found that program participants were not able to attend classes regularly because of their social and economic commitments. Secondly, majority of them were not found willing in continuing formal education or other formal employment related programs outside of their community. Thirdly, three year duration was considered long in their lives. They wanted to gain related to their lives in a shorter duration. These had led to change the program for two year duration along with a shift in the objective. The goal for the 2 year program was then revised as development of cognitive and behavioral skills and knowledge base corresponding to a typical grade 7 student, which could be considered as a reasonable preparation for effective adult life, without professional and external employment goal. That might, among others, lead to improved Reproductive and Child Health (RCH) outcomes.

In the last two years of the program, Gyan Shala has approached various agencies to carry out third party external evaluation so as to understand the program impact. The The Education Research Center of Vidya Bhavan Society (VBS), Udaipur has been involved in carrying out third party evaluation, while developing Baseline test in Language and Math and also gauging general understanding of Sciences and Social sciences in July- August 2013. In the Baseline test, VBS team carried out written and oral test in all 26 centers covering 411 program participants, with the help of 13 teams of investigators. The study revealed that although many students have basic Math and Language learning capability, they lacked better analytical capability in Language. Also, in comparison to language, the mathematics needs more attention as students had difficulty in dealing with abstract ideas and mathematical formulation.

In the Baseline test conducted by VBS, on the question of gender, in response of women's role and the place in the society, the response had a sense of patriarchal influence. No response revealed of any position that a women could occupy outside the shadow of male opinion. The final word for any position of women in the society, in most of the response, rest in the hands of male counterparts. This Baseline study assessed the needs of the program participants in the beginning of the AGP Batch 5 girls.

VBS team conducted comparative subject specific analysis of AGP Batch 4 girls in July 2014. The study had shown that the Gyan Shala girls out performed Non Gyan Shala girls within same communities in the range of 70%- 30% in the questions specific to basic Language and Math competencies. The detailed question wise report and scoring per group has been mentioned in the Annexure, with VBS report. There is no formal study to compare the competencies achieved by AGP participants with those other normal-Government school going girls, but a cursory review of the nature of questions asked in VBS test, and girls score would suggest that the level of attainment easily matches the performance of average grade 7-8 girls in Govt. schools, if one goes by the reports brought out by ASER.

The other agency, Gray Matters India Pvt. Ltd. was involved in program impact study with a methodology of comparing 'Treatment Group with the 'Control group'. The Treatment group comprised AGP Batch 5 completing their program in April 2015. The control group comprised girls with similar socio-economic profile from same neighborhood, (i) who had never enrolled in the AGP program and b) Dropout group, which consisted of the girls who had enrolled in the program but dropped out within 3-12 months after enrollment. Gray Matters, having experience of assessing learning outcomes in educational programs, used their standard assessments to test the learning outcomes (Gujarati, Math and Science) and the non-cognitive skills (Socio Emotional Well Being) of the participants in the program. The major conclusions of this comparative study are summarized in the Box below.

- 1) The learning outcomes across participants (in the study) are positively correlated with their non-cognitive ability.
- 2) On average, in Math, Science and Gujarati, the treatment group scored more than the control group and the dropout group.
- 3) The treatment group reported better non-cognitive ability than the control and dropout groups.

Post study analysis revealed two observations: a) Control group was younger (median age 12) than the treatment (median age 16) and dropout groups (median age 17).
b) The number of school going participants is also higher in control group (64%) than the treatment (22%) and the dropout group (10%). The difference in the participants across the groups has posed difficulty in attaching causal inferences.

Prof. Mrs. Leela Visaria, esteemed Development Researcher and honorary professor at Gujarat Institute of Development Research, had conducted a study of qualitative impacts of the program through her research lens, in June 2015. She and her team had designed a questionnaire (Sample has been provided in the Annexure) and interviewed 86 program girls in the age range of 13 to 18 years. Interviews were also conducted of equal number of the girls of the same age group in the same socio-economic slum settings, where Gyan Shala had neer run classes. She also conducted focused group discussions of the women teachers who participated in the program.

Here, the focus was on understanding the changes that participation in Gyan Shala education program had brought about in the adolescent girls, agency and empowerment as well as knowledge about reproductive health, this study compared these girls with those who were not exposed to such program on a range of indicators.

such as views on marriage, dowry system, autonomy and ability and freedom to take decisions on matters such money, talking to boys, mobility, views on health seeking behavior, violence, etc. In her study report, Prof. Leela has stated the following fact of city of Ahmedabad, which shows the importance of such intervention.

“It is important to note that even today in a city of Ahmedabad 55 percent of girls aged 12-19 and belonging to backward communities are not in educational institutes. One of the major reasons reported by girls for dropping out was that they were required for household work and to take care of younger siblings.”

- Prof. Mrs. Leela Visaria in her report.

She has also noticed the following important findings, which shows success of the AGP in terms of education of the program participant girls for reproductive and maternal health.

As far as health seeking behavior is concerned, large differences were noted between the two groups of girls with regard to a few issues such as how to handle child's excreta, drinking water and knowledge about contraceptives and reproductive health. Clearly, the group exposed to the Gyan Shala programme was better informed on these issues compared to the control group. The Gyan Shala group was also much better informed on precautions to be taken during pregnancy such as the need for good nutrition, for iron supplementation and for calcium. On certain other health issues such as washing hands after going to toilet, keeping cooked food covered, etc. there were no differences between the two groups.

All the three different assessment reports have noted the achievements by the program participant girls on various cognitive and non cognitive areas, but could not directly link all the achievements to the exposure to the program only. As an organization also, Gyan Shala believe that life is beyond classrooms and the knowledge- experience shared by the participant girls is a cumulative learning from the society and various media, along with their discussions in the classrooms.

Education Support Organization (ESO) and Adolescent Girls Education Program, Ahmedabad:

The investment of six years in designing, modifying and implementing the program has developed the organizational capability of ESO to understand and deal with complex issues of reaching to the Adolescent girls, so as to impact their lives. It also helped in widening the focus of the organization beyond pure academics to other social and life skills, related with non cognitive areas of development and very much necessary for the program participants.

Background

Education Support Organization (E.S. O.), Ahmedabad had started Gyan Shala program since year 1999 and designed and demonstrated a model for providing good quality primary education in urban slums of Ahmedabad for children starting from Grade 1 to Grade 7. Gyan Shala successfully covered more than 250 slum locations in Ahmedabad city.

While working in slum communities, Gyan Shala team met number of girls, who had either never went to schools or left studies without functional literacy and numeracy. These girls were sharing that they want to learn within their community. E. S. O. understood that pedagogy and delivery model for educating such girls should be different than for the children. So, in the year 2008, with a financial support from Packard foundation, E.S. O. first developed a design team for Gyan Shala Adolescent Girls Program (Gyan AGP), who then launched AGP program for the first batch in the academic year 2009-10.

In the initial phase, the objective of Gyan AGP was to prepare girls to learn first Language, Math, Science and Social Sciences up to Grade 7, where the participant girls would study for three academic years. This objective has been thought so as to mainstream participants into formal system in Grade 8.

In the academic year 2009-2010, the first batch of the girls started learning for three hours for six days a week at 12 slum locations.

Program Objective:

The objective of the program was to prepare the girls to lead their adult life with confidence in reading, writing and comprehending the first language as well as real life application of core concepts of Math, Science and Social Sciences. The important part of the objective was also to make them attain sub-set of skills which help them to know their self worth and also might lead to increase their social status.

Target Group and their profile:

Age range: Adolescent Girls in urban slums in the age range of 14 to 22 years. Few girls (less than 1%), having age in the range of 22-25 years were also involved, keeping the view of the participant's interest and needs.

Profile: The girls, residing in the urban slums, generally were coming from the families who earn their livelihoods by small businesses or labor work.

Their families were involved in small casual businesses like small vegetable/fruit/flowers selling, seasonal items selling (e.g. dry colors at the time of Holi-Dhuleti, rakhi making, flowers selling,

etc.), diamond polishing, rearing of goats, pulling hand carts, sorting of vegetables at big markets, cutting of fruits, working as help in cooking for being ceremonies etc.

Project Duration:

June 2009 to June 2015 is the total project duration, where the program duration for the first two batches had been three academic years while the program duration had been modified for two years for the last three batches.

Table 1:

Batch	Duration	No. of Classes in the beginning	No. of classes in the end	Total No. of Girls enrolled
AGP 1	Aug. 2009 to June 2012	12	8	392
AGP 2	Nov.2010 to June 2013	16	11	334
AGP 3	Sep.2011 to Sep. 2013	10	4	114
AGP 4	June 2012 to June 2014	11	10	247
AGP 5	July 2013 to July 2015	24	20	613

Curriculum Focus- Framework, Design and Modifications

Focus:

Initial focus of the curriculum was to prepare the girls to be mainstreamed in Grade 8, with the core subjects of Language, Math, Science and Social Sciences. After the first review, focus had been changed to prepare them for leading confident adult life. It meant that good command over language comprehension along with real life application of core concepts of Math, Science and Social Sciences.

In the beginning of the program, the design team was focusing on compressing the curriculum topics of Grade 1 to Grade 7 into the Gyan Shala AGP curriculum to be covered in two and a half years duration, as the last six months of the program had to be focused on achieving any vocational skill the participant is interested in.

Over the years, it had been realized that the target audience need to relate the topics with their life so as to understand them fully. Real life application of the fundamental topics was found very important for the program participants. There were many topics in the mainstream curriculum which were at the level of abstraction and limited real life application, (e.g. in Math, operations of fractions, geometrical definitions). In Language, instead of covering lessons of grade 1 to 7

textbooks, or teaching them various literature styles, focus was needed to expose them various styles of communication and command over reading comprehension and narrating their thoughts in a written form. In year 2012-13, the Gyan Shala AGP curriculum had been revised keeping in mind above mentioned facts.

Gyan Shala AGP Design team had started designing curriculum framework which led to a commitment that Graduate of their Adolescent Girls program should be able to achieve the following:

- 1) Able to comprehend any text in the first language
- 2) Able to express and write her thoughts
- 3) Able to do mathematical operations linked with life (Numbers, Operations, Measurement, Estimation, Time, Budgeting)
- 4) Able to communicate confidently
- 5) Understand value of time
- 6) Able to take care of her health
- 7) Able to organize and prioritize
- 8) Able to participate in family decisions
- 9) Able to understand Cause- effect with life context

Major Subjects:

There were four main subjects which were covered under AGP Gyan Shala curriculum namely, Language (Gujarati), Math, Science and Social Sciences. These subjects were covered so as to help the girls in mainstreaming into the formal system.

While redesigning the curriculum, the team decided to teach three subjects each day, and incorporate skill and creativity component every day for half an hour. Out of the four core subjects, it had been decided to teach Math and Science everyday and Language and Social Science alternately.

The participants were prepared first for reading and writing in Language and then Social science topics were covered either as a form of a lesson, story context, discussions and information. The three topics lessened the burden for teacher as well as more time was available for the three subjects in three hour time of the class.

Skill Development Module

As recommended by Ms. Shireen Jijeebhoy and Ms. Maggie of the Packard team and also from feedback from the field experiences, the AGP team had realized the need of ongoing skill module. Incorporation of SKILLS and CREATIVITY component in the timetable had lead to two major important achievements; a) Exposure to various experiences using multiple intelligences, which might have supported in gaining greater confidence in understanding and displaying their own abilities and b) Development of basket of skills including sub-set of vocational skills might

have lead to increase in the employability (Sub set of skills of vocational skills mean learning few simple stitch techniques and not actual stitching/sewing). The time had been kept for 30 minutes at the end of each class, out of three hours every day. Majorly, the skill module is composed of teacher guided activities such as communication and presentation, conversational English, creativity through clay, dough, crayons, drawing, discussing cooking recipes, drama/role plays, reasoning, mind teasers and group games, vocabulary building fun games, sub-vocational skills such as simple stitches with hand, threading, waxing, etc. beauty parlor skills, surveying etc.





Exposure Visits:

Some activities such as organizing visits out of the community is also found very educative experience. Girls of AGP Batch 4 had been taken to visit Kankaria lake, through experiencing Bus Rapid Transit System (BRTS) developed in recent years.

Involvement of parents and community members:

The attendance and regularity issues could not be solved without generating parental support. Involvement of parents had been already being initiated through parents' meeting and home visits by Field Supervisors. The parents were also called in the classrooms to make them understand and value about their daughters' achievements while organizing the displays of the items made by the girls. It had been also found that community members are not aware about the program activities, as the organization did its activities while maintaining the profile very low in the communities. Because of this, the program could not get sufficient support from the community members for improving attendance of the girls.



Program Aspects:

Enrollment:

As it was program meant for Adolescent Girls, the communities were identified by the field team in connection with Gyan Shala main program. Community meetings were organized at convenient timings suitable to discuss with the girls as well as their mothers. The meeting focused on the objective of the program, duration of the program, daily timings of the class, which is not clashing with their routine household responsibilities, major subjects covered etc. In the same meeting, it was also told that the girls will be given opportunity for vocational training in the last six months of the program. At the time of the enrollment, the girls were given the small test to check about their basic language and math skills, so as to decide whether to enroll them in the class or not. Initially the class size had been kept 25, but over the years, it changed to 15-18. Initially, enrollment was restricted to the girls who are either never enrolled or have been dropped out without functional literacy and numeracy. But, as program became known to many girls in the communities, many school going girls approached Gyan Shala teachers to enroll them, as they were not able to cope up with the studies, as lacking in foundational Language and Math. Gyan Shala Adolescent Program team felt that if they do not help such girls, they will not be able to continue their studies and will become dropout from their respective schools. So, school going

girls attending classes in the range of grades 6-8 have been joined in some communities. Such girls shared that they have developed better understanding and more clarity in concepts of Math such as Division, Place value, logic of operations, etc. In Science, they shared that in Gyan Shala classrooms, they have learnt reproductive system, and menstruation cycle related information in a proper manner compared to their schools. They also improved their reading and comprehension in Language.

b) Attendance:

Gyan Shala field team faced major challenge throughout the program duration in maintaining reasonable percentage of attendance. The batch wise average percentage of attendance, except AGP I batch, is as shown in the following table.

Table 2:

Batch	Duration	No. of Adolescent Girls	Average Attendance (in percentage)
AGP 1	Aug. 2009 to June 2012	392	-
AGP 2	Nov.2010 to June 2013	334	50
AGP 3	Sep.2011 to Sep. 2013	114	61
AGP 4	June 2012 to June 2014	247	59
AGP 5	July 2013 to July 2015	613	55

The reasons of modest attendance rates were such as household tasks, care of siblings as well as attending to earning members of the family such as serving food to brother/ father, supporting in family occupations which were seasonal like selling of small items before festivals, as well as illnesses or pregnancy/ motherhood in the family. Few girls were working as street sweepers who had to get up early in the morning and so they had to miss the class, scheduled in afternoons for the reason of taking rest as tired due to physical labor work in the morning. The field team also found adolescent age related reasons such as watching television serials in few cases. The girls did not want to miss their serials for attending classes. Field supervisors made one to one counseling of such girls, but did not succeed much.

The program field team came to know about the other priorities of the program participant girls, and tried to help them in explaining the importance of attending classes regularly while balancing their other role and responsibilities. Even after that, program participants had sacrificed their class time many times because of their other priorities, which led to low attendance percentage.

c) Dropouts:

Marriage or getting married was one of the major reasons of the dropout of the participant girls from the learning centers. Other reasons included such as supporting family occupations or performing household work, were also major reasons of dropout. The other reasons included migration to other locations, etc. In few instances, it has been found that parents strictly believed that the girls should not talk to other gender in the community and believed that if they allow their girls to attend classes, they might develop relations with boys. In one or two instances, it also happened that a girl from the community ran away with someone, as a result, the other girls in the community were banned to attend classes.

Sharing about their program experience:

Program participant Girls:

Girls shared that they have learnt many topics in each of the subject in the program. Most of them shared that Gyan Shala Adolescent program had deep impact in their lives, as before Gyan Shala centers in their own communities, they had problems in reading, writing comprehending and in many concepts of Math. They were not aware from where they could get help in all these also. While asking what they could remember from the sessions in their AGP classes, they could remember many topics related to their lives such as menstruation, maternal and sibling care, systems of the body, discussion about marriage, qualities of life partner, home remedies and spices usage for medicinal purposes, legal framework for domestic violence. Many girls shared that they will not be cheated, as they have knowledge of taking bills, they can test adulteration in spices. They also shared that they are more aware towards de-addiction measures, which will be useful in their families.

A very important achievement shared by many girls of the program is that their self confidence improved tremendously after their discussions in Gyan Shala classrooms. Some of them have shared that they can now decide in better way, as they have been exposed to discussions where they have to talk about any topic after taking into account positive and negative aspects, which led to think through in any situation.

The girls shared that they have become good listeners. Their confidence has increased because of confidence in how to talk with anyone. They have shared that their outlook and personality also got improved and now they can better maintain their relationship in their families also.



Teachers:

In Adolescent girls program, women having a graduation degree, residing in the same community or nearby locations have been trained as teachers and recruited. The teachers shared that while discussing the content in the classrooms with the girls, their own thoughts on various topics got improved. They also shared about dramatic improvement in their self confidence. They can go out alone now and handle any situation in the world outside their homes. Economically also, they could support their families from the earning from the program, although the amount of their emoluments was modest.

Teachers also shared that while discussing gender roles in the families, they were reflecting on their own status in the families and thinking about how they can improve on that as an individual.



Senior Teachers (Community - Field Supervisors):

Mrs. Meena Solanki and Mrs. Falguni Parmar shared that over the years, the girls have changed their attitude towards each other in the class, because of the activities undertaken in skill module. Instead of quarreling, the girls have started helping each other in the class. They want to perform their best in whatever activity has been given.

Mr. Mangla Thoser and Mrs. Trupti Shah, elderly senior teachers, shared that the girls enjoyed English conversational words the most in the skill module. Recipe of popular food items was also liked by many girls.

Skill module has definitely impacted attendance, as they enjoy learning and also playing in the activities taken as skill module. On a negative part, in few instances, they also noticed that the girls come only for that duration of the class and avoid other topics.

Senior teachers shared that as girls could not come regularly, they could not remember the previously learnt topics, which led to lack of interest in the class.

Design team:

Mrs. Vaishali Shah, Math subject Designer of AGP shares that she had found the program unique, as no one else would work for education of such girls. She believed that many organizations work for such girls, but do not focus on their education, as Gyan Shala was doing.

Regarding Math Subject teaching, she had experienced enthusiasm of the program girls for learning 'new' in Math. The program girls have shown interest in learning about topics such as Percentage, Fractions, Banking, Measurements, along with Math operations. The girls interested in such topics because of they could relate the problems of Math in their real life situations.

The negative part of the program was lower attendance as well as irregular class participation of the girls because of their social circumstances. As their attendance and regularity was not maintained, the program design team could not achieve desired learning outcomes.

Ms. Maitri Joshi and Mrs. Sejal Parikh, leaders of the AGP at different durations, shared that lower attendance have always frustrated them as coordinators of the program. At the same time, they felt re-energized while listening to the value addition experiences of the program girls as well as teachers because of the Gyan Shala learning centers.

Visitors:

Ms. Manisha Patel, working in the Activity center, Juna Gam, Hazira, during her survey visits on July 31- Aug.1, 2013 found that the girls liked their Gyan Shala centers, when she visited Bai Santok ni chali slum location. She found that the girls were answering to her questions without feeling of being shy or with any fear, and appreciated the knowledge gain in Gyan Shala classrooms. She found teachers' friendly approach has attracted girls.

Ms. Asha Tasiwal, from Vidya Bahvan Society, Udaipur has shared that Gyan Shala Adolescent learning centers have ignited thought processes of the participant girls. The girls want to move ahead in their lives because of their education.

Positive aspects of the program:

1. The program had provided opportunities to the girls to share their concerns, questions, issues with fellow girls as well as teachers and field supervisors.
2. The program was able to identify the needs of the participant girls and accordingly streamline curriculum, learning material, teacher guides and activities for the duration of two years.
3. The program succeeded in boosting confidence levels of the girls and changing their views in identifying role of women in prevailing socio- economic situations.

Limitations of the program:

1. The program could not streamline regular attendance of all the girls who have been enrolled, and could not prevent dropouts.
2. The program could not achieve as much in terms of academic excellence, which is one of the core outcomes of the other education programs of Gyan Shala.

Way Forward:

The experience of running this program for six years has built organizational capability and expertise. Education Support Organization will be able to run similar programs with specific as well as modified learning outcomes with better confidence for non-cognitive domains of education.

Third Party reports

Gyan Shala (AGP) Endline Study by Vidya Bhavan Society

1. Background research

Gyan Shala is an Ahmedabad based voluntary organization working with young girls and women in the field of education, health and quality of life. Under this programme, Gyan Shala is working on inculcating a critical thought process in this target group towards social concerns and health, along with improving the literacy level, and improving their skills in basic numeracy.

Gyan Shala runs 26 centres in make shift colonies in Ahmedabad. The age group catered to is between 14 and 25 years. Many of these girls are school drop outs at elementary level, while quite a few of them never got an opportunity to ever go to school.

In order to study impact of the programme, Vidya Bhawan, with the help of local investigator, conducted an endline test of 211 girls. Out of these, 110 girls have been associated with Gyan Shala intervention programme and the other 101 girls belong to those colonies only. But this latter group is not involved with Gyan Shala in any capacity. The objective of this study is to build an understanding at the level of mathematics and language to comparison with other group of girls at the level of mathematics in these colonies.

2. Methodology

For this study, based on level of grade 4, language and maths papers were made. They had 1½ hours for each. There was a gap of 20 minutes between the two papers. There were two invigilators on each of the centre to carry out the test. Core team of Gyan Shala and Vidya Bhawan had helped these invigilators during the data collection stage. The research team at Vidya Bhawan had made the test papers and did the analyses.

Test paper- Language

There were ten questions. Question 1, 2 and 10 required them to write sentences describing a picture, writing words they can associate with the picture, writing a story- using a series of pictures etc. Question 3 and 5 required them to fill the blanks, question 4 – to write three sentences about an animal, Question 7- they described their experience in a mela. Q 8 was in style of a Cloze Test where they had to fill in blanks, and in Q 9- they had to read a 12 line – story and answer the questions that followed.

Test paper- Maths

Like language, the maths paper was also based on class 4 level. It had 20 questions in all. First 16 questions tested their skills with numbers – like- addition, subtraction, multiplication and division (vertical and horizontal pattern). Q 2 and 6 were related to estimation. Q 3 was about identifying an odd number, in Q 5 they had to look at pictures and estimate area and perimeter. Q 4, 6, 12, 13, 16, 17 and 18 were all verbal problems based testing them on basic mathematical operations. In Q 14 they had to look at picture and decide how to go about applying subtraction. Q 15, 16 and 19 tested them on time, distance and length. Q 8, 9 and 10 tested their understanding of geometrical shapes.

Overall score in language: 68%

Overall score in mathematics: 50%

Analyses of Language Test paper

The scores of question 1 and 2 of language test which required them to comprehend and describe the picture are 44% and 50% respectively for Gyan Shala learners, and 20% and 27% the non-Gyan Shala learners.

Q 10 which required them to understand the sequence of pictures and write sentences on it, 35% former group and 5% of the latter group got it correct. This shows that most learners can look at the picture and decide the words and sentences that go with it. However when it comes to joining those sentences in a sequence and making a meaningful story out of them, their performance has been average.

Scores for questions of filling the blanks pattern (Q 3 and 5) were as these: 88% and 55% for Gyan Shala group and 48% and 15% for the latter group respectively. In Q 7, 47% of former and 14% was the score of the latter group where they described their experience of visiting a Mela. The Cloze test type question (Q 8) score was 42% and 8% respectively.

The scores of story for assessing reading comprehension were: 45% and 6% for respective groups. Here, a question was to be answered in 3-4 sentences, and 2 other questions were objective type.

If we look at the concept of linguistic abilities holistically then what comes out clearly is that most learners (both groups) have more comfortably performed in questions which are to be answered in 2-3 sentences, as compared to the questions where they had to form a story, or write their experiences. Even here, the Gyan Shala group outperformed the other group by 70% to 30%.

The test is conceptually divided into 6 parts, which are as follows:

1. Writing words/framing sentences for given pictures, and writing a story sequence based on pictures in 10-12 sentences.
2. Filling in the blanks in sentences.
3. Phrasing sentences about an object or experience of an incident.
4. Reading a situation and writing possible questions for it.
5. Completing the Cloze Test
6. Reading a paragraph of 10-12 sentences and answering the questions that follow

1. Comprehending the pictures and answering the questions based on them.

There were three questions in this category, first two asked them to write sentences describing the pictures, and the third one asked them to see the series of pictures and frame a story of 10-12 sentences. These questions were of 33 marks and performance was as follows:

Sr. No.	Distribution of Marks	Respondents
1.	21 to 30	27
2.	11 to 20	99
3.	1 to 10	50
4.	0	35
	Total	211

50% participants showed understanding of describing pictures in sentences, 15% were unable to attempt such questions successfully.

2. Writing appropriate word in the blanks:

2 questions were asked totaling up to 6 marks. The performance was as follows:

S.No.	Distribution of Marks	Respondents
1.	4 to 6	111
2.	1 to 3	41
3.	0	59
	Total	211

3. Sentence framing:

Describing an experience of an event or an object in 5- 6 sentences. 2 questions were asked totaling up to 14 marks. Performance was as follows:

S.No.	Distribution of Marks	Respondents
1.	1 to 14	32
2.	5 to 9th	69

3.	1 to 4	45
4.	0	65
	Total	211

Out of 211 participants 65 secured a null which shows that 30% participants could not even write 3-4 sentences on a given topic.

4. Framing Questions:

The participants were given a number of statements and they had to write a question for these statements. Such was the performance in this task:

S.No.	Distribution of Marks	Respondents
1.	1 marks	26
2.	2 marks	111
3.	0 marks	74
	Total	211

5. Cloze Test:

There was a passage with 10-12 sentences with a blank in place of every 8th word. They had to work out a suitable word for these blanks. It was a 10 mark question.

S.No.	Distribution of Marks	Respondents
1.	1 to 4th	64
2.	5 to 10th	62
3.	0	85
	Total	211

In this, 85% learners getting null shows that most of them are not able to comprehend the text they read.

6. Passage comprehension:

In this category there was a paragraph of 10-12 sentences. They had to answer the questions based on their reading of the text. Such was their performance:

S.No.	Distribution of Marks	Respondents
1.	1 to 3th	61
2.	4 to 7th	72
3.	0	78
	Total	211

Out of all the 211, 78 got a null which shows that after reading the text, still they were not able to answer the related questions.

7. Frequency of the marks secured in maths and language (Gyan Shala and other group)

Table 1

	Range of marks	Maths (53)	
		Gyan Shala	Others
1.	30 to 50	48	04
2.	15 to 29	31	18
3.	1 to 14	29	25
4.	0	2	54
	Total	110	101

Table 2

S.No.	Range of marks	Language (72)	
		Gyan Shala	Others
1.	40 to 70	60	3
2.	20 to 39	37	14
3.	1 to 19	13	48
4.	0		36
	Total	110	101

Non Gyan Shala-

- Maths : 54 students out of 101 score 0/53
- Language: 36 students out of 101 score 0/72

Maths test paper analysis

Mathematics test paper is analyzed on the following parameters.

A total of 20 questions were divided in 6 parts based on the various mathematical concept that these tested.

- | | |
|-----------------------------|-----------------------------------|
| 1. Understanding of numbers | 2. Estimation |
| 3. Geometry | 4. Graphic representation of data |
| 5. Distance and time | 6. Verbal Problems |

1. Understanding of numbers

In first of these there were 16 questions-which tested addition, subtraction, multiplication and division in different forms. The frequency of performance of learners in these questions is as follows:

S.No.	Frequency	Respondents
1.	10 to 16	65
2.	6 to 9	76
3.	1 to 5	06
4.	0	64
	Total	211

From all these questions learners found the multiplication based questions the hardest. 30% of them left it un-attempted. Change of pattern also resulted in relatively weak performance like:

2. Estimation

In this category there were two questions- one asking how many bowls will be required to fill the jug, and second asking them to judge which amongst the two things shown in the picture- a glass and a bowl- will have larger volume.

This was a 4 mark question and the performance was as follows :

S.No.	Respondents	Marks
1.	43	4
2.	31	3
3.	34	2
4.	26	1
5.	77	0
Total	211	

Out of those 77 who scored a null, 45 had left it blank which shows that the language of question was beyond comprehension.

3. Geometry

In the third category there were three questions judging the understanding of geometrical concepts. 6 marks were allotted to these questions, and in which such was the performance.

S.No.	Respondents	Marks
1.	44	5
2.	54	4
3.	29	3
4.	10	2
5.	05	1
6.	69	0
Total	211	

Out of the 69 who obtained a null, 40 did not attempt these questions.

4. Graphical representation of data

The graph given in these questions showed marks obtained in each subject. They had to study it and answer questions totaling up to 4 marks.

Sr. No.	Respondents	Marks
1.	43	4
2.	34	3
3.	36	2
4.	11	1
5.	87	0
Total	211	

5. Distance and time

In these questions they had to read a situation and estimate time for given distances 4 marks were allotted to these questions.

S.No.	Respondents	Marks
1.	01	4
2.	12	3
3.	14	2
4.	35	1
5.	149	0
Total	211	

In this series 70% of the learners got a 'null'. It can be said that the statement running into 3-4 sentences was possibly beyond comprehension.

6. Verbal Problem

In this series there were 9 questions related to mathematical operations, totaling to 16 marks.

S.No.	Frequency	Respondents
1.	10 to 16	52
2.	5 to 9	44
3.	1 to 4	15
4.	0	100
	Total	211

In these questions 100 learners got a 'null' which reflects that 50% of learners found the language beyond comprehension.

In the entire paper, there was one question of fraction where they were required to represent the given fraction graphically 40% of learners attempted it, out of which 20% got it correct.

Error analysis - Language

- Learners find it difficult to phrase sentences. They lack linguistic understanding in connecting sentences.
- Learners understand the questions, but if the question stretches into many sentences then they only manage to write a word, or incomplete sentences.
- Where they are required to do picture comprehension identifying related words is a manageable task. While phrasing complete sentence describing those pictures is where they get stuck.
- In story writing they only described the action of the pictures in isolation. They failed to connect the sequence among the picture or sentence.

Error analysis - Mathematics

- Done subtraction instead of addition
- Concept of borrowing not there where it was needed in addition and subtraction sums.
- Did addition or subtraction where multiplication was expected.
- In the sum $109 + 303$, answer arrived at is 1312 reflecting no borrowing was done by girls.
- In the following sum, $927 - 354$, child had actually added 7 & 4 and combine 2 & 5 to arrive with the answer, 2511. In an another copy, we found answer 573 where child had subtracted 4 from 7 but added 5 & 2 and then wrote 5 as it is.
- While subtracting 109 from 209, we received answer 98, in which child was copying the question.

- We found that students are not able to reflect their understanding of fraction with the help of denominator and numerator and they are not able to do pictorial representation of it. They are not able to make any meaning of mixed fractions.
- Students were attempting sums of addition, subtraction, multiplication and divisions successfully if they were written in traditional method but if change in format is introduced (either vertical or horizontal), they are unable to make meaning out of it.
- Students are able to do operations (addition or subtraction) with small digits, but get confused when they are supposed to borrow or lend, and ends up in avoiding use of it.
- Students were able to do multiplication of three-digit with one digit number, but in case of doing multiplication with two-digit number, and then they were not able to understand, hence didn't proceed.
- In case of word problems, students were able to understand and attempted successfully two-lines word problems but they faced problem in understanding and identifying the appropriate/expected operation in case of three to five lines word problems.

Hence, from the above error analysis we can conclude that the children are able to understand the basic rule of operations but they have problem with place value, that how the value of a same digit changes if we move its place. This is clearly evident as students are not able to do borrowing/lending sums and become disoriented in the case where the format of writing sums has been altered from the previous one (in which students were comfortable). Also, the lack of reading capability hinders students from attempting long word problems in which they are expected to comprehend and identify the appropriate operation.

Verbal Problem Analysis

Most of the students are able to write name of the given image, write sentences?? Short or long?? and able to express their own experience in 4 or 5 lines. But when they are asked to write a story consisting 10 – 12 lines, in which they were expected to go through a series of pictures and understanding it, they were not able to do that efficiently. The understanding of writing a story needs to strengthen further.

Overall findings:

Talking about linguistics abilities, most learners are able to find words and brief sentences related to pictures, and describing their experiences in 4-5 sentences. However they are unable to frame 10-12 sentences based on the sequence of the pictures given.

In maths, if given in conventional form, then they manage to do simple mathematical operations, otherwise not. Besides, they haven't yet built an understanding of coming around word problems stretching to 2 to 4 sentences.

The Adolescent Girls Program Study Report by Vidya Bhavan Society

Background to the Study: Gyan Shala, an Ahmedabad based education support organization, had taken the initiative to improve upon the quality of life of adolescent girls and young women, living in slum area of Ahmedabad. Their program tries to improve their literacy and mathematical skills and develop their sense of social rational thinking. This initiative is named as the Adolescent Girls Program (AGP). The AGP program has 26 centers across Ahmedabad city slums and has been operational for the last three years. Presently there are 599 students enrolled in these centers. The students are in the age group of 14 to 25 years. Most girls are early school dropouts and some of them have never even formally studied in a school. Vidya Bhawan conducted a baseline study of the program to get a snap shot on student's learning ability and their understanding and awareness on issues related to day-to-day life. This base line would be followed by an end line based on the same principles.

Purpose of the Baseline Study: The objective of the study is to the current capability of students in basic mathematics, basic reading and writing in Gujarati language and in their ability to deal with common life situations. The study included all children in the 26 centers.

Sample Size: The baseline study planned to cover all students presently enrolled. However, on the day of the test only 411 students were present to take the test.

The Methodology:

The study team administered the test in two forms in stages. Students took written test in language and mathematics while the social and science test was administered orally. The written paper was of two hours. In the oral test, each student had to respond to a set of questions. Two interviewers recorded the response of the students separately. The responses were later collated into a single response based on consensus view of the investigators. Difference of opinion if any, was recorded separately. The study team considered these and graded the responses appropriately. The data collection took at each center one entire day of two investigators.

There were 13 teams of 26 investigators trained for data collection including the specific procedures they had to follow. The investigators were from Vidya Bhawan Udaipur and Hazira, with support from Gyan Shala Core team. Vidya Bhawan domains experts helped the study team design the study and prepare the test paper. The tools for the study were developed in Hindi and piloted. These were recreated in Gujarati and piloted. The pilot test was conducted in the locations that resembled the social setting of AGP centers. The responses from the pilot were analysed and the tools finalised for the purpose of data collection.

The language and the mathematics paper were at grade-3 level. The general, social and science questions were from day-to-day life experiences. To minimize loss of information, especially for oral test, the responses were recorded and graded immediately after the observation.

The Nature of Test Paper: The written language paper had five questions. The first two questions tested student's ability to write names of objects and animals shown in illustrations. The second tested the ability to construct Gujarati words using a given alphabet. The third question expected choosing the appropriate word from the given to complete the sentence with the blank. The fourth question required writing a sentence to elaborate the action in the given

picture. The fifth question expected the student to read and respond to simple comprehension questions.

The mathematics paper also pitched at class III level included counting, number sense, compression and decompression of numbers, algorithm, verbal problems and simple estimation of measures.

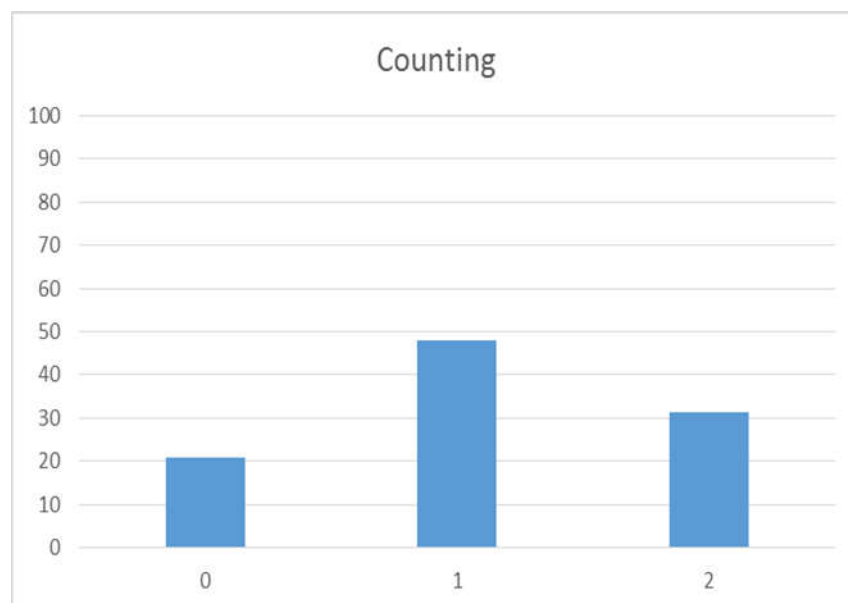
The oral paper tested student's skill to think about the social and natural phenomena that they come across in their day-to-day living. It covered many issues like general awareness on health, given social aberrations and emergencies.

Findings: The paper looked at learning level reflected in the overall average score. More detail analysis of each question gave an idea on reading, writing and basic mathematical skills. The rubric created for the purpose of the study helped assessing the performance.

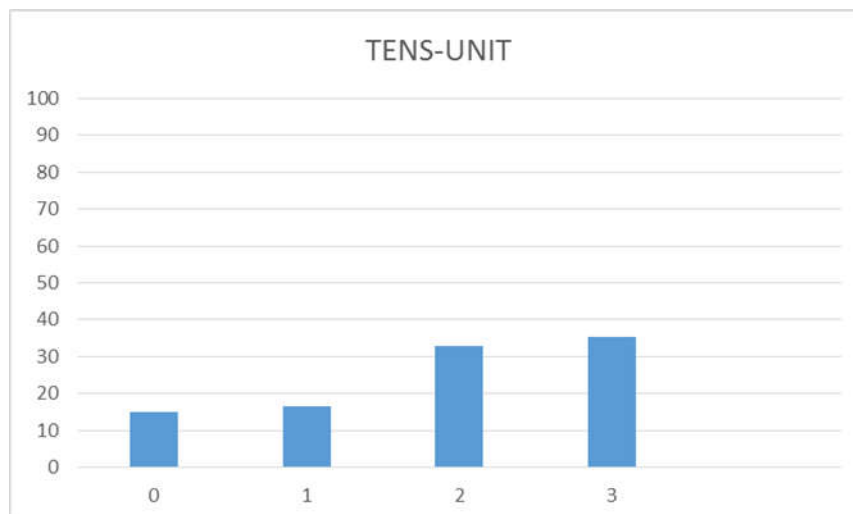
Mathematics:

The average mark in mathematics was 52%; about 60% students reached the average marks or were above the average score. Of the remaining students, ten percent (10%) had either have not attempted any question or have all the answers wrong. In the entire paper, twenty percent students have scored above 80%.

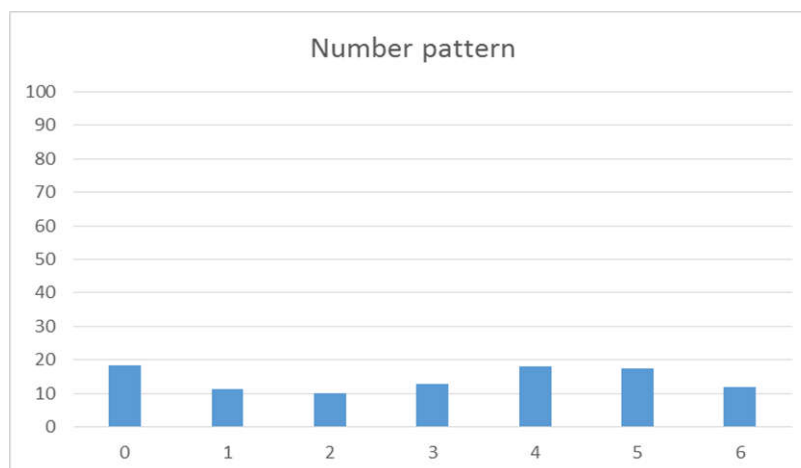
The study went into further detail on student's performance by looking at each set of questions that represented one of the conceptual areas on mathematical understanding. The study found 31% students with ability to count as they have successfully answered all the questions on counting; about 48% students could solve 50% the questions on counting. Most of the mistakes in the question could be traced in the question that required comparing the given set of two objects. About 21% students either could not solve the question or had not attempted any questions on the counting.



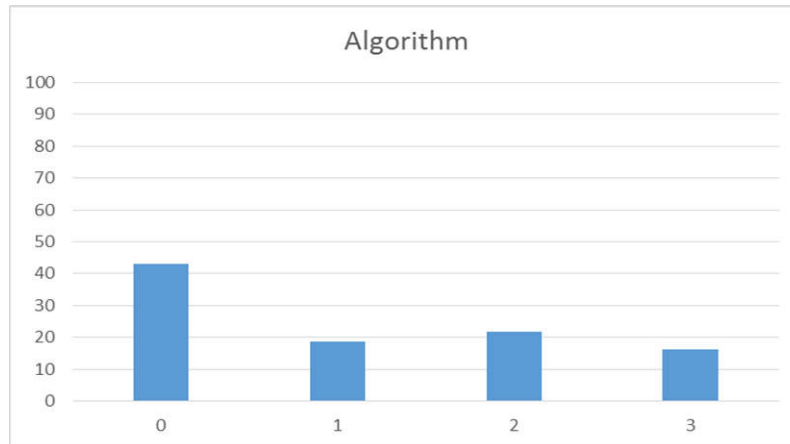
The ten and unit question had three questions of which 35% students solved all the problems, 33% solved two questions, 17% solved one question and the remaining 15% could not solve any question or have left the question. Most of the students could not solve the picture based question on counting that had a bundle of ten pencils and three more pencils for counting.



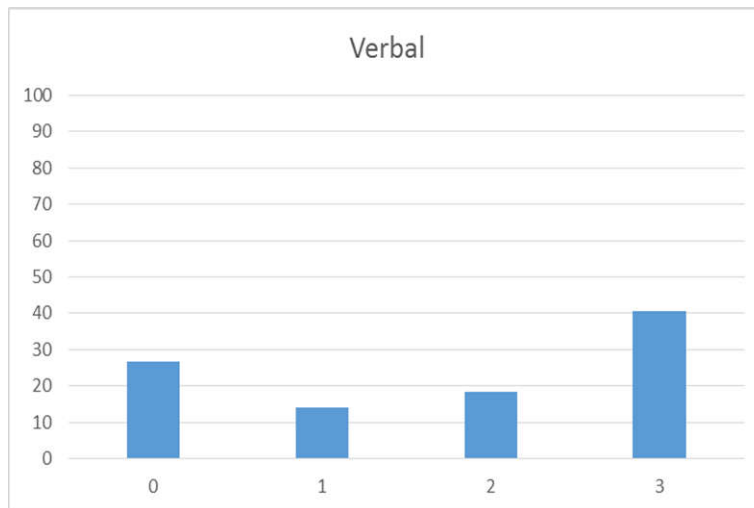
The number pattern had six questions. Number of students who solved the entire question in the number pattern section was 29%. Another 30% solved 50% questions while 18% could not solve any question in the section. The performance need flagging given that the question was simple and the response fell below the expectation level. These questions reflect development of early mathematical logic.



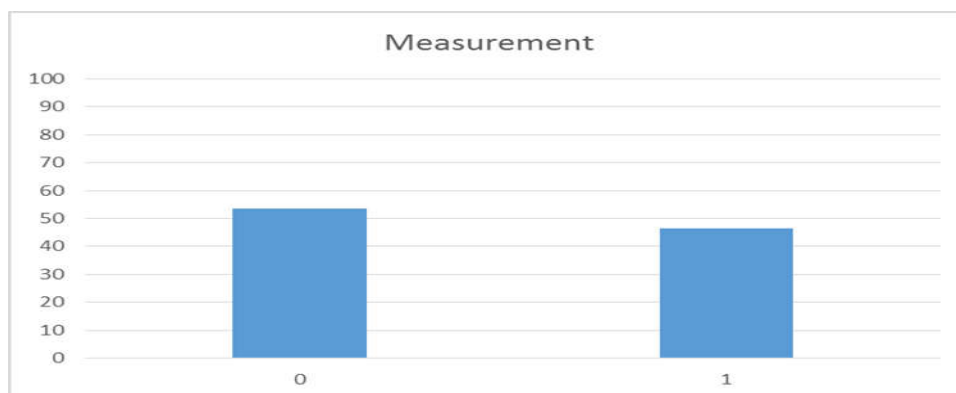
The remaining two sets of question required a higher level of competency in primary level mathematics as it involved reading with understanding and simultaneously dealing with some abstractness of mathematical concept. About 43% students could not solve any problem on algorithm despite simple questions on addition, subtraction and multiplication. Questions in the section had format not common in the classroom. It had a vertical format.



The verbal section had three questions. They were simple question on addition and subtraction. In this section 40% students correctly solved all the questions while could not solve any question in the section.

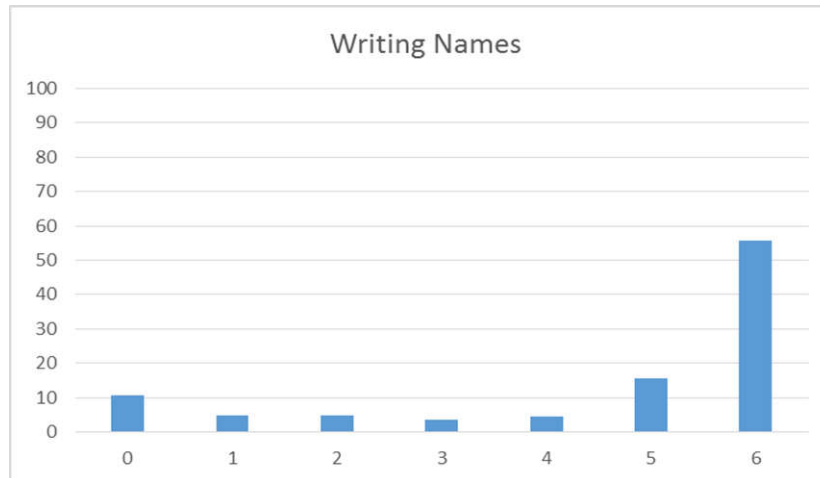


In the question on measurement, more than 50% students drew blank. The question required guessing the length of the pencil on the basis of the size of the eraser illustrated in the question.

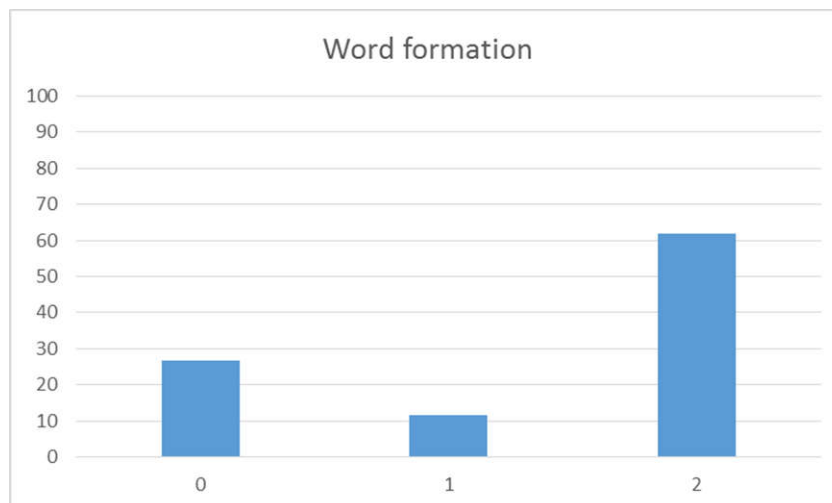


Language:

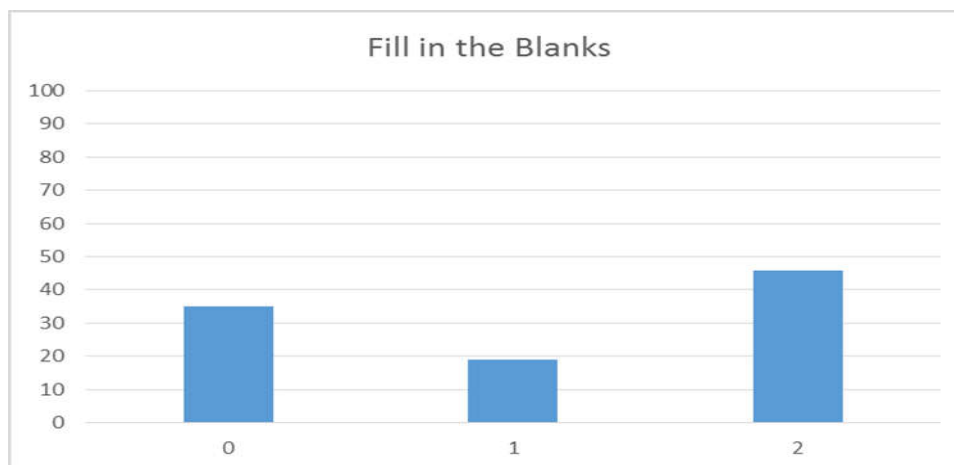
The average score in language was 63%. About 53% students have scored above the average marks. Question wise analysis showed that 70% students could write names of all the words. About 10% in the section on writing names of the given object could not correctly writing a single word.



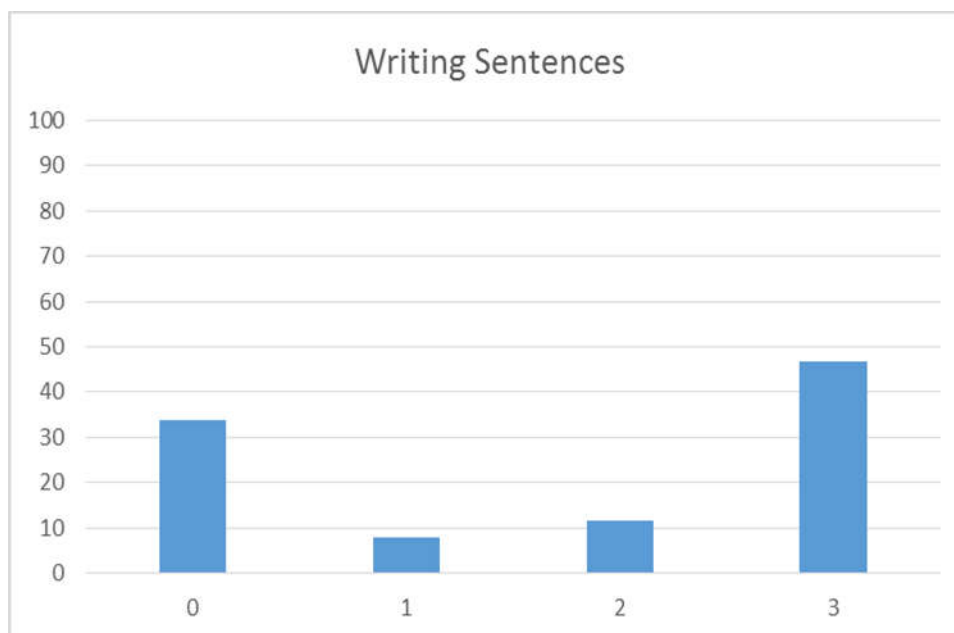
As one moves towards question requiring better analytical ability in language, there seems a steady decline in the pattern of the average score. Only 62% students could think of two words around a given alphabet while 27% could not correctly write even a single answer.



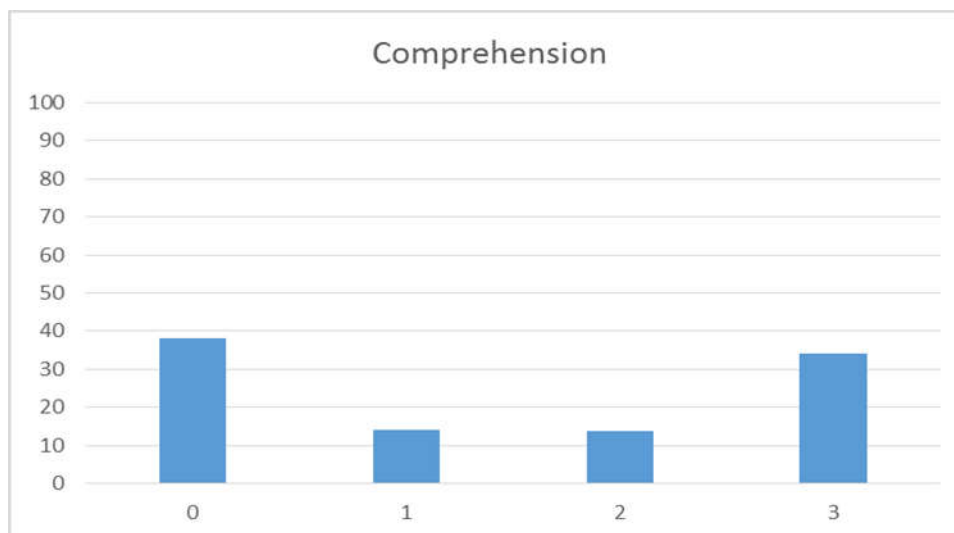
In another question on filling in the blanks with appropriate words from the list of words given in the question, 46% could correctly choose the right word from the list, while 35% had all the answers wrong.



In the question that tested for ability to write sentences, about 47% could correctly write one sentence each describing for the set of the three pictures, while 34% could not write even one sentence on any of the given picture.



The last question in language had simple comprehension exercise. About 38% students could not write any answer while 34% had correctly responded to all the questions in the comprehension section.



The social and science test paper:

This section of the test was an oral test. The study team randomly selected 130 responses and examined the responses in detail to build a larger picture of what reflected the respondent's mindset on a given situation. The report examines each situation and tries to draw its interpretation mainly directly from the recorded response of the students, and also by looking at the experience that the test takers have shared during and after the test taking or have recorded in their individual reports. The interpretations drawn in this section of the report have an element of study team perception.

In response to a question on how water could be treated to make it suitable for human consumption, majority of responses reflected what was available in the respondent immediate environment. Either most of the respondents talked about filtering the water through conventional non-motorized methods like using clothes and other conventional method or they talked about storing the water in portable utensils without any treatment. Income alone cannot justify the response. Most of the participants have had access to modern electronic gadgets at home. Some households even have refrigerator and washing machines. Many households owns two-wheelers motorized vehicles. Choice of cleaned drinking water is more a matter choice rather than having any to do with family income.. Awareness towards preventive health is an important issue that the study team think could emerge from this response depending on upon many other considerations including the quality of water in the area.

In response to a question that looked for answer on the negative impact of excess physical work on the general health of individuals, majority of the respondents talked of direct counter indicators of physical exertion on health. They used different clinical terminologies to elaborate upon their answers like lowering of blood pressure, weight loss, fatigue etc. One conclusion is that the community as a whole is aware of stress on the physical wellbeing in case of physical beyond a point. The response also point that the respondents collectively experience such situation quite frequently.

Related to the above question was regarding the steps that they could take when they face some common ailments like indigestion. Majority of the response had referred to taking help from the modern medicine, though, some of the response had home remedies as part of it, and it seems natural. The community in general is more scientific in their remedy to the disease but not reflected much thought on the preventive measures.

Assessing one's social situation and responding to a given situation do at times reflect upon the relation between community and individual. Based on this response, the study team tried to construct participant's view particularly on their relation with the community. Participants generally look for individual solutions to a solve problem that effects the community at large. The assumption is drawn from the response on question that gave respondent's opportunity to think of a solution for dealing with leakage in the community water supply pipe. Most of the respondent gave individual solution to the problem rather than by involving the community.

The students see a bright future for themselves is evident from the choices that they have made for their future. There seem lots of hope and aspiration in the minds of the respondent. The vocations have a long list that includes schoolteachers, doctors, beautian etc. This positive indicator needs further exploration.

On the question of gender, in response of women's role and the place in the society, the response has a sense of patriarchal influence. No response thinks of any position that a women could occupy outside the shadow of male opinion. The final word for any position of women in the society, in most of the response, rest in the hands of male counterparts.

Most of the respondents have a sense of taking legal route to deal with any crime against them as a woman. There is also element of involving family and the community too.

On the question on personal hygiene when dealing with women specific situation most of the response deviated from the most basic solution. This is in reference to use of sanitary napkins, only 18% have referred to it. Rest of the solutions comes from social myth rather than any rational, scientific reasons.

Conclusions: Overall performance shows learning threshold for most of the students except for small number of students whom the study found to have difficulty in reading even the simple text. Most of students have ability to read and write in the given text in Gujarati and have good grounding in the basic mathematical concepts. In comparison to language, the mathematics needs more attention as students had difficulty in dealing with abstract ideas and mathematical formulation.

Review of an innovative Adolescent Programme By Prof. Leela Visaria

Introduction

According to the 2011 Census of Gujarat, overall 92 percent of adolescent girls in the age group 15-19 in urban areas report themselves as literate. But nearly one-third to one-half of them discontinues schooling by age 15. Although reasons for dropping out vary between rural and urban areas, according to the National Sample Survey Organisation (NSSO)'s 66th Round (2009-10), 52 percent of girls in urban Gujarat dropped out because they were required to attend to the household chores or due to marriage. In fact, the National Family Health Survey 3(NFHS) conducted during 2005-06, data showed that in Gujarat among the women in the age group 25-29, one in three of them were married before the legal minimum age of 18. Marriage and discontinuation of schooling works both ways – girls drop out from school once they are married and because they drop out, they get married at early age.

Gyan Shala, an Ahmedabad-based Education Support Organisation, started a pilot project in slum areas in Ahmedabad for adolescent girls who dropped out of school or never attended school with twin objectives. One objective was to provide them broadly grade 6-7 level education that would enable them to re-enter school system. The second objective was to provide some skill based training which would facilitate income earning opportunities and along with that provide them broad-based life education that would prepare them for married life, enhance their agency and negotiation skills.

Research Design and Methodology

In order to gauge whether the programme brought about changes in adolescent girls capabilities, Gujarat Institute of Development Research, Ahmedabad undertook a quasi-experimental study in Ahmedabad during 2015. From the complete list of girls who had participated in the Gyan Shala-run classes for adolescent girls, after removing from the list girls/women who were either older than age 19 or younger than age 12, we interviewed half or 86 girls aged 12-19 from the truncated universe. For the control group, girls were selected from the same general area where Gyan Shala did not ever hold classes for adolescent girls. We identified equal number of girls of the same age group from these areas by visiting the families. The selected girls had either dropped out from school, or had never attended school and also included a few who were pursuing their studies in schools in the neighbourhood.

A structured questionnaire was prepared and piloted in a nearby area. Feedback from the pilot was used to revise the questionnaire. Same set of questions were canvassed among both the study groups. In addition, a few focus group discussions were conducted amongst the adolescent girls who had attended the Gyan Shala classes. Also, a few teachers were interviewed in depth.

Findings

Since our focus was on understanding the changes that participation in Gyan Shala education programme had brought about in the adolescent girls, agency and empowerment as well as knowledge about reproductive health, we compared these girls with those who were not exposed to such programme on a range of indicators. Comparative findings on some of the key indicators such as views on marriage, dowry system, autonomy and ability and freedom to take decisions on matters such money, talking to boys, mobility, views on health seeking behavior, violence, etc. are shown in the following Tables.

As shown in Table 1, the average age of adolescent girls in the experiment and control groups was around 16 years. Since Gyan Shala programme was held in predominantly OBC communities, 93 percent belonged to backward castes such as-- . In the control group one third of girls belonged to scheduled caste and four in ten belonged to the OBC castes. Also there was a difference in the current student status of the girls in the two groups. As opposed to 19 percent Gyan Shala group was currently attending schools, 45 percent of the girls of the control group was reportedly attending schools. On average girls were educated up to 7 years. It is important to note that even today in a city of Ahmedabad 55 percent of girls aged 12-19 and belonging to backward communities are not in educational institutes. One of the major reasons reported by girls for dropping out was that they were required for household work and to take care of younger siblings.

In terms of participation in work, the two group of girls differed. While 15 percent of the girls in the Gyan Shala programme were engaged in some fairly regular economic activity such as selling vegetables/fruits, or engaged in domestic work, 9 percent of the girls in the control group worked as casual wage labourers.

Views on Marriage and Dowry System

We found no difference between the two group of girls in the ideal age at marriage for girls, which was close to 20 years. However, of those amongst them were married, the reality was different; whose mean age at marriage was 17 years. To a question on the disadvantages of early marriage, responses of the two groups were different and brought out the impact of discussions held in the Gyan Shala programme on the subject of ideal age of marriage. Firstly, nearly twice as many girls in the control group did not respond to this question as the Gyan Shala group. Secondly, a higher percent of girls exposed to Gyan Shala programme was aware of adverse impact on reproductive health of girls if married early compared to the control group.

Interestingly, although 75-80 percent of girls were against dowry system, they were aware of the dowry practices in their own communities and were aware that their views did not matter in negotiations carried out between the elders in the natal and conjugal families. During the focus group discussions the girls did indicate that issues such as marriage, dowry were brought up and discussed in the Gyan Shala sessions but they had very limited agency to voice their views on such matters.

Girls were asked questions related to their freedom to visit or go to market, visit relatives, or friends alone on their own. Surprisingly, a smaller percentage of girls exposed to Gyan Shala programme, compared to the girls in the control group enjoyed such freedom as shown in Table 3. We need to probe further whether this is due to some selectivity of the girls in the two groups, or whether the subtle caste differences are influencing the variations in the degree of freedom.

Questions on health seeking behavior and on personal hygiene including menstruation elicited quite different responses as shown in Table 4. As against nearly half the girls exposed to Gyan Shala reported that they knew about menstruation, only one in four from the control group reported that. Given the housing conditions in which all the girls live, maintenance of hygiene during periods is a problem for a significant minority of girls. Although nearly equal percent of girls from the two groups reported relying on cloth for protection, vast majority of the girls of Gyan Shala group reported that they throw away the cloth they used rather than wash and reuse. This was a surprise to us.

As far as health seeking behavior is concerned, large differences were noted between the two groups of girls with regard to a few issues such as how to handle child's excreta, drinking water and knowledge about contraceptives and reproductive health. Clearly, the group exposed to the Gyan Shala programme was better informed on these issues compared to the control group. The Gyan Shala group was also much better informed on precautions to be taken during pregnancy such as the need for good nutrition, for iron supplementation and for calcium. On certain other health issues such as washing hands after going to toilet, keeping cooked food covered, etc. there were no differences between the two groups. Similarly, overwhelming majority of girls from both the groups said no to any form of domestic violence.

The girls exposed to the Gyan Shala programme have better knowledge and understanding of some of the health related issues compared to those who did not participate in the programme. However, it is difficult to say whether some of the knowledge was acquired from the exposure to some schooling where in primary level classes hygiene and other issues are incorporated in the studies, or acquired through the exposure to media like television.

Table 1: Individual characteristics of respondents

Sr. No	Details	Gyan Shala	Control	Total
	Number of girls	86	87	173
1	Average age of the Respondents	16.3	15.5	15.9
2	Average no. of years of schooling	6.8	7.7	7.3
3	Occupation			
	Vegetable/fruit vendor	5.8	0.0	2.9
	Domestic work for others	5.8	1.1	3.5
	Working as cook or for caterers	1.2	0.0	0.6
	Casual wage labor on road or at construction	2.3	9.2	5.8

	sites, etc.			
	Self-employed as artisan/sewing	1.2	5.7	3.5
	Home-maker/house wife	64.0	35.5	49.8
	Student	18.6	44.8	31.8

Table 2: Views on marriage and dowry system

Sr.No	Details	Gyan Shala	Control	Total
	Number of Girls	86	87	173
1	% Married Girls	4.7	4.6	4.6
2	Mean age at marriage of those married	17.0	17.2	17.1
3	Ideal age for marriage(mean)	19.7	19.9	19.8
4	Disadvantages of early Marriage(multiple)			
	Difficulty in doing work	34.0	32.7	33.3
	Forced to discontinue education	6.2	7.1	6.7
	Difficulty during pregnancy, sexual relations,	15.4	8.2	11.8
	Tensions and conflicts in conjugal home	12.4	6.1	9.2
	Other	7.2	2.0	4.6
	Don't Know	20.6	41.8	31.3
5	% who would be given choice in marriage partner	40.7	71.3	56.1
6	Views on dowry system			
	% who think dowry should not be practiced	77.9	74.4	76.2
	% who think it is okay to give or receive dowry	10.4	20.9	15.7
	Don't know	9.3	1.2	5.2
7	% who report that dowry is practiced in their community	26.7	29.9	28.3
9	Measures to remove dowry(multiple)			
	Report to police	10.0	7.3	8.7
	It should be totally banned	16.7	22.0	19.2
	People should be punished for this	1.1	1.2	1.2
	Elders should get together to remove it	21.1	14.6	18.0
	Don't know	46.7	52.4	49.4
	Others	4.4	2.4	3.5
	Total(Responses)	100(90)	100(82)	100(172)

Table 3: Autonomy with regard to mobility, decision about money matters, talking to boys.

Sr. no.	Details	Gyan Shala	Control	Total
	Number	86	87	173
1	Allowed to go to following places			
	shop or market inside the chawl/ neighbourhood?			
	Alone	68.6	85.1	76.9
	Only with someone else	29.1	13.8	21.4
	Not at all	2.3	1.1	1.7
	Visit friend or relative inside the chawl/ neighbourhood			
	Alone	69.8	82.8	76.3
	Only with someone else	26.7	12.6	19.7
	Not at all	3.5	4.6	4.0
	Visit friend or relative outside chawl			
	Alone	40.7	65.5	53.2
	Only with someone else	52.3	28.7	40.5
	Not at all	7.0	5.7	6.4
	Visit places of entertainment			
	Alone	7.0	10.3	8.7
	Only with someone else	62.8	57.5	60.1
	Not at all	30.2	32.2	31.2
	Visit health facility			
	Alone	16.3	21.8	19.1
	Only with someone else	83.7	78.2	80.9
	Not at all	0	0	0
2	% who can commute alone in bus/auto/train	18.6	26.4	22.5
3	% who can talk with boys who are not relatives	39.5	35.6	37.6
4	Who in the family takes following decisions?			
	About your friends			
	Respondent only	66.3	79.3	72.8
	Mother/sister	23.3	17.2	20.2
	Father/brother	5.8	0.0	2.9
	Jointly	4.7	3.4	4.0
	About money spent by you			
	Respondent only	64.0	70.1	67.1
	Mother/sister	23.3	27.06	25.4
	Father/brother	4.7	0.0	2.3

	Jointly	8.1	2.3	5.2
	About buying your clothes			
	Respondents only	29.1	28.7	28.9
	Others only	43.0	46.0	44.5
	Jointly	27.9	25.3	26.6

Table 4: Views on menstruation

	Details	Gyan Shala	Control	Total
1	% who know about menstruation	98.8	87.4	93.1
2	Average age at menstruation	13.4	13.7	13.6
3	Why does menstruation occur to girls?			
	Do not know	54.7	74.1	64.1
	Physical process	37.2	23.5	30.5
	Other	8.1	2.5	5.4
4	% report having problems in maintaining hygiene	30.5	22.2	26.6
5	What do you use during periods?(multiple)			
	Cloth	54.1	48.6	51.6
	Sanitary napkins	44.7	50.0	47.2
	Other/Both	1.2	1.4	1.3
6	Where do you dry the cloth?(N)	46	36	82
	Outside the house/in open sunlight	15.2	61.1	35.4
	Inside the house/in dark	2.2	8.3	4.9
	Throw it away	82.6	30.6	59.8

Table 5: Health seeking behavior

	Details	Gyan Shala	Control	Total
1	Knowledge of Precautions taken during pregnancy(multiple)			
	Don't know	6.5	21.6	13.2
	Enough rest	41.4	42.5	41.9
	Proper nutrition	36.7	35.1	36.0
	Iron supplement	9.5	0.0	5.3
	Calcium tablets	6.5	0.7	4.0
	Tetanus injection	2.4	0.0	1.3
	Other	5.9	0.0	3.3
	Total (Responses)	100(169)	100(134)	100(303)
3	Wash hands with (after using toilet)			
	Only with water	0.0	1.1	0.6
	Soap & water	98.9	98.9	98.9
	Other	1.2	0.0	0.6
4	Clean child immediately after toilet?(yes)	95.1	97.3	96.2
5	When do you clean it?			
	Immediately, by covering it with mud	41.7	14.3	31.6
	Immediately, without covering it	33.3	85.7	52.6
	After sometime, by covering it with mud	25.0	0.0	15.8
6	What is used to fetch water from matka?			
	Dipper/doya	51.2	37.9	44.5
	Glass used to drink water	29.1	43.7	36.4
	Others(matka with tap)	19.8	18.4	19.1
7	% having knowledge about contraception	38.4	23.0	30.6
8	% having knowledge of Reproductive organ diseases	56.6	39.5	48.2
9	% having knowledge of HIV/AIDS	19.8	24.1	22.0