ANNEX H:
EEA India (QUEST) Evaluation Reports

EDUCATION & EMPLOYMENT
ALLIANCE

QUEST Alliance

Evaluation of the
Computer-Assisted
Learning Programme

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Content

List of Abbreviations

APF	Azim Premji Foundation
B.Ed	Bachelor of Education
BRC	Block Resource Centre
BRP	Block Resource Person
C.Ped	Certificate course in Physical Education
CAL	Computer Assisted Learning
CRP	Cluster Resource Person
D.Ed	Diploma in Education
DIET	District Institute of Education and Training
HM	Head Mistress/Master
KSQAO	Karnataka School Quality Assessment Organisation
M.Ed	Master of Education
NCERT	National Council of Education Research & Training
NCF	National Curriculum Framework
PUC	Pre University Certificate
QUEST	Quality Education and Skills training
SC	Schedule Caste
SDMC	School Development & Management Committee
SSLC	Secondary School Leaving Certificate
ST	Schedule Tribe
TLM	Teaching Learning Material
UNESCO	United Nations Educational, Scientific and Cultural Organization

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Chapter I: Introduction

The Quality Education and Skills training (QUEST) Alliance supports initiatives that help improve the quality and relevance of basic education and skills training for vulnerable and marginalized children and youth through advocacy and provision of funding support. The Computer Assisted Learning (CAL) programme in Bangalore, which was implemented by Azim Premji Foundation (APF) with support from the QUEST Alliance, is the focus of this evaluation study.

1.1 Overview of the programme

APF has extensive experience in running CAL programme having initiated 225 computers assisted learning centres all over Karnataka. Learnings from APF's previous initiatives have been integrated into this current programme being evaluated. This programme was initially planned for implementation in twelve Government higher primary schools at Bangalore. Subsequently, it was extended to eight more schools as additional resources were mobilized from local communities. The duration of the programme was two years. The schools were short listed with the help of block officials on the basis of the following criteria:

- School strength of more than 250

- Availability of an extra room

- Presence of legal electricity power connection

- Interest envisaged by teachers

- Contribution from the community over the last three years

The head teachers of these 23 short listed schools were then oriented by APF personnel about inviting community for a meeting and the arrangements that needed to be made for the meeting. The head teachers were also informed of the process of school selection. Subsequently, twelve schools were finalized on the basis of the interest and support lent by the community members. The programme was extended to another eight schools after one year of implementation. Each school was provided with six computers. In addition one computer and printer were supplied for the exclusive use of teachers, at their behest. Another hall mark of the programme was the appointment of a support teacher in each of these schools. A fairly rigorous process was employed in the selection and training of these support teachers. A coordinator was appointed exclusively for the monitoring, feedback and follow-up of this programme. The coordinator was then supported by three personnel from APF.

The time table for using computers was prepared by the head teachers and teachers of individual schools. It was planned that on an average, each child was to get two periods at the computer every week. This CAL programme differs from the previous CAL programmes implemented by APF on the following aspects:

- Role of support teacher has been perceived differently from that of Young India Fellow of previous programmes.

- Support teachers' basic qualification was pre-university certification, preferably with a Diploma in Education (D.Ed).

- Training for support teachers was more rigorous.

- More tried and tested CDs were provided to schools.

- Grouping of children was done more carefully.

- There was a greater emphasis on documentation.

- Monitoring was more intensive.

- Teachers were encouraged to view CDs with students.

- Monitoring software has been installed on an experimental basis in three schools.

- CAL model for low electricity consumption is being piloted in eight schools.

1.2 Design of the study

The present study was conceptualized as a process-based evaluation. The objectives of the study are as follows:

1. To capture the implementation processes of the programme
2. To identify the challenges and problems faced while implementing the programme
3. To document best practices
4. To ascertain the perception of stakeholders (students, teachers, parents and community members) about the effectiveness of the programme
5. To study the implications of the programme in terms of: children's attendance; children's learning levels; retention of students; classroom practices; learning gains of students; and changes for teachers.

Apart from interacting with APF personnel involved in the programme and studying relevant documents, a field survey of all the twenty schools was administered. Out of these twenty schools, in twelve where the programme was launched in 2006, the programme ended in June, 2008. We refer to these as Phase-1 schools. In the remaining eight schools (Phase-2) the programme was launched in 2007 and continued until 2009.

A team of six investigators visited the schools to collect data. A workshop was conducted to orient the investigators about the nature of the CAL programme: objectives of the evaluation; conducting interviews and focus group discussions; observing classrooms and the kind of information to garner. It took twelve weeks (September to November, 2008) to complete the field work. The delay was primarily due to the examinations followed by a month long vacation for schools.

Sample

While general information was collected from all twenty schools, the following sampling procedure was used to get data from stakeholders:

Teachers: The mandate was to interview two teachers in each school. However, in most schools all teachers showed inclinations to interact with the study team. Hence, focus group discussions were held.

The following figures give the details of 62 teachers who formed our sample.

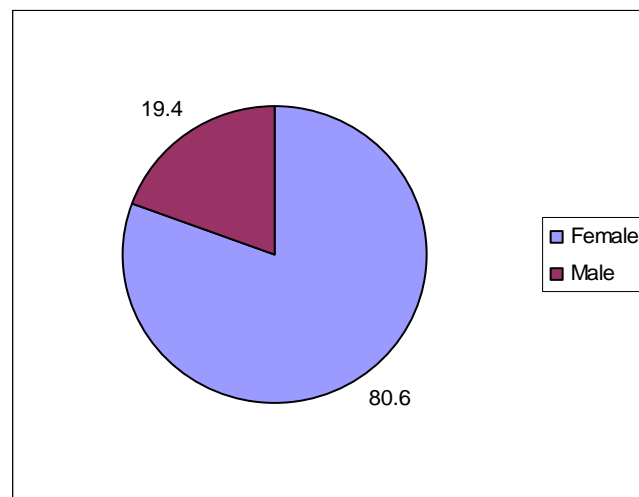Fig 1.1: Percentage of Male and Female teachers

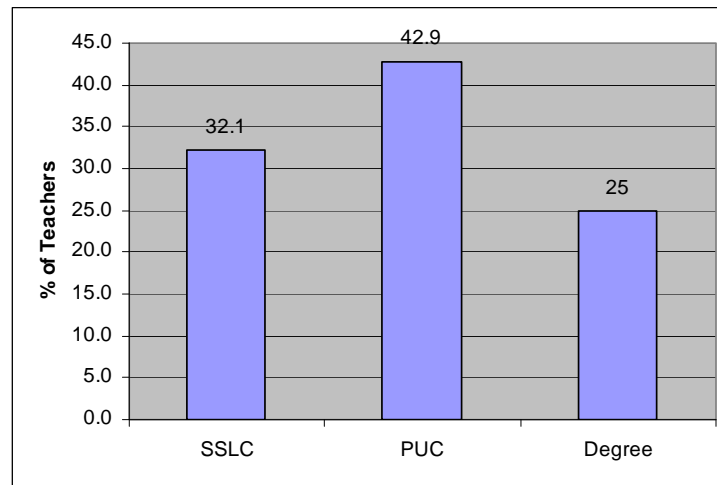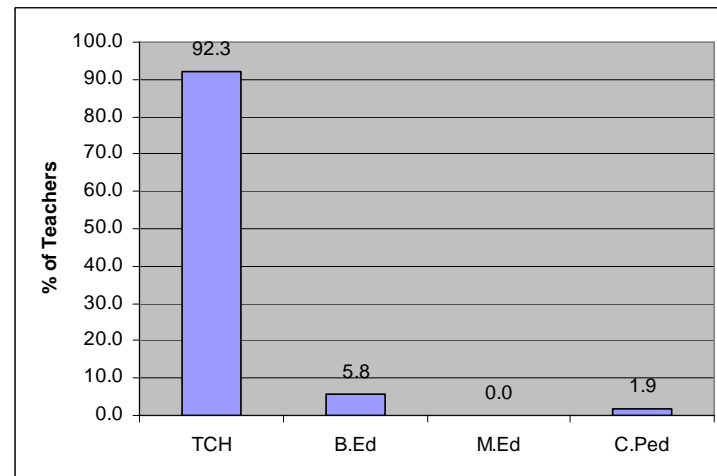Fig 1.2: Academic qualification of teachers
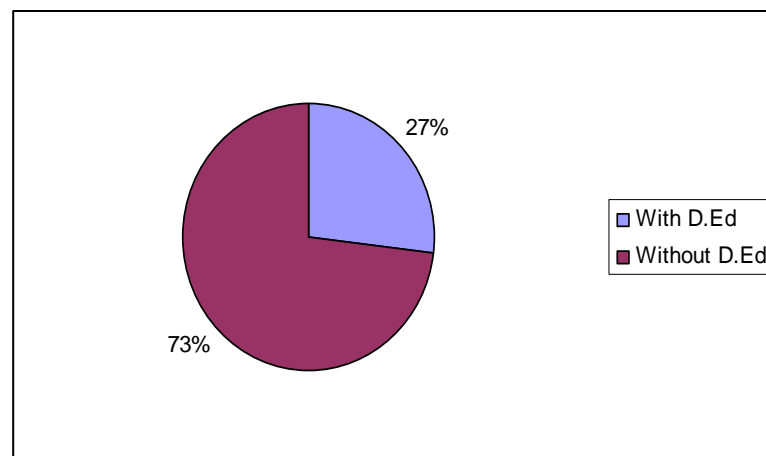

Fig 1.3 Professional qualification of teachers

Support teacher: In schools where services of support teachers were continued, we interviewed these support teachers. Figure 1.4 presents the percentage of support teachers with D.Ed.

Fig 1.4: Percentage of Support teachers with D.Ed

Students: Ten students of class 5 and ten students of class 7 were randomly selected, ensuring proportional representation of girls and boys. Discussions with class 5 and class 7 students were held separately.

Parents or School Development and Management Committee (SDMC) members: In each school, we interviewed the SDMC President where available. In five of the schools where we could not meet the President, we ensured that atleast one SDMC member was interviewed. In addition we interacted with four to eight parents, whose children study in the school.

Community members: We spoke to a few members of the community living in the vicinity of the school.

In addition to interacting with stakeholders, one computer class and one regular classroom were observed to capture integration process, in any.

A Classroom in progress

Tools

Prior to the preparation of tools, this researcher visited two schools where the programme was on-going. This helped gain a perspective for tool development. A set of nine forms were developed to aid data collection. Form-1 captured basic school details. Form-2 provided guidelines for classroom observation. Guidelines for observing a computer class were given in Form-3. Forms 4 to 8 had guidelines for interviewing or conducting focus group discussions with regular teachers; support teachers; students; parents/SDMC members; and community members respectively. Form-9 had leading questions for discussions with APF personnel. These forms are presented as annexes of the report.

Data

The following table maps the data required together with the objectives.

Table 1: Nature of data collected and source of data

Objectives	Data collected	Data Source
1. To capture the implementation processes of the programme	Primary data from organization / individuals implementing the programme	• All available documents • Interactions with people involved
2. To identify the challenges and problems faced while implementing the programme	Primary data from school teachers, support teachers and programme implementers	Interviews and focus group discussions with concerned personnel
3. To document best practices	Primary data from school teachers and support teachers; schools	• Interviews • Classroom observation

Objectives	Data collected	Data Source
4. To ascertain the perception of stakeholders (students, teachers, parents, community members) about the effectiveness of the programme	Primary data from stake holders	• Focus group discussions with stake holders
5. To study the implications of the programme in terms of: Children's attendance, Children's learning levels, Retention of students, Classroom practices	Secondary data pertaining to students; primary data from classrooms	• Attendance registers before and after implementation of the programme • Students' progress report/KSQAO scores (where available) • Classroom observation

Data Analysis

Since much of the data were qualitative, descriptive analyses were used. Some quantitative data we collected were entered in Excel spreadsheet and subjected to frequency analysis.

Limitations of the study

The study involves mainly process indicators alone. Input indicators have been adequately captured by the implementation agency. We assessed a few of them during field visit. Output indicators have not been adequately captured for lack of baseline data. Hence, assessing the impact of the programme in quantifiable terms is not meaningful. The next chapter discusses the implementation processes of the programme.

CHAPTER II: Implementation Processes of the Programme

One of the primary objectives of this evaluation was to capture the processes that went into the implementation of the programme in terms of providing resources, building the capacity of concerned people, monitoring and feedback mechanisms. Data for this study were obtained from the internal reports and other pertinent documents prepared by APF, as well as through interactions with persons involved in the implementation of the programme. These were then substantiated during field visits.

2.1 Resource Provision

The following physical resources have been provided in each school:

> Six computers: The rationale for providing with six computers was that 24 children could be accommodated at a time in the computer class with a maximum of four children per computer.

A typical computer class

> All computers have speakers; headphones were also provided for each child.
> Around 75 multimedia, interactive CDs created by APF have been given.
> The computer room has been equipped with basic furniture.
> A printer and an additional computer have been provided for the exclusive use of teachers.
> In the eight phase-2 schools, a multi-user computing approach is being piloted. This technology provides each end-user with his/her own monitor, keyboard, mouse and speakers that connect to small access terminals. These access terminals in turn are connected to the host computer. The vendor has also supplied each access terminal with the core terminal services software. This technology promises to deliver high performance at a low cost and is compatible with standard PC applications.

What we found during field visit

Fig 2.1: Percentage of computers working – Phase-1 schools
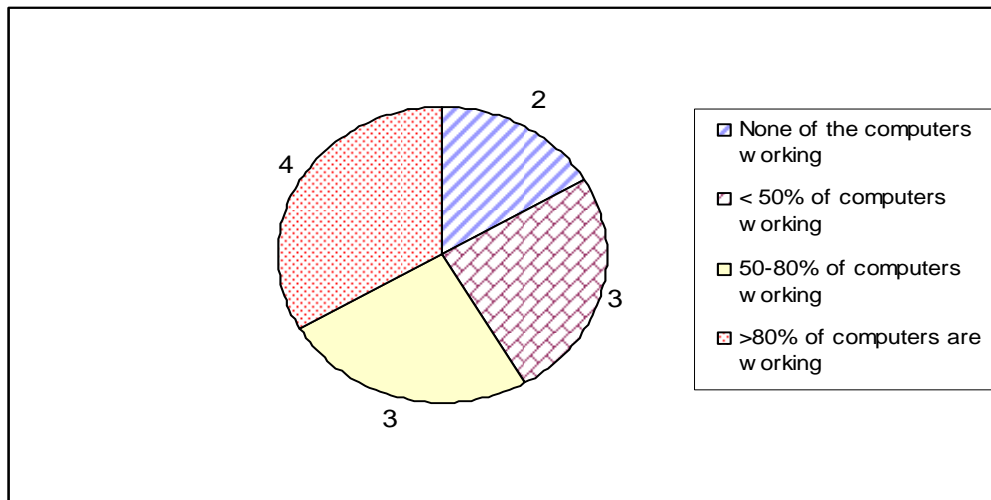
- In two of the twelve Phase-1 schools, none of the computers are working.

- In three more schools less than half of the computers provided are working.

- In the remaining schools, either all computers are working (in four schools) or only one computer is under repair.

Fig 2.2: Percentage of computers working – Phase-2 schools
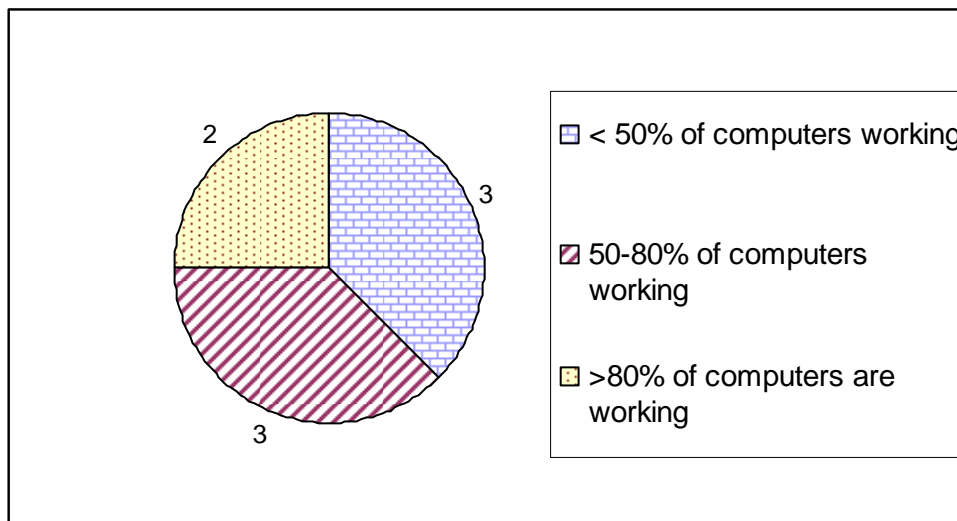
- Among Phase-2 schools, all computers were working in only two schools. In the remaining schools, only two or three of the six computers were working.

- Children tend to misuse headphones – biting on the wire or pulling it. In only a few schools, were the headphones functional.

- Each school was equipped with around 50-60 CDs.

- Printer and computer meant for teachers remained unopened, in all but three schools.

- The teachers have not been able to discern any difference between a standard PC and the new cost effective technology supplied.

Man Power Resources

- One support teacher was appointed for each school.

- 50% of the support teacher's salary of Rs.2000/- was borne by the programme, for the two years it was in effect.

- A coordinator was appointed to oversee the programme in all twenty schools. In addition, three coordinators from APF were also involved in the close monitoring of the programme.

What we observed

- Support teachers are there in all of Phase-2 schools.

- Services of the support teachers continued in three of the twelve phase-1 schools where the programme has come to an end.

- The programme coordinator had left the organisation soon after the programme ended in phase-1 schools. Coordinators from APF are monitoring phase-2 schools.

2.2 *Capacity Building Support Teachers*

As mentioned earlier, a fairly rigorous process was employed in selecting and training the support teachers. SDMC members/head teachers were asked to identify a candidate who has completed PUC, preferably with D.Ed qualifications, else with an inclination for teaching. The shortlisted candidates were observed during group discussions they were asked to participate in. This was followed by an interview. Two candidates were selected for each school, with the understanding that they would be appointed, after their training. A five-day residential training programme was conducted for over 20 candidates. The training was intended to meet the participants with basic computer skills and to orient them to pedagogic skills. Accordingly, the content of the training programme was:
- Overview of learning theories
- Introduction to how children learn; learning styles of children
- Basic computer skills
- Use of CDs and selection of CDs
- How to group children
- Hands-on experience for working with children
- Working with teachers, head teachers, parents and government officials
- Developing positive thinking
- Improving communication skills

The modality of this training programme was:
- Observation
- Hands-on with children
- Self-reflection
- Discussions

After the training, twelve were appointed as a support teacher for each school. Follow-up of this training was done at these schools.

What we found

Fig 2.3: Number of support teachers trained by APF
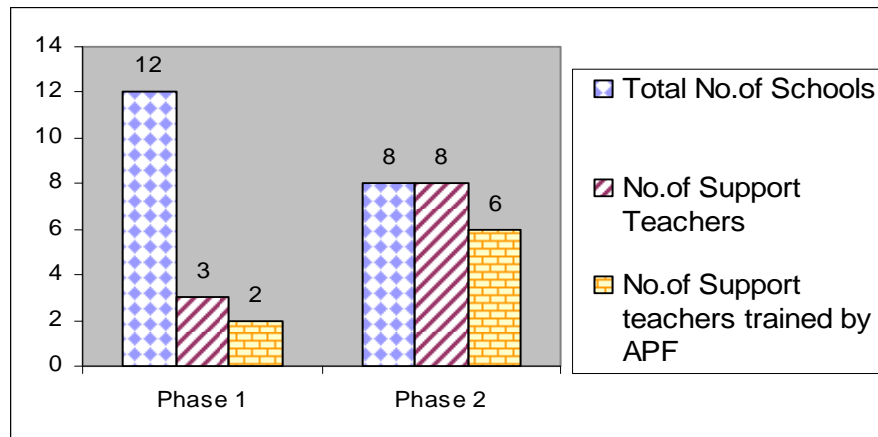
In all eight phase-2 schools, support teachers are there. Two of these eight teachers have not received training from APF. In three of the twelve phase-1 schools, support teachers are continuing. Both these teachers have been trained by APF. We gathered that attrition had been rather high, with support teachers leaving, once they get government jobs etc. However, all the support teachers opined that the training provided by APF was useful. They were especially appreciative of the soft skills component of the training.

Regular Teachers

Training for the regular school teachers was given at their respective schools by the coordinators. The duration of the programme was three days. The objectives of this training were to:

- Give an overview of the programme
- Teach teachers to switch the computers on and off
- Help teachers view the CD content

Discussions were held on integration and ideas/issues for helping support teachers.

What we observed

Of the 62 teachers from 20 schools we had interviewed, 28 said they had received training from APF personnel.

Fig 2.4 Percentage of teachers who have received training from APF
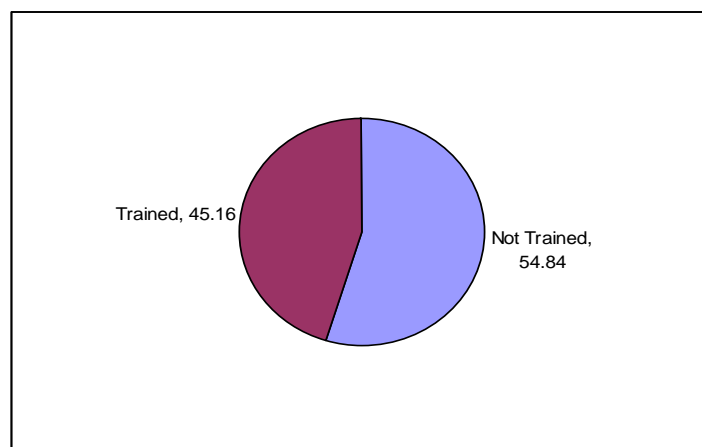
Among these 28, ten have received training through Government initiatives as well. These have been conducted by DIET/BRC/CMC. In one school, two teachers had undergone 40 days training by Intel.

Most of the teachers do not seem to have taken the training provided by APF seriously. Their typical response was, "APF has not given us any training." When prodded about it they replied, "Oh! We were taught how to turn a computer on and off."

As to the CDs except in seven schools, teachers in other schools have seen only one or two CDs. We also came across six or seven teachers (most of them were male) who had not seen a single CD. Those teachers who have seen the CDs find value in them. This is discussed in section 4.2. Most of these teachers said the support teacher had helped them handle the computer, when they faced difficulties.

In four schools, a teacher has taken the initiative in entering the time table, marks list and students' details. In one of these four schools, the support teacher types out the question papers for subject teachers. In another school, a teacher who is learning to type in Kannada said she saves her notes of lessons in the computer.

2.3 Community Mobilization

Community buy-in for the programme has been its mainstay. One of the criteria for selection of schools was the level of participation of community members in the meetings organized at selected schools.

The head teachers were requested to invite parents, SDMC members, Panchyat members, local leaders and donors for the meeting. During the meeting, APF personnel taught two-three children of the school to handle a mouse and displayed the CD content on big screen to create awareness among the community members.

To ensure sustainability of the programme, community members were asked to bear fifty percent of the salary of the support teacher and electricity bill. They were also informed that the local community has to garner funds to run the programme independently, once external funding ceases. Local community members had seeded money at the time of commencement of the programme.

What we found

During our interaction with parents and SDMC members, we found that they were rather proud that the school their children are studying in equipped with computers. A couple of them said that during the initial days soon after computers were installed they would stand outside the computer class just to watch their wards handling the computer.

The SDMC President in most schools has been taking keen interest in trying to mobilize funds to continue the programme. They informed us that they were able to pool in resources from the local community for paying electricity bill and attending to minor repairs. In the three phase-1 schools where support teacher is continuing, individual donors are contributing towards her salary. But other than parents or relatives of children studying in the school, there was little awareness about the presence of computers in the school among other community members.

2.4 Monitoring and Feedback

APF had appointed a coordinator exclusively to monitor the twenty schools. In addition, there were three other APF personnel who were monitoring the programme closely. This had helped attend to problems without delay. Periodic feedback given to support teacher helped ensure the programme remained on track. A head teachers' meeting was arranged by APF to provide them with an overview of the CAL programme. The aims of the programme and the direction of learning envisaged through the programme were discussed with the head teachers. They, in turn, came up with practical problems they face, in terms of sustenance of support teachers, shortage of regular teachers, and management of mid-day meals.

What we found

All the teachers of phase-1 schools were unanimous that the close monitoring resulted in attending to repairs in computers with little time lag. Only in one school (Bidaluru) was there a complaint about none of the computers working even during the project period. This was again due to faulty electrical wiring. The coordinator had interacted only with the support teacher and not with the regular teachers. The support teachers have found the interactions with the coordinators very useful. They said it helped them gain confidence and remain motivated.

2.5: Challenges and Problems faced

We captured the challenges and problems faced during the implementation of the programme, through interactions with APF Personnel, head teachers, regular teachers, support teachers and parents. The following were the recurrent issues that emerged:

- Difficulty in getting qualified support teachers, as the salary offered was not lucrative enough;

- High levels of attrition among support teachers, especially those with D.Ed qualification;

- Erratic power supply;

- High electricity bill (in phase-1 schools);

- Paying salary for support teachers after the programme ended;

- Attending to technical problems schools said they find it difficult to find manpower and funds to attend to the repairs. APF has provided schools with contact details of computer technicians. According to the head teachers, technicians refuse to attend to their problems saying that their annual maintenance contract has ended or that the commute is too difficult;

- Maintenance of head phones is a challenge. Children tend to handle them carelessly. In the absence of headphones, the noise level is very high;

- There are only a few CDs available. In schools where children are not being taught computer skills, they complain of getting bored seeing the same CDs after a year;

- Grouping of children based on their academic performance wherein one or two children who perform well academically are grouped with two or three who do not - which appears to be detrimental to the latter;

- During our field visit, we found children using CDs much below their cognitive level. For example, class 5 students were viewing 'Akshara Bandi' meant for six to seven years old; and

- Purpose of using CD is unclear to both regular teachers and support teachers. They are using the CDs for reinforcement, if at all.

The next chapter documents some of the best practices we observed.

Chapter 3: Supporting and Detrimental Factors

In any education-related programme given a similar set of inputs, the outputs are varied. It is therefore of interest to look into the factors that help realize the objectives of a programme and those that are detrimental. While no doubt, some of these factors are context specific, generic lessons can be drawn from them.

3.1 Supportive Factors

- Enthusiasm and interest shown by children, in general. Everywhere we found the level of confidence shown by most children in handling computer was enormous.

- Where two or more regular teachers of a school have involved themselves, programme has continued effectively after end of project period.

- English learning in terms better pronunciation and sentence formation has improved. In a couple of schools, children themselves have recognized this.

- CDs pertaining to mathematics and science concepts have helped improve understanding in a few children and in one school.

- Children have used computers during holidays. Both teachers and parents were appreciative of this opportunity, as otherwise the children would have whiled away their time.

- Children have enjoyed animations in the CDs.

- CAL has helped initiate small group discussions among children.

- Role of external agency was effective. Monitoring and feedback was helpful.

- APF trained support teachers have been far more effective than support teachers without training.

- As long as the project was in effect, computer classes were being held regularly.

We were also able to document instances wherein the programme yielded benefits that went beyond the intended objectives. These have been enumerated in the following section.

3.2 Collateral Benefits

Since these are school specific instances, the name of the school is mentioned in brackets
- Children won a quiz competition at the taluk level for the first time and the school attributes this success to CAL progamme (Ajjanahalli);
- The Block Education Officer has shown interest in the programme and asks for frequent updates (Kachuvanahalli);
- Increased involvement of parents (Ramagondanahalli);
- Teachers utilise activities/ideas from CDs in their classroom teaching (Kachuvanahalli, Bashattihalli);
- A teacher who is a resource person for block level training has got many ideas for conducting his training programmes, from the CDs (Vishwanathapura);
- A private school had to close due to decreased enrolment after CAL programme started in the Government school (Bidaluru) [While this may not be direct benefit, parents and teachers consider it a great pride that they have been able to wean back children from the more 'privileged' private school];
- CAL is being used for remedial teaching (Kaikondahalli); and
- One group of class 7 students have visited a browsing centre to get information for their social science project (Vishwanathapura).

3.3 Detrimental Factors

Based on our observations and interactions we culled out the following factors that are coming in the way of effective continuation of the programme:

- Difficulty in maintaining the hardware - computers, UPS and especially the headphone. The difficulty stems both from raising money to attend to the repairs and getting technicians;

- Low salary offered for support teacher has led to high levels of attrition;

- Little buy-in from teachers and department officials;

- CD meant for single user is being used by four children; and

- Children complained of boredom after a year, as they were being made to see the same CDs again the following year (Around 50 CD titles have been provided to each school).

These factors were common to most schools. The presence of an external agency-APF had helped mitigate these factors as long as the project was in force. However, as enumerated in the previous section, some of the phase-1 schools have been able to overcome them – where teachers have taken interest (two schools) or the HM/SDMC President has been able to garner funds for continuing the support teacher. To gain a better perspective of these factors in context, we have included two contrasting case studies in the next section.

3.4 Case Studies

Both of these schools are phase-1 schools.

Kachuvanahalli

Kachuvanahall, is a small village tucked away in the paddy field about 20 kms away from the Kanakapura-Mysore road. We went to Kachuvanahalli unannounced. The school has a well maintained garden. The corridors were clean. Children were sitting in small groups revising their lessons for the upcoming semester I examination. The school has 4 male teachers and a headmaster. The teachers came across as a highly motivated group of individuals working together well.

Computer room: Computer room was well maintained. At the time of our visit, class 7 students were being shown the CD "Shakthiyodane Sarasa". The children were sitting on the floor and watching the CD on one monitor. Upon being asked to see children use the computer themselves, children were made to work in groups of three and were made to watch CDs of different subjects. The students were quite well versed in handling computers.

Subject teachers: Teachers have made use of the computers to teach subjects like English, Mathematics and Science. They opined that the computers helped them teach children going beyond their syllabus. For example, speaking in English fluently; teachers have also been giving students the English equivalent terminologies in mathematics and science which they picked up from the CDs.

The teachers also felt that the students get an opportunity, thanks to CAL to discuss in small groups about a problem/question which other wise they would not have got. Teachers are adept in handling computers and have been using computers to prepare question paper, for maintaining records as well as invitation cards for school function. They appreciated the APF staff for periodic monitoring and feedback.

The overall impression was that even after the support teacher had stopped coming to Kachuvanahalli the teachers have continued good work. They appear to be making a conscious effort to link what is being taught in classroom with the available CDs. With more training, hand holding and guidance; integration could be more successful and children would reap the benefits.

Students: They were excited to talk about what they learned from computers. The children on their own said that pronunciation of English in CDs sounded better than their teachers and they learned how to form sentences in English from CDs. Children have also learned MS Paint and were able to use word-pad for typing. They seemed to have liked and learned a lot from Ms.Shylaja, an APF trained support teacher. The students had come to school during the summer holidays from 10.00 am to 2.00 pm to play on the computer.

Community members: Kachuvanahalli is a typical village with a small farming community. Talking to the SDMC president, it was evident that most land owners live in the city while only landless labourers and with farmers with very small land holdings live in the village. Hence collecting money to pay Rs.500/- for electricity charges was an uphill talk for them. Even though both the teachers and the SDMC President felt a support teacher was necessary, they did not think they would be able to collect enough money to pay. The parents felt that CAL programme had helped their children compete with those from private schools.

Madabal

This school is a little away from the main road. The school is to celebrate its centenary year. The HM was not informed about our visit. The school has seven female teachers and two male teachers (including the HM).

Computer room: It was very untidy. The children were asked to dust it as we entered it. A television set was placed in the middle of the room. One computer and printer supplied for the teachers' use were not even opened from their cover. As long as the support teacher was there the computer classes were regular. The UPS was making shrilling noise which made it difficult to be in that room. But the children were not bothered with the noise and they were fully involved in watching their CDs. The HM told us that this is how it has been for the past few months. The support teacher had taught the students to operate the computers and they were doing so independently. The students have learned drawing and painting from their support teacher. They looked very confident in handling the computers.

Subject teachers: Only two subject teachers have watched the CDs that too, one or two. They were unable to recall the names of these CDs. They said group activity has increased among children as they helped each other. They appeared disinterested in guiding their students to computer room as they feel that their workload is already too much. They also said that because of computers, Edusat and radio programme it is difficult for them to finish their syllabus. They wanted a support teacher who can take care of the computer room and handle computer classes. Teachers do know how to switch on/off a computer. They say they are ready to learn more but *are not ready to undertake computer classes for the children on regular basis.* One of the teachers said the CDs are helping the slow learners.

Students: They enjoy the computer classes but they said the frequency of these classes had reduced drastically after the support teacher left the school. They enjoy the Maths CD as it has games and makes it easy for them. One of the students whom we met had pronunciation problems and we were told that with the introduction of computers, he has learned to speak more clearly.

Community members: Community members other than parents are unaware of this computer programme. The parents are happy to see their children learning from computer and CDs. Their only concern was that they do not have funds to continue their APF trained teacher.

The next chapter deals with how teachers, children, their parents and other community members perceive the programme.

Chapter 4: Perception of Stakeholders

In order to ascertain their perception about the utility of the programme and its sustenance, we interviewed teachers, talked to class 5 and class 7 children separately, and held focus group discussions with parents/SDMC members/community members

4.1 Teachers

The role of teachers is rather crucial in this programme. We therefore spent considerable time in getting their views. However, most of their comments were general, interspersed with a list of requirements. Since most of them were recurrent, we have included both in this section. Also, there was no difference in the perception of teachers of phase-1 and phase-2 schools.

Interaction with Teachers

- All responding teachers said the CAL programme is good.

- Having an external agency such as APF was crucial for the programme. Many teachers contrasted APF run CAL programme with other Government run programmes.

- Periodic monitoring during the project period ensured the programme ran smoothly. All support teachers were appreciative of the APF coordinators who visited them regularly and attended to technical problems almost immediately. However, the regular teachers were not aware of such visits. But they did recognize that all problems were attended to during the project period.

- All teachers felt that the presence of support teacher is absolutely necessary.

- Students' attendance has improved after CAL programme started, and teachers in many schools have specifically stated this factor as a direct benefit of CAL Programme. Parents and students themselves have also corroborated this.

- The programme is helping slow learners (though this is a general perception of all teachers, we only came across one instance where CAL was being used for remedial teaching).

- Having a variety of activities in the CD appeals to children.

- All teachers felt that CDs should be aligned to the state syllabus/textbooks.

- CDs for higher classes especially classes 7 and 8 are needed. Most teachers said the CDs cater to lower primary classes alone.

- More CD titles are required (This was a universal refrain, although very few of them had actually seen all CDs. What differentiated the responses of those teachers who had seen the CDs from those who did not was that the former had a specific list of concepts/topics for which they felt multimedia context would be useful).

- More training needed to learn basic computer skills. All of them felt what was provided by APF was insufficient.

- More inputs are needed to help adopt CD content to lessons.

A majority of the teachers felt that CAL was another programme like Edusat or radio programme. A few teachers said that all these programmes take away their teaching time and they are unable to 'complete the portions'. We were also informed that where Edusat relay time clashes with computer period, preference is given for Edusat as their higher authorities vigilantly check records pertaining to Edusat programme.

4.2 Students

Students were in general articulate and candid as we interacted with them in the absence of their teachers. This is what they felt about the programme:

- Enjoy computers a lot. During our visit, we found this to be true in all schools.
- Like using the Paint tool on computers. Almost all children said they like to draw and paint on computer. Quite a few of them demonstrated their skill to us.
- Love the animated characters in the CDs. Most children could readily recall the names of CDs and the character in the title that they enjoyed most.
- Appreciate the songs very much. In two schools, students sang songs from the CDs.

Students singing for our benefit

- Like listening to English in the CDs. A majority of the children said English pronunciation on the CD is better than their teachers'. Quite a few students said after having played the Kannada version a couple of times, they now opt for the English version. The children said they are able to read and comprehend English language better on their own.

- Like to play games on computers. Many students said they pay Rs.5/- for half-an-hour to play games at the local cyber café's/browsing centers.

- In at least six schools, children explicitly said they liked their support teacher a lot and miss her.

- Computer classes were conducted regularly when 'computer' teacher was there.

Students engrossed with a CD

Almost all children could easily recall the names of CDs they had viewed and describe the games they played. However, only a few (less than a dozen) were able to recollect the concepts learned, especially in mathematics and science. Interestingly most of the CD titles they could recall pertained to Kannada language learning. Also, the students had their prejudices – whenever we attempted   to   draw out the most shy and reticent girl/boy into conversation, the others would say she/he is *peddi/pedda* and cannot handle a computer. We learned that while working in a group on the computer, these children took on a passive role, letting others in the group operate the computer.

4.3 Parents, SDMC members and Community members

Very few community members whose wards were not studying in the school were aware of the CAL programme.

Interacting with Community Members in a school neighborhood

But, the situation was different with parents. There was a general feeling of euphoria about their children learning computers and their expectations from the programme are rather naïve, but high.

- The parents feel that their children's level of confidence has increased, after they learned to handle computers. A few of them cited instances where their children were able to display their computer skills in their 'richer relatives' houses
- Children have started showing more interest in school. Many parents said children refuse to miss school especially on days they have computer class.

- They are very happy and grateful to the external agency for having given exposure in computers to children. In one school, as a direct result of APF's initiative, the Panchayat provided an additional computer to the school.
- Most parents feel exposure to CAL would be a passport for good job opportunities for their children, in the future. This sentiment was more pronounced in schools closer to Bangalore city.
- A few parents also opined that what is taught should not be based only on their school subjects but should also be useful for the future.
- In about five schools, parents said they would feel so proud of their children working on computers that during the initial days when the project was launched, they would stand outside the computer room watching their children.
- Four or five parents said their children are pressuring them to buy computers at home.
- In at least four phase-1 schools, parents suggested that all teachers be trained in the use of computers so that classes can go on as before.
- Some of the parents have noticed that their children's English language has improved over the past year. Two of them told us that their child is attempting to teach them English at home as well.

SDMC Members/Parents in a school

Most parents admitted that they have started taking more interest in what their children learn at school after the CAL programme. However, other than the SDMC President, none of the others had any clue about utilization of funds.

The next chapter enumerates the possible implications of the programme.

Chapter 5: Implications of the Programme

The focus of this study was primarily on evaluating the processes involved in implementing the programme. However, some quantitative data on enrolment and achievement scores have been captured for the periods before the commencement of the CAL programme and after the end of the programme (in the case of phase-1 schools). This cannot be strictly treated as baseline and endline assessments and it would be tenuous to try to assess the impact of the programme, based on these figures. Nevertheless, they could be used as indicators on the implications of the programme, along with the qualitative data collected for the study.

5.1 Classroom Integration

Integrating computers in classrooms is being studied in fair amount of detail, especially in the Western countries. Various researchers have come up with different models to understand the stages of development (Berenfeld, 1998; UNESCO, 2005; World Bank, 2003). What is common to all these models is that once the preliminary stage of learning to use computers is taken care of, the initial stage of integration would involve teachers:

1. Selecting multimedia content suitable to the cognitive level and interest of their students; and

2. Deciding when to use the content – for example, as an introduction to a new concept while teaching the concept; or as reinforcement after teaching.

In the present study, we found during our visits that CDs were being used for reinforcement, without exception. We also found many instances where children were using CDs much below their cognitive level. Nowhere had the ideas/activities in CDs become infused with the regular classroom activities. Classroom and computer room were treated as two insular places.

Computers have tremendous potential to help classrooms shift from learning by telling to learning by doing, as envisaged in the National Curriculum Framework (NCERT, 2005). If teachers are helped during the initial stages with some hand holding and they being to feel empowered, future possibilities using computers to transform classrooms can become real.

5.2 Gains for students

As mentioned earlier, the reliance has primarily been on qualitative data to ascertain gains for students. We have been able to capture some quantitative data. We could not get reliable data for average students' attendance at the time of launching the programme. Hence, it has not been included in this report. Quantitative data pertaining to enrolment are given below:

Fig 5.1: Comparison of average enrolment of students in phase-1 schools
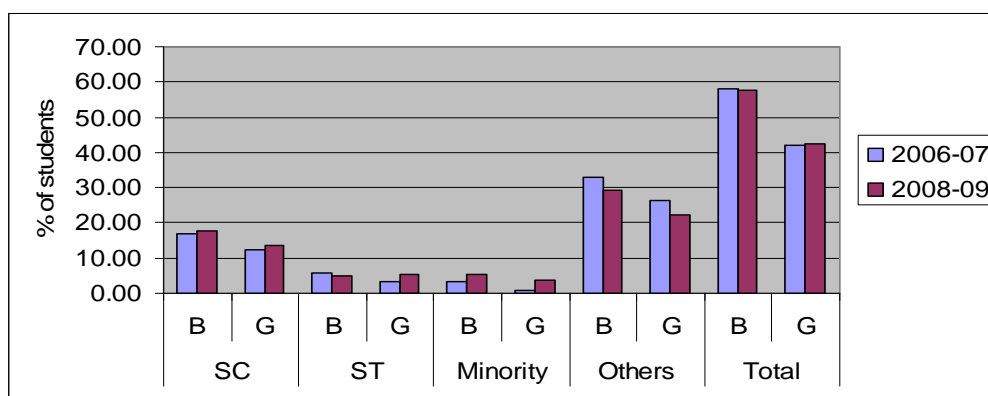
It is interesting to note that there has been a marginal increase in enrolment of both boys and girls among 'Scheduled Caste' and 'Minority'. Enrolment of 'Scheduled Tribe' girls has also increased. But, there is a dip in the enrolment of boys and girls belonging to the 'others' category. This has resulted in the total enrolment of boys and girls in 2006-07 and 2008-09 very nearly equal.

Fig 5.2 Comparison of average enrolment of students in phase-2 schools
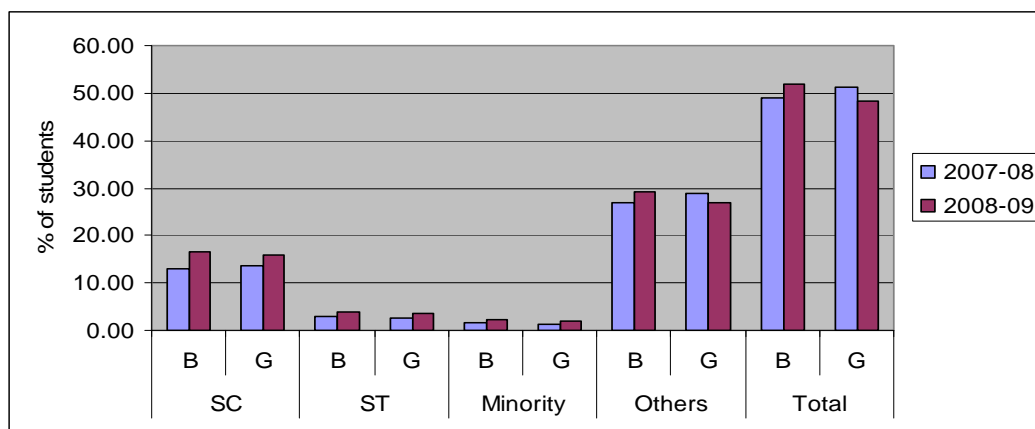
While the trends in phase-2 schools are similar to that of phase-1 schools for 'SC' and 'Minority,' the enrolment of boys has increased in both 'ST' and 'Others' categories, unlike in phase-1 schools. However, it has to be borne in mind these trends in enrolment are affected by myriad factors and cannot be attributed directly to the CAL programme. During our school visits, in at least six schools, we were informed of specific instances wherein students have shifted from private schools, after the launch of CAL programme. We do not have reliable data on attendance and retention. But, all the teachers, parents and even children themselves informed us that attendance and retention have improved, after computers were introduced in the school. Data pertaining to scholastic achievement are the KSQAO scores of class 5 and class 7 students in 2005-06 and 2008-09. Karnataka School Quality Assessment Organisation has been conducting annual assessments of all government school children of classes 5 and 7, since 2005-06.

Fig 5.3: Comparison of average KSQAO scores of students in Phase-1 schools
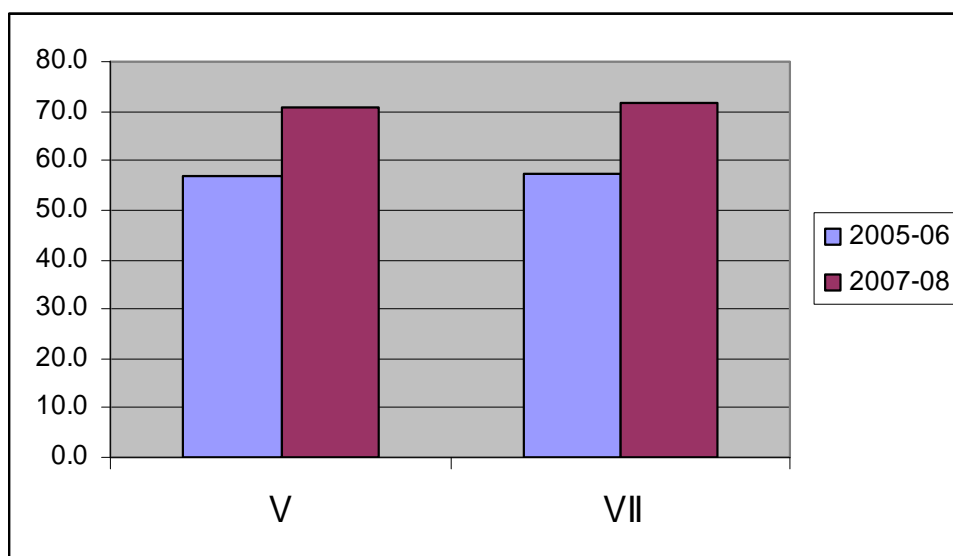
Fig 5.4: Comparison of average KSQAO scores of students in phase-2 schools
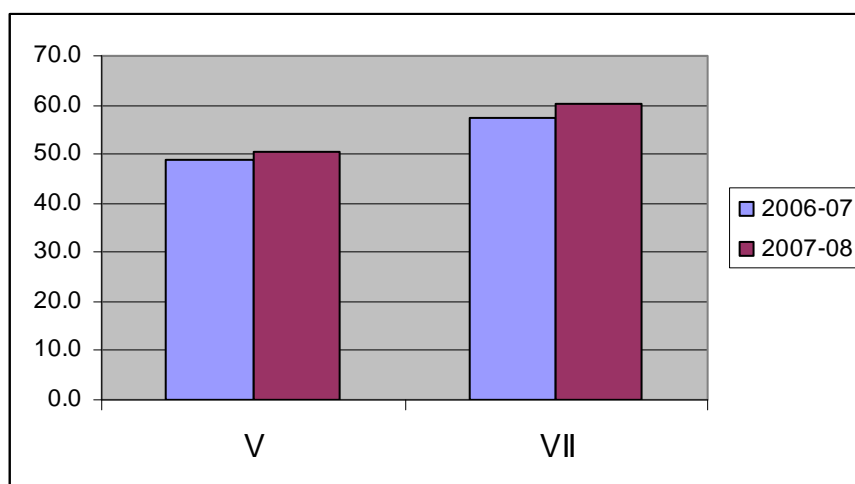
As can be seen from the figures, the scores have increased across the board. This has been the trend across the state and not peculiar to the CAL schools. Hence, it is not possible to draw conclusion about the programme's impact on students learning achievement based on this data.

Again during interactions with teachers and students and observation of students we were able to discern perceptible impact the CAL programme has made on students.

- Children have picked up basic computer skills. All children are able to turn a computer on/off and handle a mouse. In a few schools, children have been taught to use word processer.

- Their interest in school has piqued (though, this has not necessarily translated into learning). As mentioned earlier parents, teachers and children themselves reported that they do not like to miss school anymore.

- Children display greater levels of confidence. Parents have cited specific anecdotes where they discerned that their children feel more confident.

- Teachers of two schools said that their ability to comprehend instructions has increased.

- They have learned to work and interact in a group. In three schools, teacher recognized that but for the CAL programme students would not have had an opportunity to work in a group.

- Students have gained better exposure to English language. Many children and few parents felt the CDs helped improve English language proficiency.

- Children are well disciplined inside the computer room – in some cases even without supervision. We observed this in all schools where children were using computers.

5.3 Gains for teachers

CAL can support changes in pedagogy and there is documented evidence of such programmes changing the role of teachers – for example, in Chile, a CAL programme has helped create a more egalitarian relationship between teacher and students (Alvarezetal, 1998). Before this can happen, teachers need to see value in CAL. They would then be willing to invest time and effort to adopt to the technology. While there is no rigorous research-based evidence for this, experience points out that teachers need a lot of support and hand holding, till they are able to confidently use CAL meaningfully (Mythili.R, 2007). In the present study, we found that teachers in general are convinced that CAL programme is useful for students. Very few of these teachers have realized it could be a powerful tool for themselves. Among those who did, they listed the following as what they had gained from the CAL programme:

- Helped improve their own knowledge of some Maths and Science concepts (Around eight teachers from two schools);

- Gained fluency in English (two teachers from one school);

- One teacher who is a resource person for other taluk teachers has used the CDs to get ideas for activities/preparing TLMs;

- Computers have been used to enter time tables and marksheet (in two schools); and

- Teacher of one school is preparing notes of lessons using computer.

It is interesting to note that given similar inputs, these dozen or so teachers have been able to gain from the programme, while others do not seem to perceive gains for themselves. In the present study, we have not consciously attempted to probe this difference. But upon reflection, we felt the following factors that possibly could account for this difference:

1. Where support teacher had D.Ed qualification and has received training from APF, their understanding of the programme is far better and has been able to reach out effectively to the regular teachers;

2. Presence of at least three teachers in one school, who were self motivated enough to take initiatives to learn and use computers; and

3. Presence of either a pro-active head teacher or one who does not interfere with teachers' work.

It would be of academic interest to study these differences in greater detail in the future. The next and concluding chapter collates the findings of the study and the inherent lessons therein to make this and other such similar programmes more effective.

Chapter 6: Conclusions

This chapter looks at issues to consider for enhancing effectiveness of the programme in light of the findings of this study. In doing so, we have broadly focused on the program objectives.

6.1 Resources

The implementing agency has been very diligent in providing resources, going beyond what was initially planned.

Findings

- In two of the twelve phase-1 schools, none of the computers are working.
- In three more schools less than half of the computers provided are working.
- In the remaining schools, either all computers are working (in four schools) or only one computer is under repair.
- In the phase-2 schools, all computers were working in two schools. In the remaining schools, only two or three of the six computers were working.
- Children tend to misuse headphones – biting on the wire or pulling it. Headphones were functional in only a few schools.
- Each school was equipped with around 50-60 CDs.
- Printer and computer meant for teachers remained unopened, in all but three schools.

Man Power Resources

- Support teachers are there in all of phase-2 schools.

- Services of the support teachers have been continued in three of the twelve phase-1 schools where the programme has come to an end.

Issues

Maintenance of resources especially UPS and headphones proved to be a problem. Also, attending to repairs appears to be a major bottleneck despite the fact that APF has provided schools with a list of technicians and their contact numbers. As to the support teachers, there was an unanimous agreement that their presence is needed to continue the programme effectively. Generating funds for their salary and high levels of attrition among them are the two major issues facing schools.

Suggestions

Greater buy-in from the Government Department of Education may ensure better maintenance. Tying up with the Mahiti Sindhu Programme, where in operation, may help in attending to repairs. Greater synergy with the local Panchayat/self help groups would also be useful. As to support teachers, it would be untenable to continue paying them salary in the long run. Moreover, if the focus of CAL programme is on integration, it would be better if teachers were to manage the programme. Three or more regular teachers from a school could be identified, based on the interest they show, and trained for the programme.

6.2 Training

A fairly rigorous five-day residential training has been provided by APF to support teachers.

Findings

- The support teachers have found the training very useful. They were all especially appreciative of the soft skills component of the training.
- A majority of the regular teachers have not taken the on-site training provided by APF seriously.

High attrition among support teachers has led to some wastage of training. A majority of teachers have not taken ownership of the programme and are therefore apathetic towards it.

Suggestion

There is evidence from research that suggests a significant correlation between level of technical and pedagogical support for ICT use in teaching and increased ICT use by teachers (Nancy Law, 2006). Considering that the support teachers found APF training useful, the same may be offered to interested teachers. The training needs to be followed up with substantial hand holding over a period of time. After all, well trained teachers are the key to effectiveness of any programme in a classroom setting.

6.3 Follow-up and Feedback

APF had appointed a coordinator for the monitoring of the programme.

Findings

- There has been frequent and periodic follow-up and feedback by the coordinators.

- This has resulted in attending to repairs and other problems on an immediate basis.

Issues

The support teachers said they found the feedback from the coordinators helpful in keeping them motivated. But, there had been no interactions with the regular teachers.

Suggestions

During the project period, the coordinator can tie-up with the Cluster/Block Resource Person for monitoring visits. This could help build the capacity of the CRP and BRP whose job is to monitor the academic activities in schools and provide feedback to teachers. Once the externally funded project ends, the CRP/BRP can continue this role, without considering it an added burden. It is also imperative to talk to regular teachers, during each visit, even when the support teacher is there. Follow-up and feedback can also be brought under the purview of SDMC/Community. A framework can be evolved to identify components of the programme that can be effectively monitored by SDMC/Community Members. Such components that require pedagogic expertise can be left to the CRP/BRP.

6.4 Sustainability

Sustainability has been the mainstay of this programme. Community was expected to match the external grant. Assurance was taken from them to continue the programme, after funding stops. Essential documentation was also factored in. Support teachers in schools were trained to maintain records.

Findings

- SDMC President in most schools is taking keen interest in trying to mobilize funds to continue the programme.

- Schools have ceased maintaining records pertaining to the programme, even where APF trained support teachers are continuing.

Issues

Apart from parents, other community members in most schools are unaware of the programme. One school (Doddamaralwadi) has collected money from parents for the programme. Unfortunately none of the computers in the school are working for more than six months. Documentation utility has not been adequately perceived by either support teachers or regular teachers.

Networking with local youth/women groups that are active, could help mitigate the lack of visibility to an extent. These groups can also canvas for reallocation of some of government budgetary provisions for schools towards CAL programmes, as well as generate external funds, if necessary. Tying up with BRP/CRP for monitoring may ensure better compliance for maintenance of documents.

6.5 Classroom Environment

Experts are unanimous that innovation cannot occur in a teacher centric environment. CAL has potential to directly improve learning and indirectly increase attendance by making school a more attractive place. Moreover, it offers opportunities for students to become co-operative learners, when they use a computer as a group.

Findings

- There is anecdotal evidence to suggest improved attendance, attributable to presence of computers in schools.
- Teachers have noted that children have learned to work in groups while using computers.
- There was not a single instance of grouping in regular classrooms.

Issues

While initial enthusiasm could have resulted in improved attendance, sustenance of students' interest in the present set-up is going to be a challenge. There is little transfer of learning from computers to regular classrooms. What children learn through computers is not being adequately harnessed within classrooms.

Suggestion

Emphasis, during the training programme and other sensitization efforts should be on learning culture rather than use of computer per se. Repeated exposure and discussions with teachers may improve classroom environment in tune with that envisaged in NCF, 2005.

6.6 Pedagogic Approaches

CAL provides students with opportunities to learn in new ways. While computers are pedagogically neutral, teachers can use multimedia content to help students interpret information and not receive it passively (NCERT, 2006). CAL can be imaginatively harnessed to promote reasoning, creativity and critical thinking in children.

Findings

- Classrooms continue to remain didactic.
- There is heavy reliance on textbooks both by teachers and students.
- CDs are used to reinforce what is taught in classrooms.
- There was no evidence of hands-on, activity based learning as promulgated in CDs, being transferred to actual classroom teaching.

Issues

CDs, essentially designed for a single user, are being used by four or more children. Purpose of using CAL is unclear to most support teachers and regular teachers.

Suggestion

The pedagogic contribution of multimedia content, whose function is similar to that of classroom teaching, has to be reinterpreted in the light of newer evidence from cognitive science on how people learn. There has to be a shift from prescriptive to a more engaging approach to learning. Teachers need to be provided with adequate support and training to make this possible. Otherwise, there is the risk of computers becoming an expensive add-on, instead of an integral part of a new pedagogy as envisaged.

External monitoring and evaluation had not been designed into this programme at the outset. It could presumably due to the fact that APF has experience in running such programmes. Nevertheless as experiences around the world show, engaging the services of an external agency to conduct formative evaluation and thence to monitor progress, goes a long way in improving the effectiveness of a programme.

The larger value of CAL rests in their capacity to motivate students, increase equity of access and reduce time needed to accomplish a given set of objectives. CAL is not just a tool for learning but represents a new environment for teaching/learning. This can be realized only if the programme can ensure buy-in from teachers. This, in turn, can happen only if long term commitments in terms of time and efforts are made.

References

Azim Premji Foundation 2002. *A Study to Evaluate the Impact of Community Initiative,* www.azimpremjifoundation.org

Linden et al. 2003. *Computer-Assisted Learning: Evidence from a randomized Experiment.* Poverty Action Lab

Mythili.R, 2007. *Integrating Computers in Classrooms* Paper presented upon invitation at Rajiv Gandhi Foundation, New Delhi

Nancy Law (Ed). 2006. *The use of ICT in Teaching and Learning.* IEA Second Information Technoogy in Education Study, www.sites2006.net

NCERT, 2006. *Position paper: National Focus Group on Educational Technology,* www.ncert.nic.in

Rishikesh, S.B. 2005. *Computer Aided Learning Program - A Longitudinal study in Karnataka A Qualitative Report.* Azim Premji Foundation, Bangalore

Teachers' ICT Skills and Knowledge needs, Final Report to SOEID.2007. The Robert London University, United Kingdom

UNESCO. 2003. *Building Capacity of Teachers/Facilitators in Technology-Pedagogy Integration for Improved Teaching and Learning.* www.unesco.org

Venezky and Davis. 2002. *Quo Vademus? The Transformation of Schooling in a Networked World.* OECD/CERI

World Bank Report. 2003. *Challenges for developing countries.* World Bank, Washington, D.C

Appendix 1
Data Summary: Phase 1 Schools

Data	GHPS, Ajjanahalli	GHPS, Bidaluru	GHPS, Doddamaralwadi	GHPS, Gudimaranahalli	GMPS, Harohalli
Situation	Very far away from the main road	Away from the main road	Little away from the main road	Few km. from the main road	Near the main Road
Building and school surroundings	Surroundings not very clean (around the class)	Sprawling campus. Fairly good	Clean	Very clean, spacious	Good, Spacious
Classroom	Ventilated	Okay	Clean	Clean & ventilated	Ventilated
Library	Yes - not used regularly	-	Yes	Yes - used regularly	Yes
Computer room	Clean, very well maintained.	-	-	Neat, well maintained	Clean, well maintained
	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls
No.of students enrol.	145 69	92 108	158 119	155 180	197 193
No.of students pres. On day of visit	103 61	81 97	142 108	150 172	172 170
Nature of the school	Single grade	Single grade	Single grade	Single grade	Single grade
KSQAO result	V VII	V VII	V VII	V VII	V VII
2005-06	56% 50%	49% 40%	57% 58%	93% 94%	55% 57%
2007-2008	79% 86%	56% 54%	77.3% 77%	98% 97%	71% 74%
CAL	Yes	Yes	Yes	Yes	Yes
Radio	Yes	Yes	Yes	Yes	Yes
TV	No	-	-	No	No

Data	GHPS, Ajjanahalli	GHPS, Bidaluru	GHPS, Doddamaralwadi	GHPS, Gudimaranahalli	GMPS, Harohalli
No.of computers provided	7	6	6	7	7
Working	5	0	0	5	6
Not working	2	6	6	2	1
Whether there is support teacher	Yes	No	No	No	No
If yes, whether the support teacher is APF trained	Yes	-	-	-	-
If no, who's handling the computer classes		Classes are not going on	-	One science teacher from the school got training from APF for a day and he helps the children	The PT master with a computer course guides the students
Other skills learned through computers by students	Computer games, typing, drawing, parts of computers	-	-	Kannada typing	Painting, typing, on, off
Utilization of computers by teachers	One young teacher comes forwards to learn basics in computers	-	-	Teacher learning to type and keep notes they require	Time table, marks sheet

Phase - 1 Schools

Data	GHPS, Kachuvanahalli	GHPS Kaikondahalli	Govt HPS, Karahalli	GMPS, Madabal	GHPS, Shivanahalli	GHBS, Vijayapura	GHPS, Vishwanathapura
Situation	Interior village, Far away from main rd.	On the main road	Near the main road	Interior village	Near the main rd.	Main road	Close to the main road
Building and school surroundings	Clean, ventilated	Well maintained	Construction was going on	Clean, Spacious	Clean, ventilated	Old building. Fairly well maintained	Painting was being done
Classroom	Well maintained, Garden in the compound	Cramped	Okay	Clean & ventilated	Clean	Okay	Under maintenance
Library	-	Yes	Yes	Yes – not used regularly	Yes – not used regularly	-	Good
Computer room	Clean, well maintained	Good	Clean	Not very clean, too much noise from the UPS	Clean, spacious and well maintained	Clean	Good
	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls
No.of students enrol.	52 53	0 373	148 79	83 93	66 83	348 0	91 98
No.of students pres. On day of visit	42 47	326	132 74	81 89	65 80	323 -	86 91
Nature of the school	Single grade	Single grade	Single grade	Single grade	Single grade(3-7) Multigrade (1-2)	Single grade	
KSQAO result	V VII	V VII	V VII	V VII	V VII	V VII	V VII
2005-06	67% 68%	59% 49%	45% 46%	53% 60%	57% 73%	23 % 36%	71% 59%
2007-2008	88% 89%	67% 74%	84% 76%	75% 68%	73% 80%	69% 69.2%	72% 81%
CAL	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Radio	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TV	No	Yes	-	Yes	No	-	-

Data	GHPS, Kachuvanahalli	GHPS Kaikondahalli	Govt HPS, Karahalli	GMPS, Madabal	GHPS, Shivanahalli	GHBS, Vijayapura	GHPS, Vishwanathapura
No.of computers provided	6	6	7	5	5	7	7
working	6	3	7	4	3	3	7
Not working	-	3	0	1	2	4	0
Whether there is support teacher	No	No	Yes	No	Yes	No	No
If yes, whether the support teacher is APF trained	-	-	Yes	-	-	-	-
If no, who's handling the computer classes	All 5 teachers takes active interest and take turns in assisting children	Librarian takes care of the class	Subject Teacher	The subject teacher accompany the students	A teacher has been appointed by the HM to assist the children in the comp. class	Subject Teacher	Subject Teacher _
Other skills learned through computers by students	7- English pronunciation and sentence formation 5- Kagunitha and paint	Drawing on/off, knows typing their names and painting	Drawing, Switching on/off, MS paint, word	Painting, drawing	Typing, excel, paint	Typing, on/off	Paint, on/off, typing
Utilisation of comp. by teachers	-	-	PE teacher does office related work	-	-	-	Prepared TLMs after seeing CDs. Teacher is a RP and had used ideas/activities in the CD to train trs' in the taluk. Mistake in the CD on tenses

Phase-2 Schools

Data	GHPS, Arudi	GHPS, Bashettihalli	GHPS, Hosahalli	GHPS, Gunjur	GHPS, Kantanakunte	GHPS, SS Ghati	GHPS, Thippur	GHPS,Varthur Ramagondanahalli
Situation	Interior village	Near the main rd.	Interior village	on the main road	Near the main rd.	Situated in valley.	Interior village	on the main road
Building and school surroundings	Good	Well maintained	Okay	Okay	Well maintained	Wet roof	Well maintained	Yes
Classroom	Clean & ventilated	Entrance to be repaired	Crack in VII class room	Clean	Kept clean	Ventilated, spacious	Clean & ventilated	Ok
Library	Yes – not used regularly	Yes – not used regularly	Yes – not used regularly	Yes	Yes – not used regularly	Yes – not used regularly	Yes – used regularly	Yes
Computer room	Clean, well maintained, UPS, Chairs, CDs	Clean, well maintained,UPS, Chairs, CDs	Clean, well maintained,UPS, Chairs, CDs	Clean	Clean, well maintained,UPS, Chairs, CDs	Clean, well maintained,UPS, Chairs, CDs	Clean, well maintained,UPS, Chairs, CDs	Yes
	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls	Boys Girls
No.of students enrol.	129 129	230 211	119 92	132 151	117 106	96 119	114 139	130 176
No.of students pres. on day of visit	117 121	208 194	105 80	120 143	102 100	79 113	110 136	117 170
Nature of the school	Single grade	Single grade	Single grade	Single grade	Single grade	Single grade	Single grade	Single grade
KSQAO result	V VII	V VII	V VII	V VII	V VII	V VII	V VII	V VII
2005-06	25% 50%	68% 52%	35% 35%	45% 46%	52% 55%	61% 68%	48% 47%	57% 49%
2007-2008	21% 46%	73% 83%	55% 62%	72% 65%	83% 77%	24% 27%	74% 77%	81% 85%
CAL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Data	GHPS, Arudi	GHPS, Bashettihalli	GHPS, Hosahalli	GHPS, Gunjur	GHPS, Kantanakunte	GHPS, SS Ghati	GHPS, Thippur	GHPS,Varthur Ramagondanahalli
Radio	-	Yes	Yes	Yes	-	-	Yes	Yes
TV	-	Yes	Yes	-	-	-	-	-
No.of computers	7	7	7	6	7	7	7	7
working	2 with UPS	2	3	6	3 (Ups working)	3	3	7
Not working		4+1(not installed)	4	0	3	1 not installed	2	0
Whether there is support teacher	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
If yes, whether the support teacher is APF trained	Yes	No	No	No	Yes	No	Yes	No
If no, who's handling the computer classes	-	-	-	-	-	-	-	-
Other skills learned through computers by students	Draw and handling computers	Painting, game, type, shut down, on, save, inserting	Type, drawing, game, shut down, painting	-	On, game, paint, shut down, open, close, typing, creating a file and save	On/off paint type, shutdown some insert CD;s, games and save	They like to handle computers	On/Off, drawing, computer
Utilization of computers by teachers	-	-	-	-	-	-	-	-

Appendix-2
Brief Profile of the Schools

Phase 1 Schools
GHPS, Ajjanahalli (Magadi cluster)
Ajjanahalli is a very small village in Magadi taluk. The school was not prepared for our visit. Some of its older students were not available as they had to work in their fields.

The school has a few young teachers, who showed a lot of interest regarding CAL Programme. The teachers who had been here for more than two years saw lots of improvement in their students especially in pronouncing both Kannada and English. They believe the CDs are improving the learning capability of slow learners. The young teachers are ready to learn computers if provided with training.

Children enjoy the guidance of the support teacher. In front of each computer a time table specifying the name of the student and classis displayed. This is helping the children to settle down quickly. Other than viewing CDs the children are taught painting and word. The children watch CDs based on the timetable, but sometimes they choose the CDs they wish to watch.

Support teacher appears to enjoy his role as. He has taught the children the basics that was taught to him during APF training. The only problem he said he faces is a lack of service personnel to assist him in maintaining the computers. The support teacher has maintained a book which states the requirements by the regular teacher to improve computer based learning.

SDMC members/parents showed lot of interest in CAL programme. They felt that their children are learning more from the CDs. One of the parents said that his child made him understand how earth rotates after he learned it from a CD. They are confident that their children are going to improve their learning capability because of these computers. They are ready to sell coconuts from their school to pay the support teacher when necessity arises. They see the children getting excited when they talk about the computers. Parents have been shown how a computer works once in the school. A few of them come to see their children using computers once a while.

They said "instead of getting knowledge from one teacher these children are getting knowledge from two teachers (the second teacher being the computer).

GHPS, Bidaluru (Devanahalli cluster)

The school is away from the main road. The campus is sprawling but not maintained very clean. The in-charge HM appeared sincere but sounded helpless about attending to the electrical wiring problem, which has made the computers dysfunctional. The SDMC President was clueless about even the presence of CAL programme in school. A member is a local youth group also met with us. He assured the HM of attending to the problem through his organisation.

GHPS, Doddamaralwadi (Kanakapura cluster)

The school is a bit far away from the main road. The school premises were very clean. Apart from the computers provided by QUEST's CAL programme, the Government has also provided the school with six computers. None of these twelve computers are working. The head master came across as completely disinclined towards academic matters. The SDMC President is a graduate and comes to the school everyday and teaches students of classes 5,6,7 for 2-3 hours. The school has collected Rs.100/- from every child in the school for the CAL Programme.

There was a perceptible resentment among teachers against both the head master and the SDMC President. The teachers appeared to be committed and sincere. The students seem to be fond of their teachers. Students were articulate and well groomed. They informed us that an outside agency has set up a library in their school. The librarian keeps the library an hour before school opens and an hour after school closes. Most children said they are fond of reading books in the library.

GHPS, Gudimaranahalli (Magadi cluster)

It is a small but spacious school and very neatly maintained. The HM was prepared for us. The SDMC members and the parents were hand picked by the HM to interact with us. One of the parents specified that if they could teach practical skills with computers it would help the children fetch a job. The community/SDMC felt that the electricity bill is more than Rs.500/-

which is difficult for them to pay and no community member is willing to pay or collect money for this cause.

The library is housed in the computer room. Half of the class was made to use the computers and other half was made to sit in the centre referring to the library books. The financial support for the computer building was provided by an old student who has now settled in the United States. There is no support teacher now. But the children strongly felt that they were able to learn more from the support teacher as the classes were regular.

One male teacher had attended one day training at APF. He is the one who is helping the children. The other teachers showed enthusiasm but completely lacked confidence about handling computers. They believed that the students are more knowledgeable when it comes to computers. They told us that they learn from their students. Some of them have prepared materials/activities after seeing the CDs. They strongly felt that one of their staff should be given proper training by APF which could permanently help the school. Few of these teachers have been provided school based training by APF, but they felt that it did not help them much.

GMPS, Harohalli (Kanakapura cluster)

This school is on the main road. The school surroundings were clean. Classrooms were well ventilated. The PE teacher has some basic training in computers, but lacks pedagogic knowledge. He is also not too well versed in the use of computers, beyond basic operations. Teachers appeared disinterested in CAL programme. When questioned what they liked about the programme, they said children enjoyed working on the computer while they got free time.

Children appeared confident in handling computers thanks to the support teacher's (Ms. Ramya) inputs. Parents/SDMC members were happy with the CAL programme and that their children were learning computers. The SDMC President has a specially abled child in the school. So, he has been taking special interest in the school affairs. Community members feel it is untenable to ask for continued donation to pay the salary of support teacher.

GHPS, Kachuvanahalli (Kanakapura taluk)

Kachuvanahall, is a small village tucked away in the paddy field about 20 kms away from the Kanakapura-Mysore road. We went to Kachuvanahalli unannounced. The school has a well maintained garden. The corridors were clean. Children were sitting in small groups revising their lessons for the upcoming semester I examination.

The school has four male teachers and a headmaster. The teachers came across as a highly motivated group of individuals working together well. Computer room was well maintained. At the time of visit, class 7 students were being shown the CD "Shakthiyodane Sarasa". The children were sitting on the floor and watching the CD on one monitor. Upon being asked to see children use the computer themselves, children were made to work in groups of threes and were made to watch CDs of different subjects. The students were quite well versed with handling computers.

Teachers have made use of the computers to teach subjects like English, Mathematics and Science. They opined that the computers helped them teach children going beyond their syllabus. For example: speaking in English fluently; teachers have also been giving students the English equivalent terminologies in mathematics and science which they picked up from the CDs.

The teachers also felt that the students had an opportunity to discuss in small groups of three about a problem/question which other wise they would not have got. Teachers are adept in handling computers and have been using computers to prepare question paper, for maintaining records as well as invitation cards for school function. They appreciated the APF staff for periodic monitoring and feedback.

The overall impression was that even after the support teacher had stopped coming to Kachuvanahalli the teachers have continued good work. They appear to be making a conscious effort to link what is being taught in classroom with the available CDs. With more training hand holding and guidance, integration could be more successful and children would reap the benefits.

Students were also excited to talk about what they learned from computers. The children on their own said that pronunciation of English in CDs sounded better than their teachers and they learned how to form sentences in English from CDs.

Children have also learned MS Paint and were able to use word-pad for typing. They seemed to have liked and learned a lot from Ms.Shylaja, a APF trained support teacher. The students had come to school during the summer holidays from 10.00 am to 2.00 pm to play on the computer.

Kachuvanahalli is a typical small village with a small farming community. Talking to the SDMC president, it was evident that most land lords were in the city while only landless labourers and very small farmers live in the village. Hence collecting money to pay Rs.500/- for electricity charges was an uphill talk for them. Even though both the teachers and the SDMC President felt a support teacher was necessary, they did not think they would be able to collect enough money to pay. The parents felt that CAL programme had helped their children compete with those from private schools.

GHPS, Kaidondahalli (Bangalore South 4 cluster)

This school is on the main road. Classrooms are rather cramped with three sections in one room. Teachers appeared interested in CAL programme. They said getting financial support is not a problem for them. (There are a number of IT companies in the vicinity). The support teacher was being paid Rs. 3,500/- per month. Even so, the support teacher was not willing to stay on.

Children were extremely well behaved in the computer room and were handling the computers independently without any supervision by teachers. Students of class 7 informed us that they had used internet in a cyber café for their social science project. They had made notes and used that information in preparing a chart. Most children also know to type, save files and create folders. We interacted with one community member. He said he had attended APF's meeting two years back but could not remember what the meeting was about. Surprisingly, the parents of four children who we met were not even aware of the CAL programme.

GHPS, Karahalli (Devanahalli cluster)

This school is on the main road. Classes 7 and 8 are conducted in a private house under construction opposite to the school building. While the school surroundings are reasonably clean, the house where classes 7 and 8 children attend classes has a big, open sump filled with water. When we entered the school at 10.15 a.m, we saw the PE teacher caning late comers. The school has been able to garner funds through a local contributor to continue the services of the support teacher. None of the regular teachers, except the PE teacher (who has undergone a certificate course in computers) have taken any interest in the computers supplied to their school. Only two teachers have seen a couple of CDs as the time APF coordinators had provided training in their school. Children were able to handle computers with confidence. The parents were happy that their children are getting computer education but were clueless about the financial implications involved.

GMPS, Madabal (Magadi cluster)

This school is a little away from the main road. The school is to celebrate its centenary year. The HM was not informed about our visit. The school has seven female teachers and two male teachers (including the HM). The computer room was very untidy. The children were asked to dust it as we entered it. A television set was placed in the middle of the room.

One computer and printer supplied for the teachers' use were not even opened from their cover. As long as the support teacher was there the computer classes were regular. The UPS was making shrilling noise which made it difficult to be in that room. But the children were not bothered with the noise and they were fully involved in watching their CDs. The HM told us that this is how it has been for the past few months. The support teacher had taught the students to operate the computers and they were doing so independently. The students have learned drawing and painting from their support teacher. They looked very confident in handling the computers.

Only two subject teachers have watched the CDs that too, one or two. They were unable to recall the names of these CDs. They said group activity has increased among children as they helped each other. They appeared disinterested in guiding their students to computer room as they feel that their workload is already more. They also said that because of computers, Edusat and radio programme it is difficult for them to finish their syllabus! They wanted a support teacher who can take care of the computer room and handle computer classes.

Teachers do know how to switch on/off a computer. They say they are ready to learn more but *are not ready to undertake computer classes for the children on regular basis.* One of the teachers said the CDs are helping the slow learners. Students enjoy the computer classes but they said the frequency of these classes had reduced drastically after the support teacher left the school. They enjoy the Maths CD as it has games and makes it easy for them. One of the students whom we met had pronunciation problem and we were told that with the introduction of computers, he has learned to speak more clearly. Community members other than parents are unaware of this

computer programme. The parents are happy to see their children learning from computer and CDs. Their only concern was that they do not have funds to continue their APF trained teacher.

GHPS, Shivanahalli (Kanakapura cluster)

This school is situated on the main road near Kanakapura village. It is a spacious school and is well ventilated. The computer room is near the primary building. The school has appointed a teacher who has studied here. Due to erratic power supply children are not able to attend the classes regularly.   Students of higher classes are not able to go to computer classes this year as their classrooms are away from the primary building where the computers are kept. They say they miss their computer class.

The teachers enjoyed first and second standard CDs which helped the children to learn alphabets. They suggested that instead of dolls, human figures can be used in CDs, which could make it more realistic. The language CDs are enjoyed both by teachers and students. They said *activity based learning* through computers could help the students understand concepts clearly. According to the teachers, the CDs are helping children to improve their language skills. They felt that there are not adequate Social Science CDs. They require maths CD for the first and second standards. The teachers help the support teacher select CDs that have to be viewed by students.

The children are taught to paint and draw. They are confidently handling the computers. Parents are ready to support the CAL Programme as they could see the children learning more from computers. One of the parents told us that her children try to draw the animated characters they see in the school computers and talk like them at home.

GHBS, Vijayapura (Devanahalli cluster)

This school is on the main road. Classrooms are spread around in separate rooms and some of them are cramped. Teachers appeared to show very little interest in computers or viewing CDs although one has undergone a five-day computer training programme sponsored by the Government. Children informed us that they have not been to the 'computer class' ever since the support teacher left a month back. Parents of only three children could come to meet us on the day we visited the school. Among them two fathers did not interact at all. One woman did all the talking. She was an alumnus of the school and felt rather proud of her alma mater. She said she helps her children with their studies at home. She also informed us that her children have learned to handle computers well, from the support teacher.

GHPS, Vishwanathapura (Devanahalli cluster)

This school is close to the main road. Building painting was being done. The classrooms are under maintenance. There are nine teachers with 200 plus students. One teacher who lives in the neighbourhood, shows keen interest in CAL Programme. Other teachers have also seen CDs pertaining to their subject. Two of them who have computers at home are proficient in the use of computers. Computer skills were taught to class 7 students, who were interested. A couple of them had done a project using power point. According to PT teacher, one girl had informed him that her prestige at home increased after she learned how to use computers and taught her *convent educated* brother at home. The maths teacher said she maps CDs with lessons she has taught.

Phase 2 Schools

GHPS, Arudi (Doddaballapur cluster)

This school is in an interior village, not very connected to Andhra Pradesh border. School is well maintained. Support teacher has undergone software training and is a graduate. He has also been trained by the APF. He has written a book on computers for children. He wants to get it printed. Teachers said they do not have time to view CDs. Children are able to handle computers confidently. SDMC members are co-operative and try to help the school in whatever way they can.

GHPS, Bashettihalli (Doddaballapur cluster)

This school is very close to the main road and very well maintained. Within the school compound, there is huge tree, below which the school has built cemented steps. Food is served to children here and the teachers also conduct classes once in a while, below this tree. The in-charge HM is very enthusiastic and sincere and so are the teachers. The support teacher is D.Ed trained along with the computer training. He was very enthusiastic and sincere. He said he has scored 92% in

the D.Ed and awaiting appointment soon. He was guiding children to learn through CDs. He appeared successful conveying concepts to children. Two teachers who have computer at home are making use of the CDs occasionally. Maths teacher taught place value on CDs. Children had already viewed CDs and the teacher used the examples from CD to teach. The social studies teacher taught the 'weather' lesson in similar fashion. The teachers opined that they need more CDs in social studies. They used CDs to be syllabus specific like radio lessons. Children enjoyed the CDs and seemed to have learned concepts using CDs. Mathematics teacher taught set theory and asked children to make sets using things that were outside the classroom. SDMC members and community members were proud of the school and supportive of the school.

GHPS, Hosahalli (Doddaballapur cluster)

This school is in an interior village. School surroundings were fairly clean. Teachers informed us that CDs were supplied to them twenty days ago and therefore had not time to see the CDs. Support teacher had PUC qualification but not trained by APF. He knows the basic operation of computer but not had formal training. Children have learned to open and shut down computers and were highly enthusiastic. Parents are happy with the programme and willing to continue.

GHPS, Gunjur (Bangalore South 4 cluster)

This school is away from the main road situated in a sprawling campus that houses the high school. Computer room provided with grills with community's help as there was an incidence of theft. The support teacher appeared lackluster. She said computers to be provided with more games. She installed Tally in the school computer, as she wants to learn it. Class divided into 2 groups. One uses library while the other group goes to the computer class. All teachers have seen one or two CDs. Beyond this, they did not envince interest in CAL programme, except for the in-charge HM. Children appeared to be very fond of their Kannada teacher, also the in-charge HM who has shown videos on Savarkar to children.

GHPS, Kantanakunte (Doddaballapur cluster)

This school is close to a bus stop. School surroundings were clean. The in-charge HM did not appear to be cooperating with the support teacher. Support teacher is D.Ed trained and also has computer training. She said that she is waiting for another job. Teachers seem interested and most of them have seen atleast a few CDs. A few of the parents visit the computer room and watch their children operate the computer.

GHPS, SS Ghati (Doddaballapur cluster)

School is situated in a valley, away from the main road. The school surroundings were clean. Teachers claim to be interested but most have not viewed CDs. They said they do not have time to view CD. The support teacher has been appointed only a month prior to our visit. He has basic computer training but has no teaching background whatsoever. Children are enjoying their time at the computers. SDMC President is very active. Parents informed us that children's interest in coming to school has increased, after computers were introduced. One mother who is a graduate volunteers her time at school.

GHPS, Thippur (Doddaballapur cluster)

School is situated close to Andhra Pradesh border and is in an interior village.School is maintained very clean. Support teacher is D.Ed trained and has also been trained by APF. Most teachers have not seen the CDs supplied by APF. Teachers opined that with Edusat, Radio programme and CAL programme they are not finding time to complete portions. They said that all three programmes are interfering with their work! However, the mathematics teacher has seen most CDs and is attempting to integrate in his classroom teaching. He has a Master in Kannada and has appeared for KAS. He is dedicated and sincere. Children operate computers confidently. Parents are quite happy, but did not have anything specific to add.

GHPS, Ramagondanahalli (Bangalore South 4 cluster)

School is located on main road and well connected by buses. The campus was huge and very well maintained. The head master told us that a local donor is very generous with financial support. The school has also been adopted by an NGO which has donated note books and stationery to all

children. This NGO has also been conducting weekly English classes for an hour. All teachers of the school appeared very enthusiastic about CAL Programme. Two teachers had recently been trained by Intel for 45 days, sponsored by the Government of Karnataka. Children handle computer confidently. Parents said they have involved themselves more in school after computers were introduced. They informed us that many of them visit the school whenever they find time. A few parents told us that their children are asking them to buy computers at home. They also informed us that their children refuse to take leave especially when they have computer class.

Appendix -3
R.V. Educational Consortium
Rashtreeya Sikshana Samithi Trust

Jayanagar, Bangalore-11

Tools: EVALUATION OF COMPUTER ASSISTED LEARNING PROGRAMME OF QUEST ALLIANCE

Name of field assistant: **Date of observation:**

Form 1: School Details

1. Name of the school   :
2. Nature of school   :   Multi grade/single grade
3. Name of the cluster   :
4. School Strength   :

	Boys	Girls
No of students enrolled		
No. of students present on the date of visit		

5. Students' profile   :

	SC	ST	MIN	OTHERS
Boys				
Girls				

6. Class wise details of students' strength:

	Class 4	Class 5	Class 6	Class 7
2006-07				
2007-08				

7. Performance of students in KSQAO's assessment (% of marks):

	Class 5	Class 7
2005-06		
2007-08		

8. Kindly observe the school premises and fill in the table:

8.1 Is there adequate space around the school?	Yes	No
8.2 Are the classrooms spacious?	Yes	No
8.3. Are the school surroundings clean?	Yes	No
8.4 Are the classrooms clean?	Yes	No
8.5 Is there a library?	Yes	No
8.6 Is the library being utilized?	Yes	No

9.1 How many computers are there?

9.2 Are all the computers in working condition?

10. Kindly refer to the records maintained in the computer room and place a tick if these records are maintained:

10.1 Number of students using computers   :

10.2 Class-wise time-table for computer time   :

10.3 Subject-wise time allocation   :

10.4 Details of CDs viewed by students   :

10.5 Details of CDs viewed by teachers   :

Form 2: Guidelines for Classroom Observation

1. Whether the classroom is   : Multi grade ☐   Single grade ☐

2. Subject taught during observation : Kan ☐ Maths ☐ Science ☐ Social Science ☐Eng ☐

3. Class(es) handled by the teacher: -------------------- No. of students: ------------------------

4. Gender of the teacher   : Male ☐ Female ☐

5. Classroom Environment

5.1 Is the classroom clean?	Yes/No
5.2 Is there a seepage-free even flooring?	Yes/No
5.3 Is there a secure, leak-proof roof?	Yes/No
5.4 Is the classroom well ventilated?	Yes/No
5.5 Are there benches / desks for children?	Yes/No
5.6 If no, how are the children seated?	In rows / In groups
5.7 Did the children keep their bags stacked	Yes/No
5.8 Is there a table / chair for the teacher?	Yes / No
If yes, how often did the teacher sit on the chair?	Rarely / often / very often
5.9 Are there visuals displayed?	Yes/No
If yes, are they:	Student created/teacher created/purchased?

6. Classroom Management

6.1 Where was the class conducted?	Inside the classroom / outside the classroom
6.2 If inside the class, were the students seated in one place throughout the class?	Yes/No
6.3 Did the teacher attend to the seating arrangement of the children?	Yes/No
6.4 How frequently did children write?	Not all / once in a while / often

6.5 While the children wrote, did the teacher go around checking their work?	Yes/No
6.6 Did the teacher expect complete silence in the classroom?	Yes/No
6.7 Did the teacher spend extra time with slow learners?	Yes/No
6.8 How did the teacher engage students who finished their work ahead of others?	

7. Teaching (provide details for all items under this category)

7.1. Games played	
7.2 Activities given	
7.3 Use of : • Models • Charts • Textbook • Other books • Newspaper • Magazines • Computer / CD • Any other teaching aid(please specify)	
7.4. Stories / anecdotes / examples given	
7.5 Dramatization / Role play done	
7.6 Use of blackboard	
7.7 Drill work / practice given	
7.8 Use of surrounding environment	
7.9 Written / oral work given	
7.10 Grouping of children	

8. Integration with CDs (Please provide the following details if this is being done)
8.1 Link with previous CDs viewed
8.2 Instruction for viewing CD relevant to the topic being taught

8.3 Background information /
    Preparatory work for students
    before viewing CD

8.4 Suggestions/Ideas/Discussions based on CDs
8.5 Any Other

Form 3: Guidelines for Observation of Computer Class

1. Class	
2. Subject	
3. No. of students	
4. No. of students per computer	
5. Seating arrangement of students	
6. Title(s) of CD(s) being viewed	
7. Stage at which CD is being used: (before, during or after a topic has been taught)	
8. Whether all students are viewing the same CD simultaneously If yes, whether they are doing so in a single group or in small groups If in a single group, how the other children are occupied	
9. Level of interaction between support teacher and students	
10. Level of participation by students	
11. Intervention by support teacher	
12. Confidence shown by students in handling the computer	
13. Interaction among students	
14. Motivation shown by students In using CDs	
15. Discipline maintained by students	

Form 4: Guidelines for Regular Teachers' Interview

1. Name of the teacher   :
   (Need not be filled, if so desired)

2. Gender   :   Male / Female

3. Age   :

4. Academic / Professional Qualification: SSLC/PUC/Degree   TCH/B.ED/M.ED
   If graduate, mention subject   :   _____

5. Experience of the teacher   :   in LPS_____yrs   in HPS_____ yrs

6. Whether the teacher has had computer training: Yes / No   Duration of training___

7. How was it useful? Did they gain any new insights about how children learn and how
   they can be taught?

8. Did they have prior exposure to computers? If No, do they feel confident about
   Handling a computer now?

9. What CDs have they viewed?

10. Which ones did they like? Why? Which ones did they NOT like? Why?

11. Do they discuss with other teachers about the CDs? If yes, what is the nature of their
    discussion?

12. What inputs do they give the support teacher?

13. What are their ideas on integrating computers in classroom teaching?

14. What value do they see in the CAL programme:
    - For themselves
    - For students

15. What is their perception of CAL programme vis-à-vis :
    - its general utility
    - its impact on student learning
    - community involvement
    - role of support teacher
    - role of external agency

16.   What were their expectations when the programme was launched? Have they been met?

17. What has been their learning in this programme?

18. How can this programme be improved to better cater to theirs and students needs?

Form 5: Guidelines for Interviewing support teachers

1. How do they view their role as support teacher?

2. What was their experience at the training programme?

3. What support did they receive from APF?

4. How does the HM support them?

5. What interactions do they have with community members?

6. Do department officials (CRP, BRP's or BEO's) show interest in the programme? Have any of them visited the computer room and taken note of what is happening?

7. What kind of inputs do they receive from teachers?

8. Do teachers view CDs? If yes, how frequently?

9. Which CD titles are preferred by:

   - Students

   - Teachers

    Which are their personal favourite CDs?

10. Other than viewing CDs are students taught computer skills?

11. Are all students actively involved while using computers?

12. Do they ask questions? If yes, what kind?

13. How do they arrange for viewing CDs?

14. What are the challenges/problems they face? How do they overcome them?

15. Whom do they turn to when they run into problems?

16. What is their perception of CAL programme vis-à-vis:

    - its general utility

    - its impact on student learning

    - community involvement

    - role of support teacher

    - role of external agency

17. How can computers be better utilized?

18. What do they like most about this programme?

Form 6: Guidelines for students' Interview

1. Do they like coming to school? Why?

2. Do they like computers?

3. What do they like to do most in the computer room?

4. Which CDs do they like most?

5. What have they learned in computers?

Form 7: Guidelines for Interviewing Parents/SDMC members

1. Are they satisfied with:
      (i) the schools?
      (ii) the teachers?

   -    Why or why not?

2. Is the education provided by school relevant to their children?

3. What is their opinion on CAL programme?

4. What changes have they seen in their children, after computers were introduced in the school?

5. What were their expectations from the programme?

Form 8: Guidelines for interviewing Community members

1. Are they happy with the CAL programme? Why?

2. What has been their role in the programme?

3. How do they plan to continue the programme in the absence of outside support?

4. How have the HM/teachers co-operating with them for this programme?

5. What has been the role of the department officials in the programme?

6. How do they monitor the use of computers and utilization of funds?

Form 9: Leading questions for discussion with APF personnel

1. Why was this programme conceptualized?

2. How is it different from APF's existing CAL programmes?

3. What is the rationale for appointing support teachers in lieu of involving regular teachers?

4. What were the criteria for appointing support teachers?

5. How were they selected?

6. What was the frequency, duration and nature of training the support teachers?

7. What was the content of the training programme?

8. What were the modalities for feedback/ follow-up of these programmes?

9. How were regular teachers involved in the programme?

10. What support was rendered to them?

11. What was the role envisaged for the community?

12. How was the community moblised?

13. What were the steps taken for resource mobilisation?

14. What was the process put in place for monitoring of the programme?

15. How was the evaluation of the programme conceptualized?

16. What were the challenges faced during implementation of this programme?
    - Launching stage
    - Implementation state
    - Monitoring and feedback

An Evaluation Study for 'Lifelines for Education' – project in West Bengal

LifeLines India

Final Report

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List of Abbreviations

OWSA	One World South Asia
VERS	Vikramshila Educational Resource Society
EDC	Education Development Centre, Inc
SSK	Sishu Siksha Kendra
MSK	Madhyamik Siksha Kendra
ICDS	Integrated Child Development Scheme
KW	Knowledge Workers
FI	Field Infomediaries
SSA	Sarva Siksha Abhiyan
CLRC	Cluster Resource Coordinator
BRCC	Block Resource Coordinator
SI	School Inspector
ICT	Information and Communication Technologies
GP	Gram Panchayat
Q&As	Questions and Answers

Executive Summary

Background of the study

'Lifelines for Education' was an innovative service implemented by One World South Asia in partnership with Quest Alliance and Vikramshila Educational Resource Society to provide critical academic support and instructional training to the teachers in rural areas. This first-of-its kind service used the power of voice as the primary means for knowledge dissemination and information exchange. The project envisaged to improve the quality of teaching and also developed a knowledge database in the form of questions and answers. The pilot project was implemented at Monteswar block of Bardhman district in West Bengal since October, 2007 to September, 2009. The project covered almost all primary, middle and high schools, SSKs/MSKs and ICDS centres in the block. Around 1,759 teachers across 571 schools availed the service of Lifelines for Education project and 12,139 questions and answers were generated during this period. The project involved eleven Field Infomediaries (FIs), four Knowledge Workers (KWs) and a panel of 150 experts to facilitate the implementation of the project.

An evaluation of the Lifelines pilot project in West Bengal was essential to assess the ground realities of the pilot project, experiences and perspectives of the primary beneficiaries and other stakeholders, outcome and impact of the pilot project as well as to assess the sustainability and scalability options of the pilot project. The Education Development Centre, Inc. (EDC) invited ORG Centre for Social Research (a division of the Nielsen Company) to undertake the evaluation of Lifelines for Education program in West Bengal. It was expected that the findings of the study would identify the areas for midcourse correction and facilitate the Government and policy planners in formulating strategies for scaling up and assessing the sustainability options for the project. The specific objectives for the evaluation study were – (a) to evaluate the outcomes and impact of the pilot phase of the project in terms of originally stated objectives and expectations; (b) to identify the key success factors and challenges for scaled implementation and sustainability options; (c) to review the design aspects and operational processes, cost aspects and institutional mechanism to drive program modifications and enhancements; and (d) to consolidate the available data in terms of questions and answers and build the baseline for indicative quantitative assessment. The study findings analysed the information obtained from 315 teachers across 141 schools covered by the programme as well as other project functionaries. Among the 315 teachers interviewed, 58 percent were primary teachers, 23 percent belonged to middle and high schools, 17 percent were SSK/ MSK teachers and the rest from ICDS centers.

Study Findings

Evaluation study revealed that Lifelines service has reached almost all schools in the block and on an average number of users found in each school was around two or three users. It was found that teachers from primary schools, SSKs, and MSKs accepted the helpline service enthusiastically in comparison to middle and high schools. Teachers from ICDS centres too expressed their need to avail this service but the queries raised by these teachers were mostly related to general knowledge or health education.

The concept of helpline to provide support to the rural teachers was well accepted and many teachers reported that they have used the service to resolve the classroom related issues or to understand innovative ways of teaching. But many of them also revealed that they have used the service on request of Field Infomediaries. All most all sample teachers reported using the service more than once. Average number of questions asked by a teacher was reported as around five or six. Some teachers have also used the service more than ten times. Large proportion of teachers reported asking subject related questions; few of them also reported asking questions related to pedagogy, classroom management, administrative and policy related issues.

Average cycle time as experienced by the teachers was almost two weeks in lieu of the proposed cycle time of 48 hours. It was found that in most cases though the answers were prepared within a period of 48 hours but the teachers received the answer only after 10 -15 days.

Nearly 90percent respondents reported either satisfied or somewhat satisfied with Lifelines service and only around 10.5 percent of the teachers reported their dissatisfaction. The reasons cited for this dissatisfaction were – poor content of the response, delay in getting response and brief response. A large proportion of teachers across all types of schools reported that Lifeline service has improved their

knowledge and skills. Many respondents also felt that this helpline service has raised the confidence level of the teachers. Others perceived the impact of Lifelines service on inspiring the teacher towards critical thinking and also inspired them to utilize innovative ways of teaching. Around 94 percent teachers reported that they would like to utilize the service in future and speed and quality of response were reported as key concerns for not using this service in future.

FIs played the pivotal role in implementing the project. FIs were primarily engaged to receive the questions from the teachers and provide them appropriate answers. The major challenges faced by the FIs include motivating the teachers to utilize Lifelines service and asking relevant questions related to curriculum, pedagogy or classroom management. FIs also felt the pressure of generating a large number of questions as many times they have been given a target which was difficult to achieve. As mentioned earlier about the average cycle time of 15 days; it as found that the cycle time was entirely governed by the second visit of the FIs to the school which took about 15 days since a large number of schools were assigned to a single FI.

KWs were responsible for preparing appropriate answers for a specific question raised, converting the answers in audio format and posting the final answer on the server. They also maintained the database in the form of questions and answers. KWs faced number of system related challenges in addition to workload and not getting the response from experts in time.

The experts were quite enthusiastic about the project and participated in the project voluntarily but they also expressed that they did not have any control over the final response. They also did not have any clue on the satisfaction level of the teachers. The Education Administrators perceived the service as innovative and also opinioned that the helpline service should be integrated with other education initiatives like teachers training and workshops at district and block level.

Content Analysis

A total of 250 questions were selected randomly from the server for the content analysis. Analysis of the profile of users revealed that 60 percent of these questions were asked by primary school teachers, around 20 percent question were from ICDS centers, 15 percent questions from SSK/MSK teachers and remaining (5 percent) questions from middle and high school teachers.[1] A large number of questions had a little relationship with the curriculum, pedagogy or classroom management. It was found that teachers have asked questions mostly related to general knowledge or quiz type questions catering to individual interests and curiosities. Though the teachers seeking general information from the helpline service might not be restricted but as almost 80 percent question revealed this trend, this suggests that the pattern of Q&As generated through Lifeline service has not met the expected outcomes of the project.

Outcome and Impact

The concept of helpline in education was well accepted. The stakeholders across all quarters perceived that Lifeline for Education service provided a much needed academic support system to the teachers in remote rural areas. The service was well accepted due to its inbuilt system features as well as due to the quality of human resources involved in implementation of the project. The use of the local language and the voice mode has led towards the acceptance of the service. Vikramshila's existence in the block helped in initial icebreaking and access to the teachers without much difficulty. Pre-project workshops, seminars and advocacy with government functionaries ensured hassle free implementation of the project. In addition hiring of local FIs, dedicated KWs and inclusion of well known teachers proved helpful towards implementation of the service.

The profile of FIs was not accepted by the teachers, the FIs were not considered as peers by the teaching community; the teachers rarely came up with the real difficulties faced by them. This was prominent from the content analysis as well as the response from the teachers that many of them used the service on request from the FIs. Though the concept of the helpline was accepted but the service did not win the complete confidence of the teachers and very few teachers have actually sought help to improve their teaching.

Many teachers reported that they were not aware about the phone number which revealed the need of strengthening the awareness campaign on the project. The project was initiated with lot of enthusiasm but initial vigor and enthusiasm was found missing towards the end of the project. The cycle time of 15 days was found as major constraint towards effective utilization of the service. Quality of response was also found as another concern; content analysis pointed out many answers as unsatisfactory without adequate explanations. The education functionaries (like CLRCs, BRCCs, and SIs) were not involved in implementation of the pilot project and which had affected the effective utilization of the service.

There were also few good questions generated through this system and if some teachers have benefited through these responses the project should be considered as successful in providing support in quality education.

Scalability and Sustainability options

The evaluation study also assessed the viability options for the project and the scope of expansion across other districts and states. It was found that the teachers were not coming out with the real difficulties since many of them were apprehensive to use the service. So for the scaled implementation anonymity of the user would be useful for viability of the project, which would provoke teachers to expose their real difficulties. Toll-free numbers with direct dial-in facility would also ensure anonymity and FIs should act only as contact point, facilitators for implementation of the project. Involvement of educational functionaries (such as CLRCs, BRCCs and SIs) in the project would improve the confidence level of the teachers. Quality of response should be improved to provide more meaningful information to the teachers at the same time sharing of information using local media channel would improve the demand and the visibility of the programme.

Though the willingness to pay was not exactly tested in this research but it was felt that many beneficiaries won't mind paying for the call charges i.e. around Rs. 10/ for each question and answer

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[1] Complete information on profile of users were not available from the server

provided that they are completely satisfied with the responses. It was also felt that if call charges can be reduced from STD call to local call, it would be definitely an added advantage.

Conclusion

The Lifelines for Education the pilot project was implemented for around two years across all schools in the block. Though a large number of questions and answers (12,139 Q&As) were generated through the system but most of these questions rarely pertained to course curriculum, pedagogy and classroom management. This implies that though the service was accepted by the teachers but in many cases it was accepted due its innovative approach, technology involved and also due to the repeated requests of the Field Infomediaries while the archive of Q&As failed to identify the true gaps in knowledge and skills of the teachers and the pilot project has not met its targeted objective fully.

The experts also felt that the duration of the pilot project was too short to win the confidence level of the teachers and this service should be implemented in long run and teachers should experience that there is no victimization for using this service and they should be definitely inspired to utilize the service more effectively. The archive of the Q&As generated in the pilot project should be screened and all relevant questions and answers should be shared with larger audience using local media channel like local newspapers, education programme in radio and television for improving the quality of education in the state. The Lifelines for Education project has the potential; to act as effective academic support system for the teachers, and with appropriate midcourse corrections, the project can actually play an important role in improving overall quality of education.

Chapter One

<u>INTRODUCTION</u>

1.0   Background

Quality remains at the core of education. It determines what students learn, how well they learn and what benefits they draw from their education. These issues have pushed the countries across the world to have on their agenda the mission to ensure student's optimum learning outcomes that help them play a positive role in creating a civil society. Stakeholders of education have expressed concern about the quality of education being imparted in schools. While it is difficult to define the quality of education operationally due to its complex nature, it is believed that it may be viewed in terms of the quality of various components of input, process and out-put dimensions. Some of these components may be: need-based curriculum, appropriate physical facilities, use of modern approaches to teaching, scholastic performance of students, professional preparation of teachers, and linking education to life skills and world of work.

The story of India's educational achievements is one of mixed success. On the down side, India has 22 percent of the world's population but 46 percent of the world's illiterates. The country is home to a high proportion of the world's out of school children and youth. On the positive side, it has made encouraging progress in recent past in raising schooling participation but the base of India's education pyramid remain week.[2] The most crying need for the development of the nation is the quality of education. Several surveys, researches and reports have pointed to the current poor quality of education.

It was felt across all sectors that teachers' knowledge and skill set are the cornerstones of school education. The school teachers who determine the destiny of the nation in class rooms should have a deeper understanding of the subject matter as well as pedagogy. To improve the effectiveness and competencies of the school teachers is a concern of the policy planners and Government across the world. In India teachers' education is supported by a network of national, state, district, block and cluster level resource institutions working together to enhance the quality and effectiveness of teachers through a series of programs.

Recent years have seen the development of Information and Communication Technologies (ICTs) and its use in different spheres of life including education. Information and communication technologies, which

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[2] 'The progress of school education in India'- Global Poverty Research Group, Website: http://www.gprg.org/

include radio and television, as well as computers and the Internet, have been touted as potentially powerful enabling tools for educational change and reform. When used appropriately, ICTs can help to expand the access to education, strengthen the relevance of education to the increasingly digital workplace and raise educational quality. While the impact of ICTs in learning outcomes is still debatable, and the effective integration of ICT into the educational system is also a complex, multifaceted process that involves not just technology, but also curriculum and pedagogy, institutional readiness, teacher competencies, and long-term financing. Research suggests that ICT can improve quality of education in several ways: by increasing learner motivation and engagement, by facilitating the acquisition of basic skills, and by enhancing teacher training.

In case of India a system of education built on the premises of quality and equity has been considered as imperative to its rapid progress as a modern and dynamic society. Government of India stands committed to provide good and quality education to every child in our country, especially those who belong to the underprivileged sections of our society. The importance of good teachers cannot be over-emphasized. Good teachers not only educate- they also inspire. Good teachers make good students. Good teachers make good citizens. The ways and means of improving the quality of our teachers remain as a great challenge for the country.

Lifelines for Education was an innovative service to provide critical academic support and continued instructional training to rural elementary school teachers in order to improve the quality of teaching. The pilot project was launched in Monteswar block, Bardhman district of West Bengal during September 2007. One World South Asia (OWSA) in partnership with the QUEST Alliance (a partnership between public, private and non-governmental organisations) and Vikramshila Educational Resource Society (VERS) has implemented the project in Field. Lifelines for education was a value added support service for teachers located in remote rural areas where technology played a key role to connect the teachers with (subject-matter and pedagogy) experts to respond to their day-to-day queries related to academics. Teachers using the Lifelines for Education service registered their subjects along with the queries through telephone, a group of Knowledge Workers and facilitators helped to send these queries to subject matter experts / resources persons and prepared the answers based on their response, all answers were to be intimated to respective teachers within 48 hours mostly over phone.

At this juncture an evaluation of the pilot project was essential to assess the ground realities, perception of the beneficiaries, outcomes, impact and sustainability or scalability options for the project in other districts and states.

The Education Development Centre, Inc. (EDC) an international non-profit organization, which also develops, delivers and evaluates programmes to address urgent challenges in education, health and economic development has felt the need to conduct an evaluation study of Lifelines for education project. EDC as a part of its dot-EDU India programme entitled "Technology Tool for Teaching and Training' (T4), and with funding support from USAID (United States Agency for International Development), has commissioned an evaluation study to ORG Centre for Social Research (a division of the Nielsen Company) to assess the strategies and performance of Lifelines for Education project.

1.1 Objectives of the Study

The main objective of the evaluation study was to conduct an in-depth assessment of design and operational aspects as well as outcomes and impact of the pilot project and set directions to facilitate sustainable scaled implementation of the project in future. The specific objectives of the study were as follows:

❑ To evaluate the outcomes and impact of the pilot phase of the project in terms of originally stated objectives and expectations;

❑ To identify the key success factors and challenges for scaled implementation and sustainability options;

❑ To review the design aspects, entire operational process of the Lifelines service, cost aspects, and institutional mechanism to drive program modifications and enhancements; and

❑ To consolidate available data in terms of Q&As and build the baseline against which the indicative quantitative assessment is done.

1.2   Study Methodology

Following research tasks were undertaken as a part of the evaluation study.

Research Task -1: Desk research, review of relevant project documents, project proposals and other documents

The Project Implementation Plan of the Lifelines for Education project was thoroughly reviewed to develop an understanding on project design, the roles and responsibilities of each of the functionaries involved in the implementation of the project, method of supervision and monitoring the progress of the project. Also detailed discussions have been carried out with the project staff members and functionaries of Vikramshila Educational Resource Society (VERS), One World South Asia (OWSA) and Quest Alliance. Following were the main area of information collected from the secondary data and Project Implementation plan and depth discussion with project officials.

- ❑ Project design and key functionaries involved in the project
- ❑ Roles and responsibility of key functionaries
- ❑ Geographical coverage, type of schools, number of teachers
- ❑ Process followed for selection of schools and pilot area
- ❑ Type of campaign initiated to motivate the teachers to use the Lifelines for Education service
- ❑ Usage pattern of beneficiaries
- ❑ Qualifications and skill sets of functionaries of the project and
- ❑ Level of participation of the experts

Research Task-2: In-depth interview with project beneficiaries/teachers

The beneficiary survey was carried out among a sample of Lifelines service users randomly drawn from the selected schools across the project area. In order to understand the pattern of utilization of Lifelines service, only the teachers availing Lifelines service was contacted. More specifically, the teachers who availed Lifelines service to get answer to their specific queries at least once in the period from January 2008 to September 2009, constituted the universe for the evaluation study. The required information for the study was elicited by interviewing selected teachers at schools, using a semi-structured pre-tested questionnaire. The questionnaire was finalized after a series of discussions with the officials from Quest alliance, VERS and OWSA, with technical input from EDC. To obtain the required information for the study the questionnaire was designed to collect the information on the following areas:

- ❑ Key challenges faced while teaching in elementary schools and support system available through other sources (e.g. teaching learning materials and reference books made available as part of Sarva Siksha Abhiyan or SSA and in-service training organised by SSA and school authorities)
- ❑ Pattern of usage of Lifelines service (i.e. types of questions asked and frequency of usage)
- ❑ Main reasons for using academic support service or 'influencers'
- ❑ Level of satisfaction with the Lifelines service (quality of responses, spread and depth of knowledge, content clarity and relevance; use of input received from the system, e.g. whether information was disseminated across students or followed any particular method of classroom management as suggested by the experts, how effective or useful was such additional input to improve the overall quality of teaching; cycle time in receiving the response from the system; and level of satisfaction with the performance of field workers and knowledge workers who act as facilitators for this project)
- ❑ Overall experience of usage of academic support service, willingness to use such service in future, whether users have referred or want to refer such service to peers
- ❑ Suggestions to improve Lifeline India service in future

Research Task-3: In-depth interview/group discussions with facilitators (Field Infomediaries and Knowledge Workers) and contributors (Experts)

In-depth interviews and focus group discussions were conducted with Field Infomediaries, Knowledge Workers and subject matter or pedagogy experts to assess the efficiency of information flow process and outreach mechanisms. This task has helped to assess the critical 'positives' and 'negatives' of the system.

In-depth interviews and focus group discussions with Field Infomediaries (FIs):
Four in-depth discussions and one focus group discussion have been carried out with the FIs to review their roles and responsibilities, review the process followed for enrolment of the teachers in the system, key issues and challenges faced in the field while motivating teachers to avail such service, opinion on efficiency of the process, effectiveness of the system, cycle time and relevance of the responses received from the system.

In-depth interviews with Knowledge Workers (KWs):
Knowledge Workers were interviewed to assess their role and responsibilities and challenges faced by them to perform their day to day activities. KWs' experience of handling the system was the key to assess the quality of the technical system from the user's perspective.

Focus Group Discussions with contributors/experts:
Discussions with the contributors/experts revealed the opinions and suggestions of these key functionaries regarding Lifelines project. Efforts were made to assess the challenges faced by these experts to get involved in such project such as time constraints.

Research Task-4: In-depth interviews with education administrators / government functionaries of the Education Department

Efforts have also been made to know the perception and opinion of Block Education Officers, district level and state level officials of SSA, Panchayat members and other key decision makers in the community regarding Lifelines for Education project. The suggestions of these stakeholders on the sustainability and scalability options for Lifelines service would help to workout the future model for Lifelines for Education project.

Research Task-5: Content analysis of selected questions and answers

Lifelines for Education pilot project developed a knowledge repository in the form of questions and answers. Questions were raised by the teachers and answers – shared by the experts - were framed by Knowledge Workers. Around 12,000 Questions and Answers (Q&As) were generated in one and a half years of project period.

As a part of the current evaluation study, approximately 200 Q&As were selected for detailed content analysis. The selection have been made through a stratified random selection from the entire universe of the Q&As. Efforts have been made to select sample Q&As across all subjects and all sub categories. These 200 Q &A were translated in English and shared with few domain experts/consultants from West Bengal and other parts of India. The sample Q&As were analysed as following:

- ❑ Classification of questions based on subjects covered (language/others), factual questions, curriculum related questions, pedagogy or classroom management/child psychology related questions and questions related to government policies/ directives or other similar issues;
- ❑ Profile of users vis-à-vis type of questions and cycle time; and
- ❑ Understand the challenges faced by teachers in rural school and actual value of the input received through Lifelines for Education service.

1.3   Scope of Work

The scope of work for the present evaluation study included following:

- ❑ Review of the design aspect and operational mechanism of the project
- ❑ Assessment of the reach and coverage of the project and profile of beneficiaries
- ❑ Assessment of the information flow and outreach mechanism followed for the project
- ❑ Review of the experience and perception of project beneficiaries and other stakeholders
- ❑ Analysis of the capacity and the role played by Field Infomediaries and Knowledge Workers towards implementation of the project

- ❑ Review of the institutional mechanisms and sustainability option in place for the scaled implementation of the project
- ❑ Evaluate the options available for integration of Lifelines project with other state or district level education intervention program.

The operational area of the project was Monteswar Block of Bardhman district, West Bengal. The intervention area was 13 Gram Panchayats and 571 government primary, middle and high schools and ICDS/Anganwadi[3] centres in the block.

1.4   Study Limitations

The present evaluation study is limited to the experiences of the beneficiary and other stakeholders of Lifelines for Education project. The study has also made an effort to evaluate the available questions and answers and relevance of such Q&As towards improving the quality of education. The study has not made any effort to assess the actual teaching learning processes, performance of the teachers in the classrooms after receiving the support through Lifelines for Education service. The study has not used any quantitative method to measure the knowledge level or the skill sets available with the teachers and more specifically the learning outcomes of the children, as this was not included in the scope of work for the present study.

1.5   Sampling Framework

Following table 1.1 shows the sample size for the present study.

Table No: 1.1: Study Sampling

Sl. No.	Research Tasks/ Respondents	Research Tool	Sample Size
1	Desk review/secondary data collection from all project partners, VERS, OWSA and QUEST Alliance	Check list	
2	Primary beneficiaries/Teachers used Lifelines Education service in the project area	Semi-structured questionnaire	315 teachers
3	Field Coordinators/Field level Intermediaries implementing the project in Field	In-depth interviews and Focus group discussions	4 IDIs and 1 FGD
4	Knowledge Workers	Do	Do
5	Experts/Resource Persons	In-depth discussion guidelines	1 FGD
6	CLRC, BEO, State Education Department officials	In-depth discussion guidelines	4 IDIs

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[3] Integrated Child Development Service Scheme – Programme for early childhood care and development.

1.5.1 Selection of schools and teachers

A stratified random sampling process was followed for selection of schools. All schools across 13 Gram Panchayats (GP) were stratified based on type of schools viz. primary, middle and high schools, SSK and MSK and ICDS centers. Though a large number of ICDS centres covered during the pilot project but the present evaluation study has focused largely on primary schools, SSK, MSKs, middle and high schools considering that ICDS centres are not providing any effective education input. A total of 148 sample schools were selected randomly from 13 Gram Panchayats, from the stratified list of types of schools. Selected numbers of schools were proportionate to total number of available schools in the GPs. Out of 148 sample schools, beneficiaries of Lifelines service was found in 141 schools. Beneficiaries and teachers from the remaining seven schools were not available as a few of them were absent on the date of the field visit. Others were attending training programmes and not available in the school. Table 1.2 below presents the number and type of schools across blocks. All teachers those who reported using Lifelines service at least once during the project lifecycle were selected for the interview.

Table No: 1.2: Sample of schools

Gram Panchayats	Primary school (N)	Middle & High school (N)	SSK, MSK (N)	ICDS Centre (N)	Total (N)
PUTSHURI	6	1	2		9
PIPLON	6	2	1		9
BAGHASON	10	4	1	1	16
MADHYAMGRAM	11	1	3		15
KUSUMGRAM	9	2	2	1	14
BHAGRA MULGRAM	5	2	3		10
MAMUDPUR 2	4		2		6
DENUR	2	2	2	1	7
JAMNA	13	1	2	1	17
SHUSHUNIA	9	3	1	1	14
BAMUNPARA	6	1	2		9
MAMUDPUR 1	4		3		7
MONTESWAR	5	1	2		8
Total	**90**	**20**	**26**	**5**	**141**

Figure No 1.1 – Study Universe and study sample
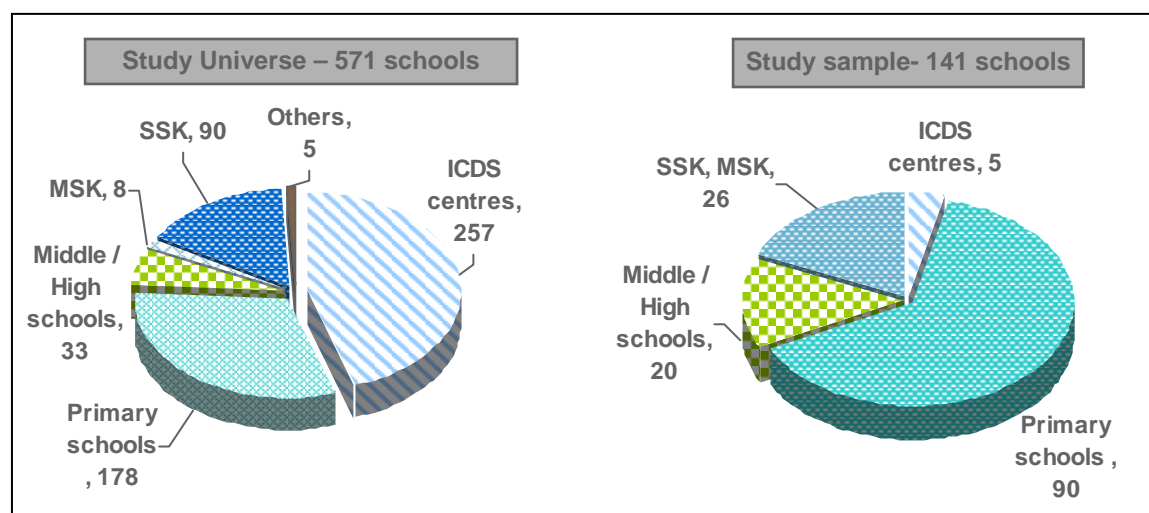
1.5.2 Selection of other functionaries

Out of eleven Field Infomediaries, four were randomly selected for in-depth interviews and group discussions. In-depth interviews were conducted with all Knowledge Workers and a focus group discussion was conducted with a group of experts from different spheres. For other functionaries, two government officials from the Department of Education, one block level education officer and one CLRC were interviewed to assess their perceptions related to the project.

Chapter Two

LIFELINES FOR EDUCATION – A BRIEF PROFILE

This chapter contains a brief profile of Lifelines for Education project, including the background of the project, implementation mechanisms, roles played by the project implementing organisations, and information flow process. This information was collected from the project status report and other secondary documents made available by VERS and OWSA.

2.0   Background of the project

Lifelines for Education, an initiative of the One World South Asia office in addition to British Telecom and CISCO systems, was a service that facilitates exchange of critical and timely information using the power of voice as the primary means of knowledge dissemination and information exchange. The system was designed as a right mix of telephony and internet for knowledge delivery by providing connectivity, content and capability via a phone based service. In its initial pilot phase the project has been successfully implemented in north and central India to provide relevant information to the farmers for agribusiness development. The rural farming community was able to get answers to their queries related to their day to day life; their illiteracy was not a barrier to obtain such information. Lifelines for Education was the application of same technology platform with appropriate customization to provide academic support to the teachers in rural areas.

There were a number of advantages of using this technology. This was a domain independent technology and can be customized for use to any knowledge domain, in any geographic location and target groups. The technology has the phone and web based features to facilitate seamless knowledge exchange in audio format. The best part of the technology was that it supported the development of a database in the question and answer format which can be analyzed to assess the specific knowledge gaps among the target groups. The application thus has the potential to address a large variety of knowledge and information challenges at the local level.

Lifelines for Education pilot project was jointly implemented by One World South Asia office, Quest Alliance and Vikramshila Educational Resource Society (VERS). The project envisaged to provide academic support to the rural teachers by linking them with the experts through a phone based service. The pilot project was launched across all government schools (primary, middle, high schools, SSK and MSKS) in 13 Gram Panchayats of Monteswar block, Bardhman district of West Bengal. The main objectives of the Lifelines for Education project were as follows:

- ❑ To pilot a system to provide critical academic support and institutional training to rural elementary school teachers
- ❑ To improve quality of teaching
- ❑ To support and build a knowledge database in the question and answer format

2.1   Implementation mechanism

The following sections detail the profile and different roles played by key project partners:

2.1.1   Profile and the roles played by One World South Asia (OWSA)

One World South Asia (the South Asian Centre of the One World Network) aims to harness the democratic potential of Information and Communication Technologies to promote human rights and sustainable development. Towards realization of these goals, OWSA has been working towards building strong partnerships with civil society organisations, private sector, government and other grass root level organisations to position ICTs strategically to strengthen the voices of the poor and marginalized.

The overall purpose of Lifelines for Education project was to promote the ICT-based information and knowledge provision to rural teachers and OWSA was responsible for basic setup, customization of the technology platform, and providing functional technology solution and support for carrying out the entire

backend operation. OWSA also played an important role in training of the project implementing team, Field Infomediaries, Knowledge Workers and Experts in addition to overall project monitoring and evaluation.

2.1.2   Profile and the roles played by Vikramshila Educational Resource Society (VERS)

Vikramshila functions with a motto of "Making Quality Education a Reality for All Children" and has been involved in various educational initiatives over last one decade. As the main implementing partner, VERS was responsible for promoting the Lifelines service among the teachers and encouraging them to use this service. VERS was entirely responsible for implementation and facilitation of the project on the ground. VERS recruited and trained a team of Field Infomediaries to facilitate Field implementation, and also provided and trained a team of Knowledge Workers and experts to ensure quality and timely answers. VERS also took part in IEC activities for the project, provided personal consultation as a part of marketing / advocacy strategy, and networked with local experts to provide localized answers.

2.1.3   Profile and the roles played by Quest Alliance

The Quest Alliance is a multi-stakeholder partnership working across India towards a social commitment to improve education and employability among India's disadvantaged youth. As a resource partner and donor Quest Alliance has provided both technical and financial support in implementation of Lifelines for Education project. Quest Alliance has also undertaken initial research design study with Quicksand design studio to recommend design interventions and also initiated the current evaluation study.

2.2   Information flow process

As discussed earlier Lifelines for Education service was based on an interactive voice response system and also using an innovative mix of telephony and internet. The project was designed to answer the teachers' queries related to subject matter, pedagogy, classroom management and administration within a period of 24 – 48 hours by a group of educational experts / administrators. The information flow process was connected to the computer and telephone infrastructure and also to the knowledge level and skill sets of Knowledge Workers and experts as and when required. The service was operated with a telephone number attended through an automatic voice response system and the query was recorded in the server. A query ID /reference number was provided to the teacher to track the query and receive the response.

The Knowledge Workers at VERS office received the query from the server and prepared the answer for the query accessing different resources available with them e.g. text books, reference books, dictionaries, encyclopedia as well as internet. Knowledge Workers contacted the concerned experts in case of non-availability of the answer from other sources. Once the answer was ready, the Knowledge Workers stored the answer as an audio clip in the server against the query reference ID so that IVR system can play back the answer to the users / teachers in this case. Knowledge Worker also added the question and answer in the FAQ database for future reference. The end users/teachers used the mobile phone provided to the Field Infomediaries to raise the question and receive the answer. Figure 2.1 shows the information flow process for the project.

Figure No 2.1 Information Flow Process
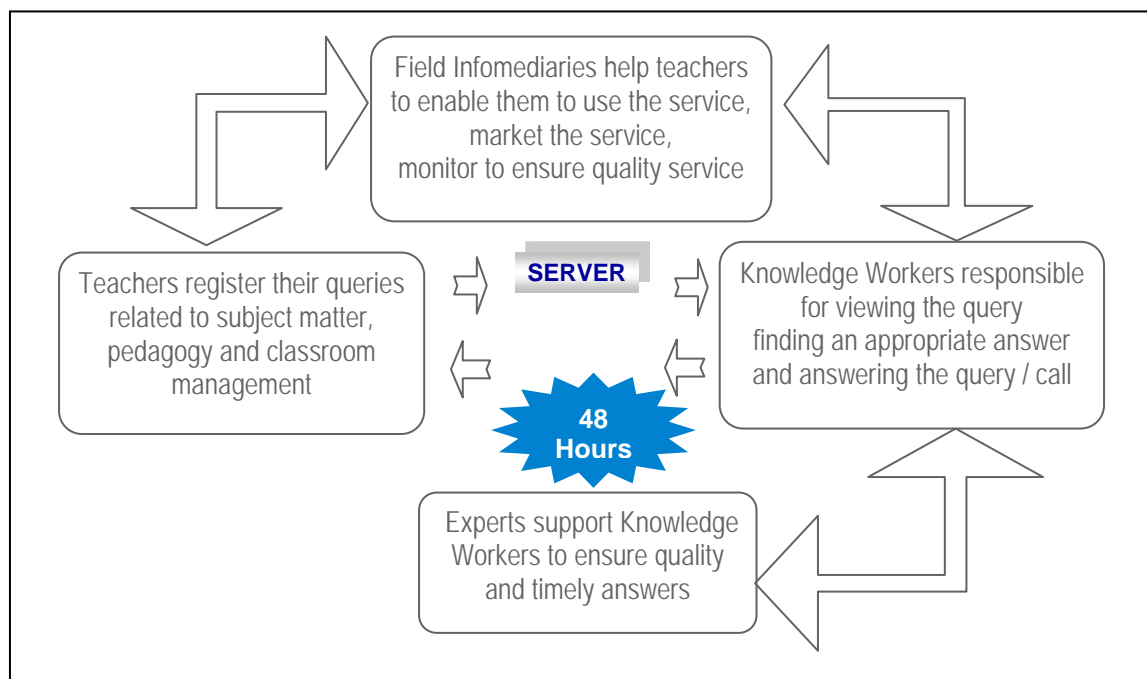
2.3 Project activities

The implementation of Lifelines for Education service included a series of workshops, seminars, and training programmes involving the project beneficiaries and other stakeholders. Vikramshila's presence in the block as an education resource centre has also helped in implementation of the project. A pre-project kick-off workshop was organized at Monteswar for initial icebreaking. A viability study was conducted by Quicksand Design Studio to determine the model for Lifelines for Education project. A number of training programmes and workshops were organized by VERS to orient and train the Field Infomediaries and Knowledge Workers for the project. Teachers' workshops were organised periodically to raise the interest of the teacher's community. This helped in advocacy campaign for Lifelines for Education service at ground level. FAQ booklets and reading material were distributed among teachers as supplementary resources for academic reference.

2.4 Cost aspect

The following calculation of the average cost per question and answer was calculated from the records available at VERS. The total operational cost of the program for one and half years was around 22 Lakhs. The remunerations paid to the Field Infomediaries and Knowledge Workers were Rs 3,000/ and Rs 8,000/ per month respectively. Average call charge for asking a question and receiving the answer under the program was worked out as less than Rs 10/. However the teachers were not charged the user fee for using the service under the pilot project.

Cost of the pilot project should be assessed with reference to number of beneficiaries and type of outputs generated in the project. The pilot project at the cost of 22 lakhs have benefited around 1,000/1,200 teachers directly, many other teachers indirectly (while discussing with friends and colleagues), and a large number of children in the blocks. In addition, around 12,000 Q&As generated would benefit other teachers, trainers and text book writers in developing teaching/learning materials.[4]

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[4] Information on operational cost of the pilot project was collected from VERS, while other project partners could not provide such information specifically for Lifelines for Education project.

Chapter Three

COVERAGE OF THE PROGRAMME AND PROFILE OF THE BENEFICIARIES AND FUNCTIONARIES

The following chapter includes the reach and penetration of the project and profile of the beneficiaries and other functionaries.

3.0 Coverage of the programme

The pilot project has covered 571 schools, which includes ICDS centres, primary, middle and high schools across the block. Total coverage of beneficiaries as reported in the project document was 1,759 teachers;[5] the total number of questions generated was 12,139 and the project was facilitated by 11 Field Infomediaries and four Knowledge Workers in addition to around 150 experts.

Table No. 3.1: Coverage of the Programme

District	Bardhman
Block and Gram Panchayats	Monteswar Block, 13 Gram Panchayats,
No. of schools covered	571
No. of teachers enrolled	1,759
No. of Field Infomediaries	11
No. of Knowledge Workers	4
No. of Experts	150 (eminent educationist in the state, approx)
No. of Questions and Answers generated	12,139

The present evaluation study has contacted an aggregated 148 schools across the block; 141 schools reported having the beneficiaries of Lifelines for Education service on the date of visit. In the seven remaining schools, teachers were either absent or busy in attending a training programme or retired. All available beneficiaries were interviewed at all 141 schools. A total of 315 beneficiaries/teachers were covered in the survey.

3.1 Profile of the primary beneficiaries

Out of the 315 teachers, 183 teachers were from primary schools (58 percent), 74 teachers belonged to middle and high schools (23 percent), 52 teachers from MSKs and SSKs (17 percent) and only six teachers from ICDS centers.

The average number of students reported for primary schools was around 100. Middle and high schools reported having almost 600 students while SSKs and MSKs had 160 students on average. Primary schools reported having two to three teachers. SSK and MSK had about four teachers. Almost all middle and high schools reported having more than ten teachers. This also revealed that in primary schools and SSK, MSKs teachers are teaching all subjects in the curriculum while in case of middle and high schools teachers are mostly teaching one to two subjects based on their expertise. An average number of students per class was reported as 27 students for primary schools and 60 students for secondary schools.

3.1.1 Demographic profile

Most of the teachers reported to be in the age group of 35-50 years (45 percent). Around 75 percent of the MSK/SSK teachers, 50 percent teachers from ICDS centres, 39 percent teachers from primary schools and 36 percent teachers from middle and high school found in this age group. Around 27 percent of all teachers reported in the age group of below 35 years and similar proportion of teachers also reported in the age group of above 50 years.

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[5] The study revealed that the total number of beneficiaries was in the range of 1,000 – 1,200.

Figure No. 3.1: Age profile of the teachers

Figure No. 3.1: Age profile of the teachers
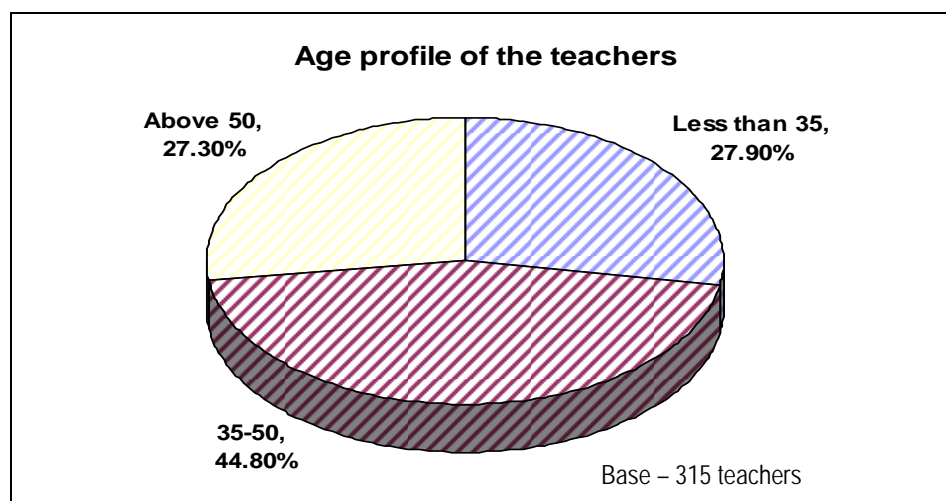
Middle and high schools reported the highest proportion of teachers in the age group of below 35 years (38 percent), and SSKs / MSKs rarely reported teachers in the age group of below 35 years – see Table 3.2.

Table No: 3.2: Age profile of the teachers

Age Profile	Type of school							
	Primary school		Middle school/ High school		SSK, MSK		ICDS Centre	
	N	%	N	%	N	%	N	%
< 35	54	29.5	28	37.8	3	5.8	3	50.0
35-50	72	39.3	27	36.5	39	75.0	3	50.0
50+	57	31.2	19	25.7	10	19.2		
Total Teachers sampled	183	100.0	74	100.0	52	100.0	6	100.0
Average age of the Teachers	42.4		40.8		45.8		37.2	

Around 71 percent of all sampled teachers were male. Predominance of male teachers was found in primary, middle and high school (above 80 percent) and female teachers were predominant in ICDS, SSKs and MSKs. All the teachers in ICDS centres and 75 percent of teachers In SSK/MSK were reported as female.

3.2   Educational qualification and experience

Analysis of data revealed that there was a significant gap in education level among teachers in primary schools and SSK, MSK and teachers in middle and high school. More than 55 percent of primary school teachers, 79 percent SSK, MSK teachers and almost all ICDS teachers have either completed secondary or higher secondary level of education. While half of the middle and high school teachers were reported as graduates and remaining half were reported as postgraduates – see Table 3.3.

Table No: 3.3: Educational qualification of the teachers

Educational Qualification	Type of school								Total	
	Primary school		Middle school/ High school		SSK, MSK		ICDS Centre			
	N	%	N	%	N	%	N	%	N	%
Class 10	41	22.4			33	63.5	3	50.0	77	24.4
Class 12	60	32.8			8	15.4	3	50.0	71	22.5
Graduation (BA/ B.Sc / B.Com/ B.Ed / B.Tech / BBA)	66	36.1	37	50.0	7	13.5			110	34.9
Post Graduation (MA/M.Sc)	15	8.2	36	48.6	4	7.7			55	17.5
Others / refused	1	0.5	1	1.4					2	0.6
Total	**183**	**100.0**	**74**	**100.0**	**52**	**100.1**	**6**	**100.0**	**315**	**100.0**

Average experience or number of years in service was reported as around 12 years across all sample teachers. Nearly 50percent teachers in both primary schools and middle and high schools reported having teaching experience of less than 5 years. Teachers in SSK, MSK and ICDS centres reported having better experience profile. Around 75percent SSK teachers reported having more than five years of experience – see Table 3.3.

Table No: 3.4: Numbers of years in service

	Type of school									
	Primary school		Middle school/ High school		SSK, MSK		ICDS Centre		Total	
Years of teaching	N	%	N	%	N	%	N	%	N	%
Less than 2 years	12	6.6	11	14.9	1	1.9	1	16.7	25	7.9
2 yrs - less than 5 years	71	38.8	25	33.8	12	23.1			108	34.3
5 yrs - less than 10 years	68	37.2	15	20.3	34	65.4	5	83.3	122	38.7
10 years - less than 20 years	12	6.6	9	12.2	5	9.6			26	8.3
More than 20 years	20	10.9	14	18.9					34	10.8
Total	**183**	**100**	**74**	**100**	**52**	**100**	**6**	**100**	**315**	**100**

3.3 Training received

Out of the sampled teachers, 87 percent of SSK and MSK teachers, 43 percent of primary school teachers and 50 percent middle and high school teachers reported that they have not received any formal pre-service training, while 41.5 percent teachers from primary schools also reported having pre-service training like Basic Training, Junior Basic Training, Primary Teachers Training and PGBT. Around 91 percent of all teachers reported received in-service training; the proportion was the highest (94 percent) for primary school teachers.

Table No: 3.5: Trainings received

Formal Pre-service training					
Type of training	Primary School (%)	Middle and High Schools (%)	SSK and MSK (%)	ICDS Centers (%)	Total (%)
Dp. Ed /B.Ed /M.Ed	8.2	36.5	9.6		14.9
Other trainings (Basic Training, Junior Basic Training, PTT, PGBT etc)	41.5	13.5	3.8		32.1
No formal training received	50.3	50.0	86.5	100.0	53.0
In-service training					
Received Training	94	86.4	90.5	66.7	91.1

Base: Primary schools – 183 teachers; Middle and High schools – 74 teachers; SSK, MSK – 52 teachers; ICDS – six teachers

3.4   Availability and use of teaching aids

The following table presents availability of teaching aids in the school. Out of 141 schools, only five schools reported having computer facilities and none of the schools had internet. Total 46 schools reported having question bank and 69 schools reported having library facilities – see Table 3.6.

Table No: 3.6: Use of teaching aids

Teaching Aids		Primary Schools (N)	Middle and High Schools (N)	SSK and MSK (N)	ICDS centers (N)	Total (N)
Text Books	Yes	90	2	26	1	137
Reference books/Dictionaries	Yes	74	19	12		105
Questions Banks	Yes	28	13	5		46
Library	Yes	47	14	8		69
Teaching Learning Materials	Yes	89	20	23	5	137
Computer Facilities	Yes		5			5
Internet	Nil	**90**	**20**	**26**	**5**	**141**
Total		**90**	**20**	**26**	**5**	**141**

Charts, pictures, cards, globe and models were reported as most commonly used teaching learning materials. Regarding usage of reference books, around 29 percent teachers reported using reference books very often; while around 51 percent reported using reference books occasionally and remaining 20 percent teachers reported not using reference books at all. Nearly 13 percent of all teachers have also expressed that reference books were not required for their teaching.

3.5   Challenges faced by the teachers

Lack of physical infrastructure, students' absenteeism and drop-out, large number of students in a class leading to difficult classroom management, less number of teachers and heavy workload are the major challenges faced by the teachers in rural areas. Issues faced while delivering subject matter due to inadequate skill sets and knowledge etc were reported by 35percent SSK/ MSK teachers, which suggests that these teachers do require academic support service while this issue was also reported by 13 percent primary school teachers and 16 percent middle and high school teachers. Non-availability of text books and adequate teaching learning materials and issues related to multi-grade teaching were other common challenges reported by the teachers across all types of schools – see Table 3.7.

Table No: 3.7: Problems of the teachers

	Primary Schools (%)	Middle and High Schools (%)	SSK and MSK (%)	ICDS centers (%)	Total (%)
Physical infrastructure – lack of space, toilet, drinking water	31.1	41.9	51.9	100	38.4
Student absenteeism and drop-out	36.1	23	40.4	33.3	33.7
Large number of students in one classroom and classroom management	29	35.1	28.8	66.7	31.1
Less teacher	26.8	21.6	3.8	33.3	21.3
Non-availability of text books / adequate teaching learning materials etc	16.9	13.5	25		17.8
Issues related to syllabus / subject matter / not having adequate skill sets / knowledge	12.6	16.2	34.6		16.8
Issues related to multi-grade teaching	13.7	8.1	1.9		10.2
Children poor in education	6.6	5.4	3.8		5.7
No problems	2.2	13.5	1.9		4.8

Base: Primary schools – 183 teachers; Middle and High schools – 74 teachers; SSK, MSK – 52 teachers; ICDS – six teachers

The teachers were further probed whether they discussed these challenges with anyone or received any support to overcome these challenges. A majority of the teachers reported discussing school related issues with their colleagues, head teachers and school management. In connection to support received, most of the teachers reported having informed discussions with colleagues, head teacher or CLRCs which helped reduce such difficulties. Others reported that teachers training programme or workshops conducted by education functionaries or NGOs were beneficial.

3.6. Profile of the functionaries

As discussed earlier Field Infomediaries, Knowledge Workers and experts are the key functionaries involved in implementation of Lifelines for Education programme. The following table provides the profile of these functionaries.

Table No 3.8: Profile of the functionaries

	Total No.	Age, Sex, Education and Experience
Field Infomediaries (FIs)	11	All male in the age group of 25 – 40 years, 4 of them had qualification as Graduates / Post Graduate in Bengali / History. Others were having Secondary / Higher Secondary level of education with experience of working in Vikramshila
Knowledge Workers (KWs)	4	Female – in the age group of 25 – 35 years, All of them were graduate / post graduate in humanities/ social sciences and also had experience of working in NGO sector
Experts / Resource Persons	150 (actively involved around 20)	Schools teachers from the reputed schools in Kolkata and College/ University lecturers and professors. Some of them were Education Consultants and Administrators / officials from SSA etc.

Chapter-IV

EXPERIENCE OF THE PRIMARY BENEFICIARIES – THE TEACHERS

The following section includes the pattern of usage of Lifelines for Education service, the key influencers for using such service, the benefit of the service and the level of satisfaction. It also tries to capture the willingness of the teachers to avail the service in future and suggestions for improvement of Lifelines service.

4.0   Usage pattern of Lifeline for Education service

Analysis of the pattern of usage of Lifelines for Education service revealed the acceptance of such academic support service by the beneficiaries.

4.1   Number of questions raised by the teachers

Around 90 percent of the sampled teachers reported that they have been using the Lifelines service for more than six months and average number of questions asked was reported as around five. Nearly half of all teachers/beneficiaries reported asking less than four questions while about one fourth of the beneficiaries also reported asking more than ten questions. Across different types of schools, SSK, MSK teachers reported maximum usage of the service as around 40 percent of these teachers reported asking more than ten questions while middle and high school teachers reported minimum usage of Lifelines service-only 13 percent of these teachers reported asking more than ten questions. Around 28 percent primary school teachers and 17 percent ICDS teachers also asked more than ten questions through Lifelines service. (Refer fig 4.1 and table 4.1)

Figure No. 4.1 Number of questions
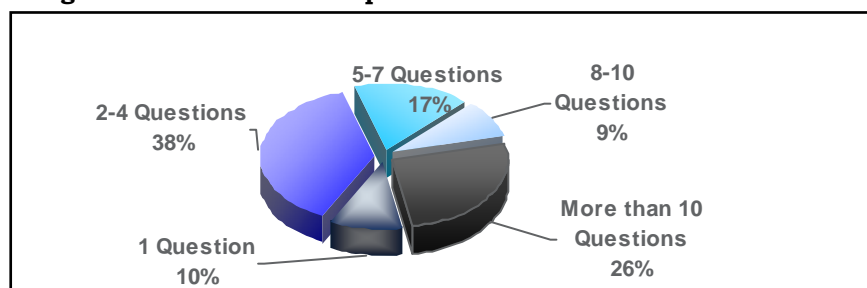
Base – 315 teachers

Table No: 4.1: Number of questions raised by the teachers

No. of questions	Type of school							
	Primary school		Middle school/ High school		SSK, MSK		ICDS Centre	
	N	%	N	%	N	%	N	%
1	14	7.7	17	23.0	1	1.9		
2 – 4	69	37.7	30	40.5	18	34.6	3	50.0
5 – 7	32	17.5	15	20.3	3	5.8	2	33.3
8 – 10	17	9.3	2	2.7	9	17.3		
More than 10	**51**	**27.9**	**10**	**13.5**	**21**	**40.4**	**1**	**16.7**
Total	**183**	**100.0**	**74**	**100.0**	**52**	**100.0**	**6**	**100.0**

Around 39 percent teachers also reported not asking any question in last six months. Pattern of usage in last six months also suggests that teachers from middle and high schools have rarely used the service during this period. The major reason cited by the teacher for not using the service during last six months was irregular visit by Field Infomediaries during this period.

Lifelines project was initiated in September 2007 and the project was continued till September 2009 but the last six months of implementation the project was operational in an extended mode and initial enthusiasm was found missing. The period March- September also considered as less active in terms of teaching activities since this period has got exams, summer vacations, promotions and new admissions etc.

4.2 Pattern of the queries raised by the teachers

Most of the teachers (90 percent) asked questions related to subject matter while analysis of pattern of questions also revealed that some teachers have also posed their questions related to pedagogy, general knowledge and classroom management. Nearly 37 percent teachers from primary schools and 46 percent teachers from SSK/MSK asked questions related to pedagogy but only nine percent middle and high school teachers reported the same. Around 15 percent primary school teachers and 17 percent SSK/MSK teachers have asked questions related to policy matters but very few teachers from middle and high schools reported the same.

It was found that ICDS teachers had more questions related to health issues and administration related issues. The purpose of ICDS programme is to improve the health, nutrition and development of children. The programme offers health, nutrition and hygiene education to mothers, non-formal preschool education to children aged three to six, supplementary feeding for all children and pregnant and nursing mothers, growth monitoring and promotion, and links to primary healthcare services such as immunization and vitamin A supplements. So most of these ICDS workers / Anganwadi Workers (AWWs)/ teachers in ICDS centres were found concerned with child health and related issues. (Refer table 4.2)

Table No: 4.2: Patterns of questions raised by teachers

Content of the question				
Topics	Primary school (%)	Middle school/ High school (%)	SSK, MSK (%)	ICDS Centre (%)
Subject Matter	89.1	94.6	94.2	50.0
Pedagogy	36.6	9.5	46.2	50.0
Administration	7.7	4.1	3.8	33.3
Policy	14.8	5.4	17.3	50.0
Classroom Management	7.1	2.7	15.4	16.7
General Knowledge	5.5		1.9	
Environment			1.9	
Health Education				16.7

Base: Primary schools – 183 teachers; Middle & High schools – 74 teachers; SSK, MSK – 52 teachers; ICDS – 6 teachers

Knowledge Workers and Field Infomediaries have also reported a large proportion of subject related questions. Questions related to English teaching was reported as quite common considering that the state has recently resumed English teaching in primary section with a revised curriculum and a large proportion of teacher are still facing challenges while teaching English through direct method in primary division.

4.3 Motivation for using the Lifelines Education service

More than one third of all teachers have reported that the difficulties faced by them while teaching in classroom have actually motivated them to utilize this service. This top of mind response revealed that the challenges faced by the teachers in rural schools included not only the lack of physical infrastructure and resources like text books, reference books, teaching learning materials etc but also the gaps in teachers' own knowledge and skills sets. So the help line in education to provide critical academic support and instructional training to the teachers in remote rural areas was extremely needed and well accepted by a significant proportion of beneficiaries.

Other important motivating factors as reported by the teachers included the reasons as following: to access facts and figures related to curriculum but not available in the text book, and to understand innovative ways of teaching. These responses suggested the need of additional reference books and adequate teaching aids. In addition, many teachers also reported the following reasons for using Lifelines

service: wanted to experience an innovative service; wanted to identify the printing errors in text books; required to cross check different version of facts and figures in different text books. Usage of Lifelines service to manage difficulties while teaching English was also found as one of the prominent responses revealed by the teachers.

Figure No. 4.2 Top of the mind and prompted response (figs in %)
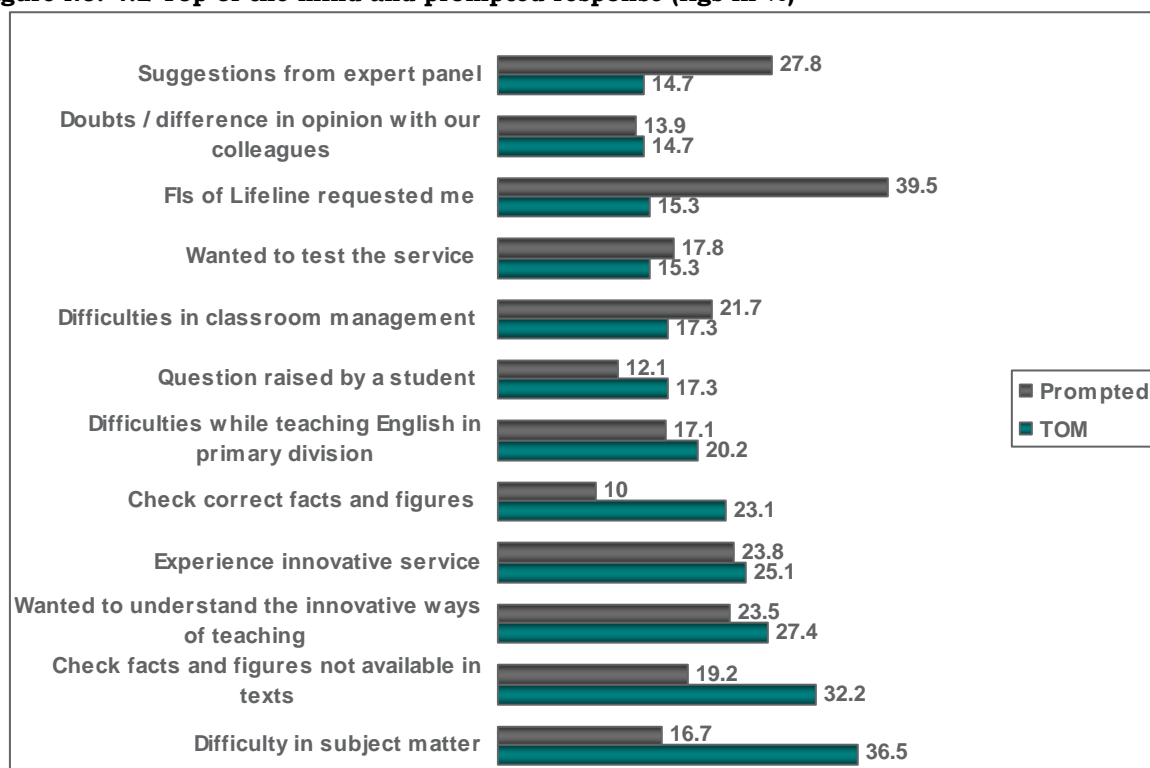
Base: 315 Teachers

These teachers were further asked on other 'influencers' for using Lifelines service while prompting various responses. During prompted responses many teachers / beneficiaries also came out with the response that they have also used the service on request of Field Infomediaries (40%) which suggests that FIs have played a critical role in initial icebreaking and many teachers also reported using Lifelines service to avail the suggestions given by the expert panel.

An analysis of the motivating factors across different types of schools revealed that around 33 percent primary school teachers, 29 percent secondary school teachers and 24 percent SSK/ MSK teachers reported that their difficulties related to subject matter and lack of knowledge and skill sets have actually motivated them to utilize such service. Teachers across all types of schools universally reported that checking of facts and figures either not available in text book or different text books providing different versions have motivated them to use Lifelines service. Many primary school teachers (21 percent) reported that the difficulties faced while teaching English have motivated them to use Lifelines service. (Refer table 4.3)

Table No: 4.3: Motivation for use of Lifelines for education

Issues	Primary schools %	Middle & High schools %	SSK, MSK %	ICDS centres %
Wanted to check correct facts and figures (different version)	23.0	31.5	35.5	14.0
Wanted to check facts and figures, not available in text books	32.0	38.4	45.2	28.0
Faced some difficulties related to subject matter	33.1	28.8	24.2	60.0
Faced difficulties while teaching English	21.3		6.5	40.0
Doubts / difference in opinion	11.8	17.8	14.5	22.0
Confused due to errors in the text book	4.5	9.6	6.5	2.0
Question was raised by a student and I did not have any suitable answer	19.7	15.1	14.5	14.0
I found difficulties in classroom management / understanding child psychology	16.3	8.2	9.7	26.0
Wanted to understand the innovative ways of teaching / new methods etc	29.8	16.4	14.5	36.0
Innovative service and I wanted to experience the service	24.2	26.0	25.8	30.0
I wanted to test the service and see the reliability / quality of responses	16.3	9.6	9.7	22.0
As Lifelines India got a very well known expert panel, I wanted to know their suggestions	16.9	12.3	9.7	12.0
I wanted to raise my concerns questions related to policy matters	5.6	1.4	1.6	4.0
I was motivated to see my colleagues using the service	5.1	8.2	6.5	6.0
Field Investigators of Lifelines requested me to use such service	14.0	19.2	16.1	12.0

Base: Primary schools – 183 teachers; Middle & High schools – 74 teachers; SSK, MSK – 52 teachers; ICDS – 6 teachers

4.4 Barriers of using Lifelines for Education

Teachers were always respected and admired in Indian society; unlike the modern concept of facilitators, teachers were always considered the providers of knowledge. The fact that a teacher might lack knowledge and skill sets etc was not well accepted. Even teachers were also apprehensive to use the service at the beginning and considered that asking questions would be a sign of weakness or this might be an attempt to test the level of competency of the teachers. Absence of culture of questioning or academic sharing and lack of skill sets to ask relevant questions were found as other barriers for using Lifelines service. The above information came out during the discussion with FIs and Project Coordinator.

4.5 Experience of the teachers about Lifelines Education

About 28 percent of the teachers reported that they have not received the answers to their questions and the proportion was highest among the ICDS teachers (83 percent). The discussion with FIs revealed that the questions raised by ICDS teachers were mostly related to child health, nutrition and other similar issues. So during the last six months of project implementation FIs have actually reduced their visits to ICDS centres and which could be one of the reasons that a large proportion of ICDS teachers / workers reported that their questions remained unanswered.

> E.g. a question asked by an ICDS teacher – 'if the blood group of father is B+ and the blood group of mother is also B+, what would be the blood group of the child?' – The KWs faced difficulty to respond this question.

The average cycle time i.e. time period to receive an answer after asking a question was reported as more than two weeks (15.8 days) as reported by the teachers. Though the project has envisaged for a cycle time of 24 – 48 hours but this cycle time was not maintained due to various reasons.

Figure No. 4.3: Average cycle time for receiving answers

One week to 10 days 32%

Less than a week 18%

Less than 48 hours 17%

2 weeks / more than that 33%
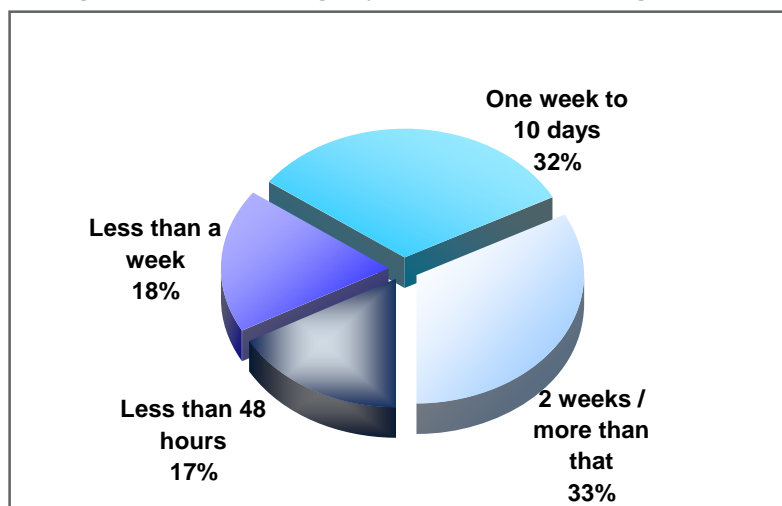
Base – 315 teachers

Almost similar response on average cycle time was received across different type of schools. Around 67percent teachers from ICDS centres, 34 percent teachers from primary schools, 26 percent teachers from middle and high schools and 23 percent teachers from SSK, MSKs reported the received answers only after two weeks. Little more than one third of respondents for both primary schools and SSK and MSKs reported the cycle time experienced as less than a week, while this proportion was around 27 percent for middle and high schools. (Refer Table 4.4)

Table No: 4.4: Average time of receiving answers for last question

Average time	Primary School (%)	Middle and High School (%)	SSK and MSK (%)	ICDS Centers (%)
2 weeks and more	33.9	25.7	23.1	66.7
One week to 10 days	24.6	41.9	34.6	16.7
Less than a week	18.0	14.9	19.2	
Less than 48 hours	17.5	12.2	17.3	
NA – not received the answer	6.0	5.3	5.8	16.6

Base: Primary schools – 183 teachers; Middle & High schools – 74 teachers; SSK, MSK – 52 teachers; ICDS – 6 teachers

4.6   Level of satisfaction among the teachers

Nearly 90percent respondents reported either satisfied or somewhat satisfied with Lifelines service and only around 10.5 percent of the teachers reported their dissatisfaction. Around 12 percent middle and high school teachers and 9 percent primary teachers were not satisfied with the response. The reasons for such dissatisfaction were reported as following: (i) content of the response was not up to the mark (23 percent of those reported dissatisfaction), (ii) response was very brief (6 percent of those reported dissatisfaction) (iii) delay in getting response (23 percent of those reported dissatisfaction) and (iv) not received the response (23 percent of those reported dissatisfaction).

4.7   Perceived benefits of Lifelines for education

Teachers those who reported satisfied or somewhat satisfied were further probed to assess the actual benefit of the response received from Lifelines service. A large proportion of teachers have felt that these responses have improved their knowledge level around 77 percent of those reported satisfied with the Lifelines service has expressed this. Nearly 49 percent of these respondents have also felt that their teaching skills were improved through Lifelines service. Many reported that their confidence level had improved and helpline service raised their ability of critical thinking and questioning. (Refer figure 4.4)

This revealed that the teachers perceived the benefit of Lifelines service more towards their self improvement, improving their knowledge level and skill sets etc while the impact of such input on teaching learning process and the performance of the students need to be assessed in future.

Figure No. 4.4 Perceived benefits of Lifelines Education (figs in %)

Base 267 teachers

- No help received: 4.2
- Identification / reducing text book errors / printing mistakes: 4.2
- Impart innovative ways of teaching: 9.3
- Manage/handle the classroom better: 11.8
- Improvement of thinking and questioning skill: 17
- Can face questions raised by students: 24.2
- Raised my confidence: 25.3
- Improve my abilities / teaching skill: 49.1
- Improvement of knowledge: 77.2
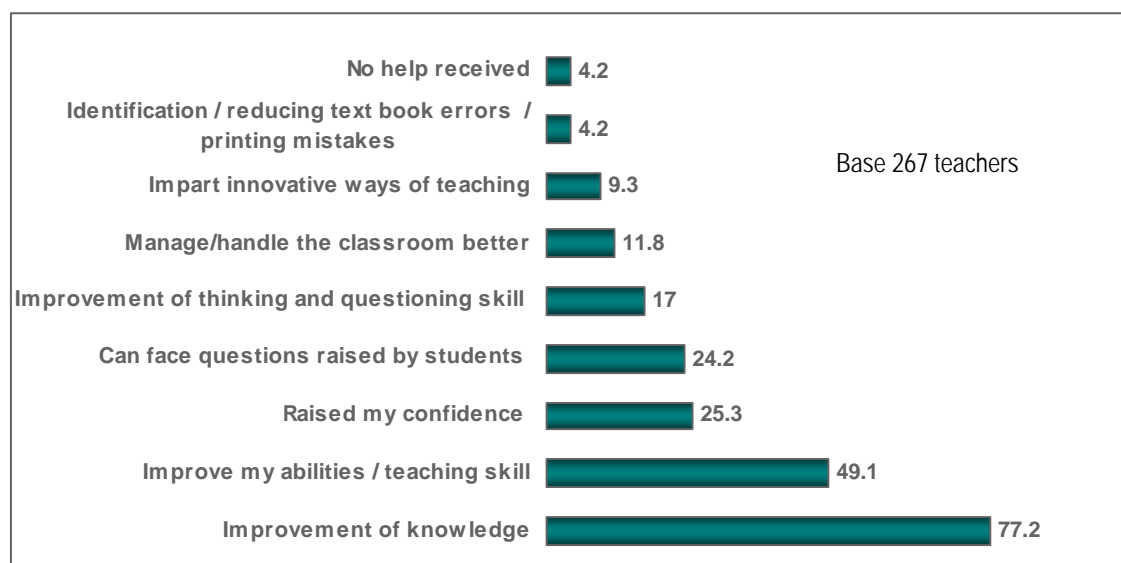
The above analysis reflect that the majority of beneficiaries were satisfied with the service and also felt that such support service can help them to increase their knowledge and skill sets by improving their overall quality of teaching.

4.8   Contribution of the Lifelines for Education

All sample beneficiaries were further asked their opinions related to contribution of Lifelines for Education service. More than two third of these beneficiaries across all types of schools reported that such service has improved the knowledge and skill sets. More than half of all respondents have also felt that this helpline service has raised the confidence level of the teachers. Many teachers opinioned that the lifeline service helped them to mange the unknown subjects in the class well and to face the difficult questions raised by the students. Many also perceived the impact of Lifelines service on inspiring the teacher towards critical thinking and also helped or inspired the teachers to utilize innovative ways of teaching. (Refer figure 4.5)

Even FIs also reported that Lifeline for Education service improved the teachers' knowledge and skill sets. FIs have noticed that teachers discussing and debating on the responses received from Lifelines service among themselves and a culture of education discourse was initiated. They also believed that teacher have started imparting these information to the students in the classroom.

Though further analysis of FAQs in later sections actually revealed that a large number of questions were related to general knowledge or quiz type question and not much related to course curriculum or pedagogy relevant for the teachers at primary, middle or high school levels.

Figure No. 4.5 Contribution of Lifelines Education (figs in %)
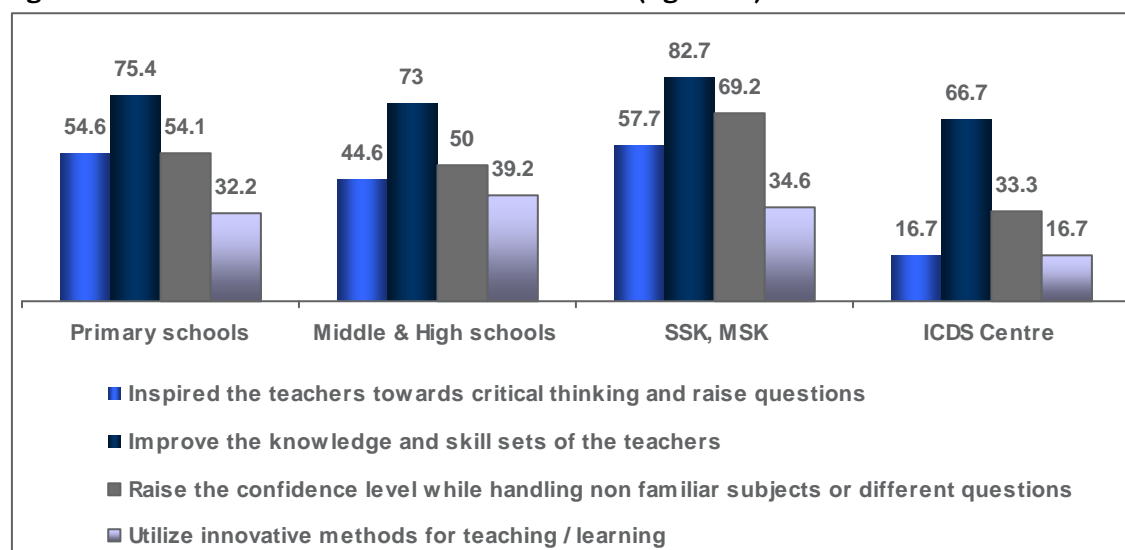
Base: Primary schools – 183 teachers; Middle & High schools – 74 teachers; SSK, MSK – 52 teachers; ICDS – 6 teachers

4.9 Future use of Lifelines for Education service

Around 94 percent of the teachers expressed that they would like to use the Lifelines for Education service in future. This suggests that teachers in rural areas are actually in need of such service and accepted the helpline service eagerly.

4.9.1 System related issues in future use

Respondents were further asked about their opinion related to system such as clarity of the voice and ease of handling the system. Regarding the clarity of voice of responses, over 90 percent of these beneficiaries reported that they did not find any issue with the quality of the voice of the response. While many of these teachers reported that they wanted to hear the response more than once. This might be related to the need for better comprehension of the response.

Though none of these beneficiaries have received any training on using Lifelines service but many reported using the service on their own without any support of FIs. Many young and enthusiastic teachers have reported the same. Around 75 percent teachers considered the system as very user friendly and also felt that they can handle the helpline without any help from the FIs.

4.9.2 Triggers and barriers for future use of Lifelines for Education

While motivating factors are which the service-providers should bank upon and strive for excellence, the de-motivating factors clearly signal to the service-provider's shortcomings. Based on these factors the service-providers should plan their course of action. The sampled teachers were probed to find out the motivating and de-motivating factors for the future use of the service. The following table reflects the triggers and barriers as perceived by the teachers.

Table No: 4.5: Triggers and Barriers

Motivating Factors	%	De-motivating factors	%
Innovative service	**50.2**	**Irregularity of the FIs**	**44.0**
Speedy response	19.2	Delayed response	33.0
Quality of response	15.8	The service is not toll-free	11.0
Involvement of experts	7.4	No need of the service	5.0
Service at doorstep	6.4		
Voice-based service	1.0		

Base: Motivating factors – 297 teachers and de-motivating factors – 18 teachers

The key motivating factors to use such service in future include the innovativeness of helpline service and quality of response, involvement of panel of experts and availability of hassle free service etc were important. The main de-motivating factors were reported as irregular visit of FIs and delayed responses. Very few teachers were found as still not convinced with the service and felt that such service was not required.

The table clearly indicates that although the teachers accepted this helpline as an innovative service but the speed and quality of response should improve to motivate the teachers for further use of the service. In addition to this many teachers have also felt that the service should be toll free and easily accessible.

4.9.3   Areas of improvement

All beneficiaries were further asked about their suggestions for improvement of Lifelines for Education service, the responses include following:
1.   Improve quality of response
2.   Reduce the cycle-time
3.   Direct communication with the experts
4.   Increase the involvement of the experts
5.   Improve the frequency of visits by the FIs
6.   Implement a toll-free number

About 48 percent of the teachers felt the Lifelines service should be available on a toll-free number so that they can access the service on their own. In absence of a toll free number, many teachers felt that FIs should visit the school more regularly to increase the use of such service. Similar proportion of teachers have also felt that the awareness campaign initiated for the pilot project was not adequate. It was suggested that active awareness campaign through leaflets, posters, local newspapers and other media channels would help increase the demand for this service.

The cycle time was also found as critical towards future use of Lifeline service. According to these teachers, the optimal cycle time should be reduced to one to two days, i.e. within two days time the teachers should receive their answers to the questions. A few teachers have also expressed the need for improvement of quality of response. They expressed that the response should be more elaborate with adequate explanation and examples. Others have also suggested that such service should be made available to the parents or students. A few respondents also felt the need of two-way communication and reported that direct communication with the experts might be more beneficial.

Figure 3.5 Areas of Improvement (figs in %)
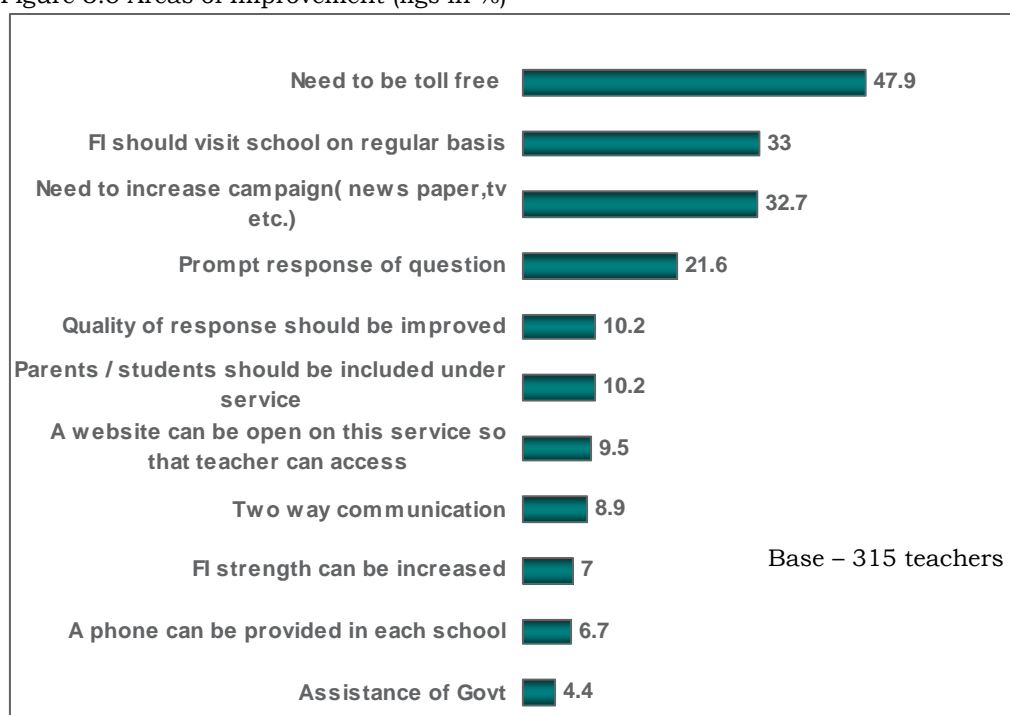
An analysis of the teacher's responses across different type of schools revealed that the demand for a toll-free number is the unanimous response. Proportionately more number of primary teachers wanted a toll-free line. This might be due to the fact that primary school teachers were most frequent user of this service. A large proportion of ICDS teachers recommended for regular visits of the FIs. While FIs also reported that they have reduced the frequency of visit in ICDS centre considering that the questions raised by these teachers in ICDS centre were not related to education.

Increased campaigns were also found as one of the key areas of improvements as suggested the teachers. Even many teachers have reported during informal discussion that they were not aware of the toll free number of Lifelines service so they could not access the service on their own even if they wanted to use the service for immediately but they had to wait for the visit of FIs to raise their questions - see Table 4.6.

Table No: 4.6: Areas of improvement

	Primary schools %	Middle & High schools %	SSK, MSK %	ICDS Centre %
Need to be toll free	57.4	37.8	30.8	33.3
FI should visit school on regular basis	25.1	44.6	42.3	50.0
Need to increase campaign (news paper, TV)	31.1	37.8	32.7	16.7
Prompt response of question	19.1	16.2	32.7	66.7
Parents / students should be included under service	10.9	6.8	11.5	16.7
Quality of response	9.8	10.8	11.5	
A website can be open on this service so that teacher can access	12.0	4.1	7.7	16.7
Two way communication	9.8	8.1	5.8	16.7
FI strength can be increased	7.1	5.4	9.6	
A phone can be provided in each school	3.8	18.9		
Assistance of state / central Government	6.0	2.7	1.9	
Feedback on answers from student	3.8	5.4	3.8	

Base: Primary schools – 183 teachers; Middle & High schools – 74 teachers; SSK, MSK – 52 teachers; ICDS – 6 teachers

Chapter-V

EXPERIENCE OF THE STAKEHOLDERS – FIELD INVESTIGATORS, KNOWLEDGE WORKERS, EXPERTS AND OTHERS

Lifelines for Education service involved a group of functionaries at the field level and at back end for effective implementation of the programme. Field Infomediaries recruited at the field level were the key players of the entire field operation. Knowledge Workers played the most critical role at backend. Lifelines for Education service also involved a pool of experts from renowned schools universities, child psychologists, officials from the Department of School Education and other think tanks in state education system. This chapter includes the roles played by these functionaries while implementing the programme and their experiences and suggestions.

5.0   Profile and roles played by Field Infomediaries (FIs)

Field Infomediaries were recruited by VERS from the same block and district. Young enthusiastic male and female in the age group of 25 to 40 years having varied qualifications were recruited. Many FIs were working with VERS for many years as resource teachers in Bigha education resource centre in Monteswar block and due to their familiarity with the teachers in the block they were selected as Field Infomediaries. All Field Infomediaries have been trained thoroughly on essence of quality education and handling the system.

Field Infomediaries played the pivotal role in the service. They were provided cell phones and they were responsible for motivating the teachers and convincing them to use the Lifelines service through these cell phones. These FIs were the grass-root level functionaries who were primarily engaged to receive the questions from the teachers and provide them the appropriate answer. FIs also played an important role in IEC activities, initial icebreaking, building the confidence level of the teachers and help them registering their queries. FIs facilitated the entire process of posting the questions in the server through the voice recording system and were also responsible to replay the recorded answer to the teachers. FIs also maintained regular communication with the knowledge workers to help them to understand the queries. Each FI was allocated one / two Gram Panchayat to provide the service to all schools located in the area. There were total 11 Field Infomediaries working in Lifelines for Education project.

All most all FIs reported that they used to initiate an informal discussion while visiting the school, raise probable issues related to subject matter where the teachers might have questions and such discussions helped the teachers in framing their question. FIs also maintained a record book where all questions and answers along with the date and question ID numbers were recorded chronologically. This record book was considered as extremely helpful in case of system failure. For example, where the knowledge workers could not hear the recorded responses due to poor audio quality, or even in case of ID mismatch in the server where question IDs and answer IDs did not match with one another.

This record book was also supposed to collect the feedback of the teacher on quality of response on a five point scale. But such information was not collated systematically and the evaluation team could not collect this information from the hardcopy database.

5.1   Experience of Field Infomediaries – challenges faced

The major challenge as reported by the FIs was coverage of a large number of schools by a single person. Each FI had to cover 40-60 schools in a Gram Panchayat. Though around 50 percent of these schools were reported as ICDS centers but teachers in ICDS centres also demanded such service though their questions were rarely connected to the objectives of the project.

FIs also spent time in each school to have a meaningful discussion, post which the questions were raised. Again, visits to high and middle schools to meet teachers were linked to the free periods of the teachers. Considering all these the average number of schools visited per day was around two to three and almost all FIs reported taking about two weeks to visit all the schools assigned to them. Thus, the second visit to a particular school was only possible after a period of 10-15 days and the teachers who had asked any question during first visit used to receive answer only during the second visit. It revealed that the average

cycle time of around 15 days as reported by the beneficiaries was accurate. Average weekly productivity was found to be 25 – 30 questions per week for each FI.

The second major challenge as revealed by the FIs was motivating the teachers to utilize Lifelines for Education service. Many teachers were reluctant to use such service initially as they were apprehensive to disclose their professional weaknesses. In addition the traditional rote method of teaching and complete absence of critical thinking or academic discourse has also affected the utilization of the service. Regular meeting and workshops with the teachers, involvement of education administrators, state, block and district level officials, involvement of teacher's union / association etc have helped the FIs to overcome such difficulties.

Though many FIs felt that there was a variation in the usage pattern among the teachers of different types of schools while primary teachers and teachers from SSK and MSKs were quite keen to use the service, but middle and high school teachers were not reported as quite enthusiastic. Further analysis revealed that middle and high school teachers reported having better education profile and better support system in the school like a group of colleagues, library, computer, internet etc and they did not require the service as desperately as their counterparts.

Although middle and high school teachers were reported reluctant to use Lifelines service, a group of young teachers appointed in the high schools through the recent School Service Commission Examination conducted by state government were interested in the service. It was found that these young teachers were mostly keen to use Lifelines service as many of them were also aspirants for different competitive examinations and Lifelines service helped them to prepare for these examinations. The analysis of FAQs in next chapter have also reveled a large proportion of questions not directly related to course curriculum in school. These questions were either related to the curriculum at college level or related to general knowledge. Another reason why this service was usually preferred by the young teachers could be possibly due to the fact that young minds have a better adaptability for innovative technology.

FIs accepted the fact that many teachers did not ask relevant questions like questions related to curriculum, pedagogy or classroom management etc. In contrary many asked questions related to their personal interest like career opportunity for themselves, family members or relatives or other problems they face in their life. Teachers also asked questions related to their teaching service as well as rules and regulations, for example, rules on number and types of leaves available and types of allowance available. FIs reported that one of the most important challenges was to improve the quality of questions and inspired the teachers to ask good/relevant questions.

Few FIs also reported that teachers took more time while recording their questions through IVR system; sometimes the teachers fumbled and could not record the question properly. This was also evident from the Knowledge Workers response' as they found some questions as long statement and they faced difficulties in understanding the actual query. Most of these teachers never used IVR service and were not at all familiar with such service resultant into such difficulty and this pointed out the need of handholding while recording the queries.

System related issues were not reported as a major challenge but few FIs have reported facing issues like system failure e.g. not being able to access the server, save the question or replay the answer etc. Few FIs also reported facing problems where answers saved were not matching with the question due to some mismatch in question and answer ID. But communication with QWSA team helped them to resolve such difficulties.

Many FIs have reported that the target of number of questions given to them was difficult to achieve. During the project implementation phase, twice they have received a target of around 1500 questions in a month. Considering the school timetables, different programmes in schools and the number of holidays, raising more than 800 questions in a month was practically difficult.

5.2   Opinions about the service and suggestions for improvement

All most all FIs reported the feedback they received from the teachers regarding the answers was satisfactory, be it the content of the answer, the language or the style of answering. Few of them have also claimed that they have seen the teachers discussing the answers received from Lifelines with their colleagues and students. FIs also felt that the types of questions were changed with the time, and

teachers started asking more relevant questions towards the end of the project; the questions became more curriculum / pedagogy related and less general knowledge/quiz type questions.

All FIs felt that the project should be continued with the support from state/central government, a toll free number should be provided to improve demand and FIs should act as only facilitators or troubleshooters.

5.3 Profile and roles played by Knowledge Workers

A team of four Knowledge Workers (KWs) were appointed by VERS in this project. All Knowledge Workers reported having graduation/post-graduation level of qualifications and the team has also received thorough training in handling the system and preparing appropriate answers. A number of workshops and training programmes were conducted by OWSA and VERS to orient the Knowledge Workers in the programme. Though during the evaluation study it was found that initial KWs were not available and a new team replaced the first team of KWs. The new team was also found as competent to handle the system.

KWs were also responsible for preparing the appropriate answers for the questions raised by the teachers. KWs reported consulting the reference books, resource materials, surfing the internet, and consulting the group of experts including state level education administrators to prepare the answers. The Knowledge Workers were also responsible for converting the answer in digital voice format so that the teacher could access it by phone. Knowledge Workers also reported using in-house resources at VERS before posting the final answer in the web in digital audio format. Updating and maintaining the data base in the form of questions and answers was found as other responsibilities of Knowledge Workers. Knowledge Workers held the key to the final answers as the final answers were entirely prepared by them.

5.4 Experience of the Knowledge Workers

The first and foremost challenge reported by almost all Knowledge Workers was workload or a large volume of questions received from Field. An analysis of major tasks of Knowledge Workers revealed that on an average preparing answer for a single question takes about thirty minutes. But this time varied depending on type of question and ease of availability of the answer and also availability of the experts. One Knowledge Worker can manage around 12-15 questions in a day and around 250-300 questions in a month. The following table 5.1 provides details of different activities taken up by the Knowledge Workers and average time spent on these activities.

Table No: 5.1: Activity schedule of the Knowledge Workers

Activities		Time Spent per question
Sorting questions from server	Among themselves	About 30 Minutes everyday
	Hosting them in the system	About 30 Minutes everyday
Finding answers to teacher's queries from different sources (in house)		10 Minutes per question
Talking to experts		5 Minutes per question
Preparing the final answers		10 Minutes per question
Loading answers to the server		5 Minutes per question

Knowledge Workers have reported number of system related challenges which are detailed below:

❑ System running slow and uploading the questions and answers took time.[6]
❑ The voice recording of the questions from the Field was not audible, most of the time there was lack of clarity in voice or lots of background noise and hence the teacher's question was not clearly audible. In such circumstances, the KWs referred to the FIs to get the actual question asked by the teacher and this process increased the cycle-time of the response.
❑ KWs also reported that the FAQ search options in the website was not at all user friendly and to retrieve answers for similar questions, a lot of references had to be provided.

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[6] The Knowledge workers reported that during the implementation of the project, the server ran slowly from June to August, 2009 for which a large number of questions got accumulated.

❑ KWs have also reported that the time slot available for recording the response was not adequate specifically for answers which require more explanations or examples.

Other challenges faced by the Knowledge Workers include difficulty faced in comprehending the questions. It was found that teachers were unable to pose a straight forward question and sometime they pose a question in a roundabout way which was difficult to understand. This issue was also connected to the pronunciation of the teachers or local dialect used in the questions, to answer such questions Knowledge Worker had to coordinate with Field Infomediaries.

Non availability of experts due to their busy schedule was also reported as an area of concern by the KWs. Though around 150 experts were registered to provide service but only 20/25 of these experts were found as actively providing support and due to their other responsibilities like teaching etc. sometime these experts were not available or even if they were available they took long time to respond which raised the cycle time.

Lastly many Knowledge Workers reported facing problems in questions related to science and mathematics as all of them were from humanities background. Knowledge Workers were asked about examples of questions which they found difficult to respond or which took more time. The following were provided as examples during in-dept discussions and they also reveal the knowledge and skill level of KWs.

Box No. 5.1- Examples of difficult questions

> Question 1: When we multiply with two or more digit numbers we leave blank spaces or zero in the second line at right hand side, what is the reason behind this?
>
> Comment- This is very basic mathematics related question as we multiply by 10 we add a zero at the right side, so when we multiply by two digit number we add zero in the second line at right hand side.

5.5 Opinion about the service and suggestions for improvement

Similar to Field Infomediaries, Knowledge Workers have also felt that the quality of questions have improved during last six-seven months towards the end of the project. KWs reported finding more and more questions related to the curriculum, subject matter or pedagogy as compared to earlier questions which were mostly general knowledge related or sometimes irrelevant questions. This shows that gradually teachers have gained confidence on Lifelines service and motivated towards using this service more effectively. The Knowledge Workers suggested that number of available experts should be increased further to reduce the cycle time of the response. Knowledge Workers have also felt the need of a more user friendly system with more flexible FAQ search options, the need of a toll-free number for the teachers to ask the questions and integration of the project with other education initiatives for scaling up of Lifelines service across other districts and states.

5.6 Experience of the Contributors / Experts

The experts were found to be very enthusiastic about the project; many reported that they were involved in the project since inception. A few of them also reported difficulties in attending calls from Knowledge Workers due their busy schedule and other involvements. The number of questions received by an expert did not pose any major challenge for them. One expert received around 20-25 questions per month, i.e. one to two questions per day. Few experts reported that they can revert to these questions within half an hour but others reported that they require at least 24 hours to revert particularly for critical questions.

Experts' mode of communication with the KWs was entirely over phone and they also reported that they found some questions difficult to explain over phone particularly answers which require illustrations for better explanation. The experts also pointed out that they do not have any command over the final output i.e. the answers in the digital format loaded by the Knowledge Workers. According to them the quality of the final response was entirely dependent on the comprehension skills of the Knowledge Workers. Though the experts were found confident with the skills of the Knowledge Workers but personally they did not have any control on the output.

The experts also perceived that sometimes direct interaction with the teachers/beneficiaries would have created greater impact. They did not have any clue on the satisfaction level of the primary beneficiaries as this information was not shared with the experts.

5.7 Experience of the Education Administrators

Education Administrators were of the opinion that Lifelines service was a 'technology-based Ready Reckoner' for the teachers of rural areas. All most all of them expressed the need of such service for the teachers in primary schools and SSK, MSKs. They also felt that the project should be continued and extended to other areas with the financial support from state/central government. The compendium of the questions and answers on different subjects were highly appreciated. They felt that such compendiums would be very useful for teachers across all types of schools. The experts also pointed out the fact that the project should be integrated with other education programs, training programs and workshops etc. The need of a toll-free number and the direct interaction between the teachers and experts was considered as key towards the future of Lifelines programme. They also opined that the impact of this programme can be assessed only in long run.

Chapter-VI

CONTENT ANALYSIS OF SELECTED QUESTIONS AND ANSWERS

The following chapter details the content analysis of selected Question and Answers across all subjects. As mentioned in the scope of work the entire archive of Q&As was reviewed by the researchers. Effort has been made to select around 250 questions and answers distributed across all subjects through a complete random selection.

The selected list of Q&As were shared with VERS, OWSA and Quest Alliance to collect information on profile of users raising these questions and satisfaction level of the beneficiary with the response. This information was not available from the server or hard copy data available with these organisations. In absence of such background information, effort has been made to take up the content analysis of Q&As and under the challenges faced by teachers in rural schools.

Table 6.1 shows how many questions and answers were selected for the content analysis:

Table No: 6.1 – Selected Q&As for content analysis

Subject / Topic	Number of Questions in the Server		Selected Questions for Content Analysis	
	N	%	N	%
English	587	4.8	12	4.8
Bengali	1,269	10.5	26	10.4
Physical Science	582	4.8	12	4.8
Life Science	807	6.6	17	6.6
Mathematics	858	7.1	18	7.0
History	1,055	8.7	22	8.6
Geography	1,614	13.3	33	13.2
Pedagogy	1,959	16.1	40	16.0
Administrative	320	2.6	7	2.6
Policy	170	1.4	4	1.4
Others – General Knowledge/Quiz type questions	2,918	24.0	61	24.1
Total	12,139	100	252	100

6.1   Profile of users

Information on type of schools was available for 86 questions only, 60 percent of these questions were asked by primary school teachers, 20 percent were from teachers from ICDS/Anganwadi centres, 15 percent questions were asked by the teachers from SSK/MSK and only five percent of all questions were asked by the teachers from high schools. It is likely that a large percentage of questions were from primary school teachers, the entire information for all selected questions and answers was not available.

Question related to science was found as 11.4 percent of all questions. Around seven percent of all questions were related to Mathematics and close to five percent of all questions were related to teaching English. Questions related to pedagogy along with very specific questions related to classroom were found around 16 percent.

6.2   Typical questions and answers

Fairly large proportion (close to 80 percent) of questions seems to have little relationship with the curriculum. While there may not be any restriction for teachers seeking general information, this may be seen in relation to the major objectives of the project. A large chunk of questions were asked about History and Geography and majority of these questions were not related to curriculum. For some questions information would easily available in the text books. Many questions read like quiz questions catering to individual interests and curiosities.

Table No: 6.2 Few typical questions in History and Geography

Sr. NO.	Question ID	Question	Answer
1	22158	Who wrote the 'Dan Sagar' and 'Adbhut Sagar'?	Ballal Sen wrote Dan sagar and Adbhut sagar and for that he was honoured in the society of poets and philosopher.
2	22065	The Mesopotamia civilization was related to which age?	The Mesopotamia civilization related with copper and bronze age.
3	21975	Who was the first independent king of Bengal?	Kutubuddin Iboke was the first independent king of India and for Bengal the first independent king was Murshid Kuli Khan.
4	21724	What is the name of the holy book for Jews?	The name of the holy book for Jews is TORAH, it is also known as 'Hebrew Bible'.
5	20338	Which neighboring country of India is known as 'The Last Shangrila'?	The neighboring country of India, Bhutan is known as 'The Last Shangrila'.
6	20269	Is Delhi a state or Union Territory? If it is a state then when it got affiliation as a state?	In the year 1993 Delhi got affiliation as a state.
7	16744	Which state has highest density of population and which state has lowest density of population in India?	The West Bengal is the state with highest density of population and Arunachal Pradesh is the state with lowest density of population.
8	15885	How many islands are there in Sundarban? Of which how many islands are there in Bangladesh and in India?	In Sundarban region there are total 102 islands, of which around 54 islands are in India 54 and rest 48 islands are in Bangladesh.

There are other specific questions, the answers to which are available in any text book. Such questions are given in the next table.

Table No: 6.3: Few typical questions and answers available in any text book

Question ID	Question	Type of school	Remarks from consultants
19499	How can we use 'not only' and 'but also' in the same sentence?	Primary school	Likely to be available in the text book
21498	What is the smallest number that should be added to 127 such that the number obtained is divisible by 5?	Do	The logic is too simple
14277	What should be the % increase in rate at which an object can be sold such that there is 10% profit instead of 8% loss?	Do	Books in mathematics with section on profit & loss carry solutions of such questions
22445	What is the difference between Harappan and Vedic civilization?	Do	Any History book would have explained this in detail

The above examples suggest that teachers were either asking questions not related to the curriculum, or asking very obvious type of questions for which explanation was available in any text book.

It has to be understood by the teachers that help can be sought by them for improving their teaching -- which includes knowledge of subject matter; how to transact it; managing large or multigrade classes; understanding how to help children learn particularly children with different abilities; how to evaluate; and how to use information available from evaluation to improve their own teaching or learning by the people.

The content analysis reveals that the teachers were asking questions through Lifelines service but these questions were not related to the subject they were teaching in the class, or the method followed for teaching. As experts, education administrators and teachers themselves reported that they do require academic support service this clearly points out that the teachers were afraid of exposing their professional weakness through Lifelines service. This issue should be dealt with utmost care during scaling up operation of Lifelines for Education project.

6.3   Discussion on quality of the response

Analysis of answers revealed that Knowledge Workers too need to understand how to respond to these queries. We would discuss different types of response given by Knowledge Workers in the following section:

- Answers which are too technical / difficult to comprehend
- Inaccurate answers
- Unsatisfactory answers
- Good answers
- In contrast to good answers
- Questions related to policy and administrative issues

A. **Answers which are too technical / difficult to comprehend**

Example 1:

Question ID	Question	Answers
22538	What is DNA?	DNA is De Oxiribonuicleic Acid. It is a kind of nucleic acid. The structural chemical element of an animal cellular gene two nucleotide chain develops upward holds each other with the help of an axis and then one atom of DNA is made. Each and every chain is made up by deoxiriboze carbohydrate, phosphoric acid and purine and perimidine acidic base. The nucleic acid of a chromosome is the functional and structural unit of heredity called DNA.

Example 2:

For both the questions and answers mentioned above, the questions could be general questions not related to curriculum and the answers given are too technical for any non-scientist to understand anything. DNA, for example, can be explained to non-technical people for its use in a much simple language.

Question ID	Question	Answers
22612	What is protozoa?	Protozoa means the first animal. It is a unicellular microscopic animal having clear nucleus. Over 30,000 classes of protozoa live independently in sweet water, sea and in soil. Some of them live dependent on others like plasmodium. Few species of protozoa are able to photosynthesis like euglena. The body part responsible for movement is not visible in protozoa, e.g. ameba. The protozoa's of sweet water has a hole in the cytoplasm. Generally they complete their reproduction by asexual process but in some species sexual reproduction can be found.

B. Examples of inaccurate answer

Question ID	Question	Answers
22707	What is the difference between town and city?	The place situated at a high level from the sea surface on a plain land and the place having comfortable atmosphere for living also having better transportation and communication facilities, near agricultural land, having electric supply facilities, better environment for business and trade, proximity of mining facilities, availability of adequate water, administration centre and popular historical places, is called town. And the town where the population is over 10 lakhs is called city.

The above question is an example of inaccurate answer where the respondent has used his/her imagination to define the town.

C. Unsatisfactory answers

Table No: 6.4: Examples of unsatisfactory responses

Sr. No.	Question ID	Question	Answers
1	21984	Why there are two times rainfalls in South India?	When the north east monsoon winds travel over the Bay of Bengal that time it received some water moisture and become obstructed by Eastern Ghats and as a result it rains in Tamil Nadu, That is why there is two times rainfalls in South India
2	19939	What is the definition of Ancient Period? How can we explain the definition to the children of 4th standard?	Approximately 4000 B.C to 476 AD time period is called Ancient Period. You can tell about some incidents/ give some facts and figures of this period to the children so that they can understand the period easily.
3	21428	The Golden Temple of Amritsar was constructed in which Century and in which kings ruling period?	It to be said that on 1,574 The Mugal Emperor Akbar **donated a land** to build the Golden Temple of Amritsar.
4	11746	In mathematics why do we use unit, ten, hundred etc from the right hand side?	In decimal system smaller numbers start from right hand side and we move left for larger numbers. This is the reason we have unit, ten and hundred from the right hand side.
5	14662	What is the difference between Punctuation comma (,) and a semi-colon (;)?	When we pause in a sentence we put a comma and when the pause is for a **long time** we use semi-colon. For ending a sentence we use full-stop.

The first question was reasonable and pertaining to the curriculum. The answer does not clearly say why it rains twice. It mentions only one season of rain without giving month etc. The concept of old century would have been explained with some incidence of this time so that children can understand this easily. The Question ID 21428 asked about the year when the Golden Temple was built and the ruling period of which king while the answer talks about the year when the land was donated. For the question on decimal system, the answer does not explain anything. Similarly the answer on semi colon is not correct answers.

Table No: 6.5. Examples of Good answers

Question ID	Question	Answers
21201	Which is the oldest university of the world Nalanda or Takshyasila?	Till now there is a debate among historians regarding the oldest university of the world between Nalanda and Takshyasila. Many believed that the Al-Azhar of Cairo in Egypt is the oldest university of the world.
21966	Why the king of Egypt is called Pharaoh?	The original meaning of the word Pharaoh was 'Great House' but later it was used to address the King of Egypt with respect. Approximately from 1500 B.C to 343 B.C all kings of Egypt were called Pharaoh. People used to believe that Pharaohs were the ambassadors of God.

These answers really added meaningful information in contrast of one point answer to the other questions.

Table No: 6.6. Examples of answers in contrast to good answers

Question ID	Question	Answer	Remarks
22116	Which is the driest place or district of West Bengal?	Mayureswar of Birbhum district is the driest place of West Bengal	The answer is to the point and quiz type answer. Information on annual rainfall or why the area does not receive adequate rain would have made the answer more interesting.
22111	What is the hottest place in the world?	Al Azizyah, Libya	The answer could be completed with information on temperature, where exactly in the word map Libya is located.
21121	Where is the living place of Tungus Tribes?	The northern part of Russia is the living place of Tungus Tribes	More information about the Tribes should have added value to the answer.

Table No. : 6.7 Questions and answers related to policy and administrative issues

Question ID	Question	Answer
19634	After passing Secondary in 2000, I received an appointment as a primary teacher. I saw in a newspaper that the minimum eligibility is Higher Secondary. Will my appointment be cancelled?	Please enquire at DPSC.
19554	One of my colleagues will be absent for four months. How will it be possible for me to handle the center alone?	Please talk to the CDPO about your problem.
14895	Whether the Contributory Provident Fund Scheme is still optional or it has been closed?	You can contact the District Primary School Council about this Contributory Provident Fund Scheme

Many questions were found related to policy, rules and regulations, many of these questions remain unanswered with Knowledge Workers guiding teachers to consult local administrator. A decision need to be taken at the policy level whether such questions are to be entertained or replied to.

Chapter VII

OUTCOME AND IMPACT

Lifelines for Education, the project was envisaged to provide critical academic support and continued instructional training to rural school teachers in order to improve the quality of teaching and learning in classroom and thereby improve students' learning gains. The project was implemented towards achieving this goal by helping the teachers to be effective in what they do. The purpose of this evaluation study is to assess the outcome and impact of the project in terms of originally stated objectives and expectations. The evaluation study made an effort to assess the following:
   a) The functioning of the pilot project
   b) Quantum and quality of help asked for and provided
   c) Building of knowledge database (Q&As)

The outcome and impact of the project in terms of improving quality and relevance of classroom instruction were not assessed as this was beyond the scope of work for this study.

6.4   Key success factor

Lifelines for Education, a helpline to resolve the difficulties faced by the teachers in the classroom, is an innovative concept and well accepted both by the teachers and education administrators. The fact that teachers in rural areas face challenges related to subject knowledge and skill sets like the ways to transact the knowledge and help the students to learn was agreed and accepted. A large number of teachers having qualification only till secondary and higher secondary level, lack of adequate resources, library /reference materials / TLMs raise such difficulties manifold. The situation is not going to change in the near future.

The evaluation study revealed that this innovative project was well accepted due to its inbuilt system features as well as due to the quality human resources involved in implementation of the programme. The factors which have influenced the acceptance of this helpline were following:

   1. Innovative service available through telephone
   2. Support available in local language
   3. Transfer of information over voice mode
   4. Authenticity of information with involvement of well known expert panel
   5. Dedicated Field Infomediaries following up at regular intervals
   6. Information available at the doorstep without any hassles

Vikramshila Educational Resource Society, the field level implementing organisation for Lifelines project, reported their presence in the block with a resource centre in Bigha village Monteswar for more than a decade. VERS was also involved in other education initiatives in the district. So VERS as an implementing organisation for the pilot project in Monteswar block has actually helped the project in initial icebreaking and reach to the beneficiaries/teachers without much difficulty.

The pre-project workshops, seminars conducted at different locations in addition to advocacy with the Government functionaries at different level have ensured hassles free implementation. The project was launched simultaneously from two locations, at the block level the project was inaugurated by DPSC chairman and at Kolkata it was initiated in presence of state Project Director SSA

Inclusion of well-known teachers/education administrators in the expert panel raised the acceptance level, while a dedicated project implementing team and back office added value in the project.

6.4   Challenges faced in implementation of the project

With the back drop of key success factor, there were number of challenges involved in effective implementation of Lifelines for education.

   a) The role of Field Infomediaries – The profile of Field Infomediaries was not accepted by the teachers. The profile of FI was found as following: young male mostly in the age group of 25 – 40

years with varied level of education and working in the NGO sector. These functionaries were not considered as a peer group by the teachers; they were considered at lower socio–economic level and the teachers rarely came out with the real difficulty with classroom management and other similar issues with the FIs. Though the evaluation study revealed that this team was extremely dedicated and tried their best to inspire the teachers to ask meaningful questions. Due to constant pressure of these FIs teachers sometime asked irrelevant questions just to do favours to these functionaries. Many teachers have revealed during the prompted responses that they have used the service only on request of FIs to help them perform well in their job.

b) Involvement of functionaries inside the education system, e.g. BRCC, CRCC and SI, was found marginal. All these functionaries were aware of the project but they rarely played the role of effective Infomediaries in the pilot project.

c) Anonymity was not maintained and to verify the usage pattern, the teachers were asked to reveal their name and school name which has also created some kind of apprehension on the part of the teachers and many of them considered the service as a system adopted by the government to measure the proficiency level of the teachers.

d) Communication strategy adopted in the project was not found very effective and a large proportion of teachers reported not being aware of the helpline number. Many reported that they could not use the system on their own because they were not aware about the helpline number.

e) Initial enthusiasm was missing during the end of the project, numbers of Field Infomediaries were reduced, the entire team of Knowledge Workers was replaced and irregular visits by FIs to many schools were reported as one of the main reasons for not using the service more effectively.

f) Skill set and role assigned to facilitators – The average cycle time was rarely found as 48 hours or less. The average cycle time varied between 10-15 days as reported by most of the beneficiaries. The average cycle time was entirely dependent on the second visit of Field Infomediaries in the school. As discussed earlier the schools were assigned to FIs in such a way that it was rarely possible for FI to visit a particular school more than once in fifteen days. Field Investigators also reported not maintaining any systematic movement plan. Many time depending on the urgency of the response, FIs reported visiting a school more often.

g) Knowledge Workers skill set was critical for project implementation. It was reported that almost all Knowledge Workers were reported more proficient in humanities and had difficulties answering queries related to science and mathematics.

h) Knowledge Workers' understanding on how to prepare a quality response with information collected from the experts/other sources, was considered important in implementation of the project. Many questions read like a quiz type questions and answers were found to be brief and one point answers, without adding any meaningful information as discussed earlier in the content analysis section.

i) Experts also need to understand the level of comprehension of teachers having studied only 10th or 12th standard. Answers using many technical words could be difficult to comprehend by persons not having studied a particular subject, particularly Science.

j) Involvement of college lecturers and professors in the expert panel might have created such responses which were technical in nature. Well experienced school teachers would be more appropriate to function as experts in this project.

7.3 System related challenges

User friendly system with ease in operation is imperative for effective implementation of any technical system. As discussed in earlier section the Knowledge Workers have faced number of challenges while operating the system.

A large number of questions were found in the server and were marked as voice not audible due to technical difficulties.[7] But these difficulties were also partly related to the lack of awareness of the teachers' on how to record a question, with clear pronunciation, proper pause, and less background noise. The system should sort out such issues.

Knowledge Workers have also reported the need of increasing the time slot for recording the response. The present time slot was reported as around two or three minutes. The user friendly FAQ search option was also perceived as an area which needs immediate attention to reduce the duplication of work on part of Knowledge Workers.

SMS alert to FI as soon as the response was ready was another requirement as expressed by many FIs and KWs and the system did not have such in-built option available. In the present system, FI had to call and verify whether answers were ready or not while such additional service might not be required if the cycle time can be reduced for all responses.

The evaluation study also revealed that the pilot project did not follow any systematic data base management process which needs to be look upon for scaled implementation. The evaluation team has faced difficulties in tracking query ID number with the profile of the users. Additionally, mismatch in query ID vs. response ID was also reported.

The evaluation study also tried to collect the profile of the user and satisfaction level with the response from backend information but such information was not available, even the number of calls received from a particular number, calls received from outside the coverage area were not available from the system.

7.4 Project Outcome

Lifelines for Education service has helped the teachers to get answers related to their specific queries. Many teachers have considered the service as an easy way to get correct answers to their queries related to subject matter, general knowledge and even personal questions faced by them in their day to day life. Very few questions were actually related to the issues faced in the classroom. It seems many a times teachers were asking questions not related to the subject they teach in the class, a large proportion of questions had little relationship with the curriculum.

There were also good questions generated through this system and if some teachers have benefited through the responses the project should be considered as successful in providing support in quality education.

Question - One of my students knows all answers but he can't write, whenever he writes his answers do not match with what he speaks, how to improve this situation?

Answer - The child has got poor writing skills, he should practice writing more often. Please speak to his guardian, so that they help him to practice writing more at home. But here a specific process needs to be followed. e.g. when you ask him to write on something, please ask him to write 2 lines first day, 3 lines second day, 4 lines next day and in this way if you develop his habit of writing based on his own thoughts while increasing the content gradually he would be benefited. In addition to this he might not be able to write during exam within the given time and he might have lost his confidence due to this. You have to raise his confidence level; he should believe that he would be able to write like other students.

The pilot project has proved its authenticity as an additional referral system and it seems beneficiaries have used this system to raise their knowledge level, to meet their own aspiration, and to resolve their difficulties they face in their own life. However, how far such information was beneficial for the classroom teaching remain questionable. The true knowledge gaps of the teachers could not be identified through this system and the impact the system has to be assessed in the long run.

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[7] The exact number of such questions could not be determined.

Chapter VIII

SCALABILITY AND SUSTAINABILITY OPTION

This chapter provides an overview of viability option for the project and the scope of expansion across other districts and other states.

8.1   Suggestions for improvement

The major suggestions which has come out across all quarters were as following

- Reduce cycle time for the response to 24-48 hours: Teachers, experts and other facilitators have suggested that the ideal cycle time for the helpline should be less than 48 hours.
- Toll free numbers: Many helpful suggestions came out during this evaluation. Many respondents reported that they are quite confident in handling the system on their own and no training is required to help them use help line service.
- Quality of the responses: The quality of response was reported as another key concern and as presented earlier, the success of this helpline in the future would depend a lot on the quality of responses generated by the system. More meaningful, relevant, easy to comprehend information is the requirement.
- Involvement of BRCCs, CLRCs and SIs was reported as important. The role of FIs might not be entirely replaced by BRCCs, CLRCs and SIs given their other administrative responsibilities. Therefore, FIs should be there only for technical hand holding or as facilitators or might be responsible for overall monitoring while the functionaries from SSA should take the role to motivate the teachers to utilize the service to resolve the challenges they face in their classroom teaching.
- In addition to voice mode response, answers should be available in written format or in the form of booklets, or can be discussed over other media channels.
- Active awareness activity is required to improve the demand of such service.
- Anonymity of the user is extremely important to avoid apprehension on part of teachers; toll free number direct dialing facility would ensure anonymity.
- Usage of functionaries within the system would give the teachers more confidence to utilize the helpline service.
- The programme needs to be effectively linked with other education related programmes and activities such as in-service training programme, seminars and workshops conducted under SSA.
- Team of Knowledge Workers should have different backgrounds as subject experts. More persons knowing mathematics and sciences may be deployed.
- Library and other resources available to the Knowledge workers should be strengthened.
- System design need to be revisited to make the system more user friendly, like clarity in voice recording, ease in FAQ search options, increasing the time for recording the response.
- Active involvement of experts in preparing the final response, experts should monitor the final response periodically to ensure the quality of response.
- Experts should be allotted specific timeslots to answer the questions forwarded by Knowledge Workers.
- Satisfaction level of the beneficiaries should be tracked and this information should be shared with all project functionaries at regular interval.

8.2   Future model of Lifelines for Education service

The evaluation study has also proposed the future model for Lifelines for Education system as following:

- The service should be extended only up to the level of middle school teachers since the teachers in high schools have alternative support system available to refer in case of difficulties.
- ICDS centres might not be included in the project since these teachers were not providing any knowledge input.

- Direct line (if possible a toll free number) should be the most preferred option, where teachers should ask questions directly without any intermediary and maintaining complete anonymity.
- Though the willingness to pay was not exactly tested in this research, it was felt that many beneficiaries would not mind mind paying for the call charges which is around Rs. 10/ for each question and answer - provided that they are completely satisfied with the responses. It was also felt that if call charges can be reduced from STD call to local call it would be definitely an added advantage.
- Involvement of SSA functionaries/CLRCs is proposed to motivate the teachers to use the service. CLRCs are also experienced teachers; they should also have the options available with them so that they can answer the question themselves but the questions should be forwarded to the helpline.
- Teacher's apprehension in expressing the real challenges faced in the classroom; should be handled carefully. Even in case of involvement of government machineries, they might not feel confident to utilize the service. To win their confidence, the project should be continued for a longer period and the teachers should be explained that they are not victimized for using this service.
- FIs should act more as a contact point, as a facilitator/campaigner to improve the usage or as a troubleshooter for technical difficulties and should work without the pressure of generating a large number of questions.
- The profile of FIs should include few senior / retired experienced school teachers instead of young graduates.
- Knowledge workers should be recruited from diverse background and they should be thoroughly trained on how to prepare good answers.
- The resource base available to the Knowledge Workers should be strengthened, text books and reference materials published by NCERT, CBSE board and others can be referred as additional resources.
- If the resource base is strengthened, the involvement of experts can be reduced and cycle time can be improved.
- Cycle time has to be less than 48 hours in all cases.
- Publicity of the service using local media channel/newspapers and publication of interesting questions and answers in local newspaper would enhance the visibility and demand for such project.
- Institutional mechanism of proposed model should involve a combination of government and voluntary organizations.
- Archive of 12,000 questions and answers generated in the pilot project should be shared with broader audience. In addition to publication of booklets, such questions and answers can be published in local newspapers and discussed during radio education programmes.
- This archive should be shared with the text book writers and education administrators.

Future Model of Lifelines for Education service
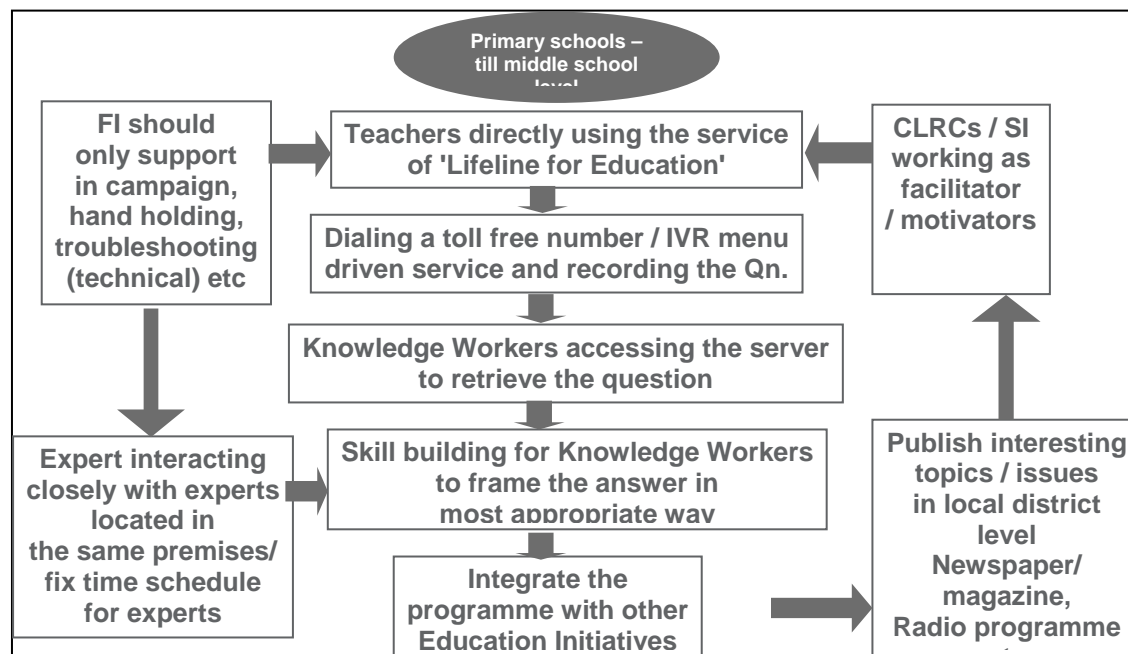
8.3 Alternative model for self sustenance

To address the sustainability option for the project, in the following section, the consultant has also proposed a few alternative models involving different target groups to cross subsidize the part of the project implementation cost.

Sustainability option 1: Lifelines for Education service could be available to the students in higher classes with career counseling option. The students and parents can call the number and ask their questions related to various career options and ways to pursue those careers and other relevant information. The users would be paid while availing this service and this would cross subsidize the service available for teachers.

The experts felt that such model would be in high demand across the community, this might not be directly linked with the project objectives and the regular updated information on career options need to collected and update at regular interval from reliable sources.

Sustainability option 2: As a second option, it is suggested that the publishers and booksellers can be roped into the project and information on additional text book; reference book etc can be shared with the teachers in rural area. This should be built in as an additional system feature where information on different reference books would be recorded and stored in advance and teacher would select the require option to hear the recorded information on additional support system .

This option is partially meeting the project objective. But the relevant changes in system would be required and information need to be collected from publishers and booksellers, name of the book, information on content, market price, publisher name and address should be available to the end users. The model can be cross subsidized with the help of publishers and booksellers.

An in-depth study would be required to test the pros and cons for both these models.

8.4   Conclusion

- The pilot project was implemented for nearly two years, covered almost all government primary, middle and high schools in the block along with ICDS centres. Many ICDS centres were covered partly due to the pressure from the local community/Panchayat and also to meet the target given to the Field Infomediaries to raise a substantial number of questions in each month.

- The average number of users per school was around two though a very large number of questions were generated through the system compared to the number of users and actual usage pattern reported by the users. Average cycle time proposed for the study was not maintained, there was ample scope of improvement on quality of response.

- Few questions were actually related to course curriculum or pedagogy; the service could not identify the true gaps in knowledge and skills of the teachers.

- The evaluation study revealed that the pilot project has not achieved its objective fully. It was felt that such projects should be given adequate time to overcome initial hurdle, to win the confidence of the teachers. This suggests that the project should be continued with mid-course corrections.

- Involvement of education functionaries within the system was required, the system design need to be changed to adopt more flexibility and user friendly approach and involvement of teachers association and senior teachers is found as important.

- It was felt that with all these midcourse corrections the project can actually play an important role in improving overall quality of education.

VIDEOSHALA

CONSOLIDATED EVALUATION REPORT

July 2009

BY

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1   EXECUTIVE SUMMARY

The Videoshala project, implemented in Gujarat since 2007, was created by two NGOs: Drishti and Udaan, in partnership with the QUEST Alliance. Four other NGOs: Sahyog, Meghdhanush, Hind Swaraj Mandal, and Navsarjan were then chosen as partners to set up and manage four Education Community Video Units (ECVUs) that focus on producing relevant educational videos for local children in local schools.

These are community videos – videos created by local people who are trained as full-time community video producers (CVPs), by the founding NGOs and external experts, and who are members of the ECVUs. The videos are on subjects that the students find hard to learn, teachers find difficult to teach, and are imbibed with values of democracy, citizenship and diversity.   These videos are shown in classrooms to children in local schools. Following the screenings a series of activities and interactive sessions are carried out by classroom facilitators who are also members of the community as well as the ECVUs.

Two organizations: the Center for Media Studies (CMS) and Nirantar were chosen to carry out separate evaluations on the Videoshala project in 2009. This executive summary provides an overview of the findings of the two evaluation reports.

The objective of the CMS evaluation was to track the extent to which Videoshala has achieved its objectives; to examine the progress and growth of the participants/stakeholders in the project; to measure the learning gains of students in Videoshala schools compared to non Videoshala schools; carry out a technical analysis of the videos; to identify the factors exerting the strongest influence in effecting change among children, teachers; and the challenges faced. CMS's research design consisted of face to face and focus group interviews with students, teachers, parents, ECVU members and other stakeholders; field visits to the communities, schools and ECVUs; and the administration of a quantitative test to select students in Videoshala and Non Videoshala schools.

The objective of the Nirantar evaluation was to assess the content, quality and the screenings of the video films produced by the four ECVUs. The evaluation process included an in depth qualitative review of a select number of videos; extensive desk review of Videoshala proposals, quarterly program reports, worksheets and activity sheets; field visits to the four ECVUs and to select Videoshala schools where the video films screenings were observed; and face to face and focus group interviews with students, teachers, ECVUs and other stakeholders.

Targets Achieved

Reflecting upon the process of the project initiation and implementation, all the project partners were of the unanimous view that Videoshala project has been by and large successful in achieving its intended objectives. They felt that one of the key achievements of the project was that it was implemented in the manner in which it was intended during the project planning.

Further during the overall project intervention over 21 months (since 2007) Videoshala:
- Reached 7,957 children (between ages 6 and 14) in 194 schools
- Provided alternative livelihood opportunities to about 24 young people as Community Video Producers
- Built the capacity of 21 local Classroom Facilitators to participate in their community's educational process
- Developed 24 videos on various classroom subjects that integrate the values of democracy, citizenship and diversity
- Screened the videos in over 640 classroom
- Strengthened six local NGOs to create compelling and effective learning materials

Total number of students participated				
Primary		Secondary		Total
Male	Female	Male	Female	
3,060	2,570	1,464	863	7,957

Video Films

The evaluation of the video films of the four ECVUs revealed:

- The videos produced by all four ECVUs are child centric. All videos have children as the main protagonists. Their questions, inquisitiveness and anxieties are addressed in all films. Yet they are not shown as being ignorant or uninformed, but in many films are confident and articulate. It is either a child or a group of children who take the viewers through a film and learn new information and ideas along the way. This learner-centered strategy ensures that children – the main target audience of the videos – are involved and engaged as viewers and can relate to the content easily.
- In most videos children are encouraged to learn by gathering information, going to different places, conducting interviews and doing things themselves. Seeking information is an effective way of learning and this is a method that most videos have adopted. This is in contrast to the conventional top-down approach of the teacher as the only provider of all answers to children's questions.
- The videos are based on chapters from Gujarat State Board School Textbooks. Core curricular areas in textbooks are referred to and yet in most cases there is an attempt made to broaden the horizons of learners by providing new information or by contextualizing the information. The information in textbooks is dull, detached, simplistic and in some cases, problematic. In contrast, several videos are refreshing as they are located in the lived realities of learners – they show their own geographical areas, people (and children) who are similar to them and speak the same language.
- People from marginalized communities are shown in positive roles in most videos. There is no stereotyping of roles or professions. People from Dalit, Muslim and working-class backgrounds are adequately represented. Their knowledge and skills are treated with respect and their contribution to children's learning process is recognized. This effort is well appreciated; however, in some films there appears to be a tokenistic representation of marginalized groups.
- Most E-CVU videos are well produced. They have used different genres of film making. Both fictional as well as non fictional ploys have been used in videos and this effort is commendable. There are plots and sub plots which are woven together in a coherent manner. The visual medium has been used to its fullest potential in many films. There are a few aberrations to this – some videos are not well shot, have plots which are unrelated and end abruptly.
- The videos produced by all four ECVUs are unique in that they provide information and address values of citizenship, diversity and democracy. This is unlike all other audio-visual educational resource material available to schools in the area. This is quite commendable for the program. Teachers and principals of both government as well as non-formal schools also appreciated this feature of the ECVU videos. The information provided enhances quality of education in schools and values incorporated into the subject areas enable learners to think critically.
- Most videos have made an effort to incorporate values of equality, democracy and diversity in different ways, however, this is not done in a way where values implicit or embedded in the content. However, in the case of some videos on Science and Language, it has been challenging to incorporate values.

Implementation of Video Films

The following issues relate to the implementation and screening of the video films in the target schools by the ECVUs.

- In schools where the videos are screened, facilitation is as important as the screening itself. In the absence of facilitation, the video becomes an interesting activity that does not necessarily stimulate critical thinking. In schools where facilitation was good, the video was very effective. Children were able to understand concepts and information provided. However, where facilitation was absent, the video was like an 'interesting activity' which was not linked to curricular issues.

- In most ECVUs very little time and resources have been invested in training facilitators. As a result of this, it is up to each individual facilitator to decide how he/she will transact a video. It is based on their existing skills and interest that this is decided. In some cases, screening and transaction of films is not prioritized given the existing work commitments of facilitators. However, in ECVUs where orientation and inputs have been provided to the facilitators, the classroom transaction is creative and inspires children to engage more with the video and the activities.
- Each E-CVU has worked out its own process of involving facilitators in the process of film production. In some ECVUs feedback is sought from facilitators at different stages.
- There is no common point at which a video is introduced in the school syllabus. It is up to each E-CVU to decide whether a video will be screened before/after/during the time that the topic is being covered in school. This also depends on the availability of the facilitator in some cases. This lack of clarity and ad hoc manner of transaction has led to some amount of confusion in the ECVUs. In some places there is a long gap between the time that the topic is covered and the screening, making the impact or effectiveness of the video inconsistent.
- More discussion is needed on values, imbibed in the videos, in the classrooms. Facilitation is usually around information and concepts that are introduced. While values are in the realm of the abstract and therefore difficult to discuss, more effort has to be made to raise questions or debates around values of diversity, citizenship and democracy.
- In some ECVUs, teachers of schools are also involved in the process of hard spot selection and in developing scripts and providing feedback on the rough cut. However, in other ECVUs, the facilitators and teachers have no role whatsoever in the film-making process.

Cost Viability of Videos

The video production was found to be cost effective in the following manner:
- The estimated cost of the production of the videos as reported by stakeholders and technical support partner (On an average Rs.1.5 lakhs per video) was kept in mind while evaluating the expenses incurred. The actual expense as reported by NGOs heads and technical partners was also close to the same amount.
- The same job would have been done by professional at three times the above cost, which shows the viability of using CVPs.
- The cost effectiveness of the project also increases due to the training of the CVPs as they continue to make additional videos and also contribute in training any new CVPs that are hired.
- Based on analysis of the videos by technical evaluators, it was concluded that the final product meets the desired standard of video production given the costs incurred.

Connections with the Community

Regarding the connections between Videoshala and the community, the hiring of local community members to become community video producers (CVPs) in the ECVUs was a very enriching experience. All the CVPs were of the view that Videoshala had given them a chance to do something for their community in a very positive manner along with helping them build their own individual skills. The classroom facilitators (CFs), who were also chosen from the local communities, felt that the project was providing them a unique opportunity to help their community along with gaining them meaningful employment. Additionally each ECVU has a team including women and people from marginalized communities and this composition reflects the diversity that exists within the project, which also enables the ECVUs to bring in different experiences and learning, from the local community, into the film-making process.

Learning Outcome Tests

The objective of the learning outcomes tests, carried out by CMS, with groups of ten to twelve students in each of the selected Videoshala schools and non-Videoshala schools (where students had not viewed the Videoshala films) was to make an assessment of the extent to which the videos were helpful in facilitating and enhancing the mastery of hard spots.

Overall, the learning outcomes tests of each ECVU did show that the level of understanding, as projected by performance on the post-test as well as in comparison to a matched control group, amongst the Videoshala students has improved. However, the extent of recall of the content of the video was not found to be very satisfactory on some questions. This could be due to four possible reasons: 1) the time gap

between screening of the videos and conducting the post-test; 2) in spite of the clarity on the issues, students were not able to express it through words in the learning outcomes test; 3) the post-screening interactive sessions were not able to clear the doubts in the mind of the students; and 4) some of the videos and learning outcomes tests need to be reviewed for their reliability and validity of content.

The graph below shows the percentage of students giving right answers for questions related to two videos, each, made by the four ECVUs.

Percentage of students giving right answers
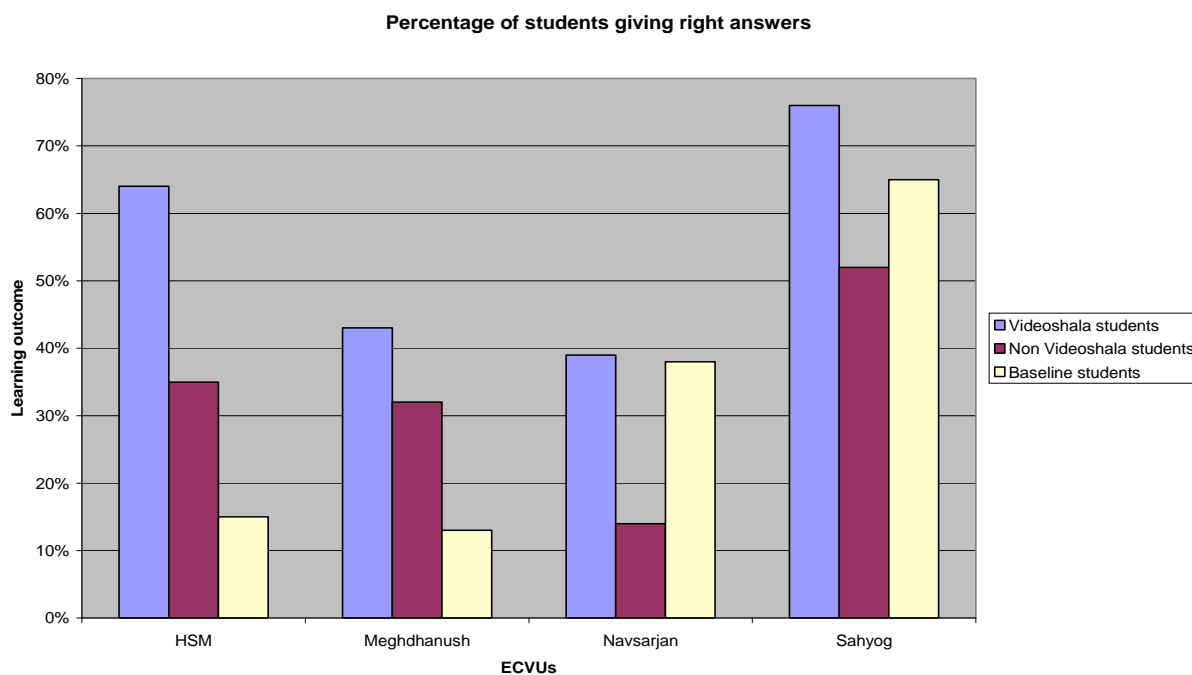
Learning from Videos

According to the community facilitators (CFs) who were the first people who could observe and receive the immediate reactions, responses and queries of the target audience (i.e. students and teachers), the videos have not only been beneficial in knowledge enhancement in the students but other positive impacts have also been observed in the children. After screening of one or two videos, the children shed their shyness in asking questions and became more interactive, and were able to infer and understand the content of the subsequent videos more clearly. The videos made the children more aware, thoughtful and proactive on issues such as pollution and environment. The CFs also felt that the teachers took the videos very positively, which not only proved helpful to them to understand subjects and themes difficult to transact but also in their teaching methodology.

The analysis of the qualitative data gathered on students showed that nearly all of the students liked the videos however the recall level of the content of videos was greater among the students of higher grades than of lower grades. The students of higher grades were also more able to articulate that the videos not only provided information on the difficult themes to understand, but they also made an impact on their thinking and behavior. They reported that after watching some videos on Pradushan, Vanaspati, Kudrati etc they have become more serious towards keeping their surroundings clean and green. The video Sthanik Swaraj Ni Sansthano also made them aware about functions of local self-governance and rights of a citizen. Many students also felt that the use of the local language in the videos as well, as the familiarity with illustrations and examples, made it easy for them to identify with the content. One of the key objectives of the Videoshala project was to help imbibe the feeling of citizenship and democracy amongst the students, which was also more evident in the responses from students of higher grades.

The interaction with the teachers in the Videoshala schools demonstrated that some teachers were involved in the identification of the hard spots to be addressed in the videos; however, this number was not a majority. The teachers' involvement during the screening of the videos in their respective schools was also limited. Nonetheless, almost 100 percent of the teachers were convinced of the effectiveness of

the videos in helping in their teaching. A good majority of the teachers rated the content of the videos as very good and relevant; presentation of the videos as attractive; language of the videos as easy to comprehend; and overall quality of the video as very good and attractive. The teachers further added that their own understanding of the topics/subject matter got enhanced. For example, one of the teachers reported after watching a video on Vanaspati, that it came as a new learning to him that bamboo was a type of grass, and that it is the longest grass.

Regarding the change the teachers observed in the students as a result of watching the videos, a majority of the teachers mentioned that the students had more clarity on the issues that the videos tackled. Many teachers also noticed the change in behavior and conduct of the students towards their peers of other communities and social groups. The students, they felt, have also become conscious towards keeping the surroundings clean and green.

Furthermore, in non-Videoshala schools, the teachers were informed of the model of Videoshala and they agreed that difficult subjects and themes in the curricula can be better addressed through videos. Though they had not watched any videos of Videoshala, they were of the view that the idea of developing videos on hard spots in the curriculum by the community members in the local language could be very effective and relevant.

Interviews with the parents of Videoshala students revealed that most of them were aware that videos were being shown to their children in the school. All the parents were appreciative of the video-inputs being used to facilitate the learning of their children. According to many of the parents, when the children came home after watching the videos they shared this experience with them. Regarding whether the parents observed any change in their children's behavior subsequent to watching the videos, most of the parents mentioned that they found many positive changes in their children. Mr. Pankaj Lalji Bhai mentioned that the thinking of his son towards Dalits and other communities has changed as now his son has friends from Dalit and other communities which were not there before.

Recommendations for the Future

The CMS and Nirantar evaluation teams, along with the other respondents they interviewed, also made some recommendations to expand and grow the project in the future stating:

- It is important to develop future content of videos according to the specific age and learning levels of children.
- The issue of integration of values in films on Science, Language and Math has to be addressed. These are topics which are most 'difficult' for learners; therefore it is all the more important to integrate values in these topics – a task that is challenging, but critical for the project.
- There should be a strategic involvement of facilitators/teachers in the process of the production of videos, especially in the selection of hard spots. Further the role of teachers in the classroom screenings has to be expanded. If the project plans to scale up its operation and involve government school teachers as facilitators, this involvement has to be very strategic in nature.
- Efforts should be made to get in touch with the school authorities at Block Resource Centers and Cluster Resource Centers to make them aware of the Videoshala concept. This would potentially help Videoshala in getting permissions to screen the videos in government schools.
- In many schools the facilitators are the face of the program. The larger objectives of the Videoshala program and the local producers are not known to people in schools and to the larger community in many places. Since one of the objectives of the program is to empower local people to produce educational material to improve quality of learning, it is essential that this information be shared with various stakeholders. The E-CVU should look at additional forums where its work can be promoted and publicized.
- ECVUs should also screen the videos in the community so that additional children and teachers of other schools as well as parents can view them.
- More connections should be made with additional NGOs and other private organizations to become partners in the project.

2   INTRODUCTION

A growing trend in India is the use of Information and Communication Technologies (ICTs) in various types of primary education interventions. However many of these projects relegate local communities to a position of passive receivers of externally made content, while never letting them be the creators of the content themselves. Hence there are few examples of ICTs based projects that are entirely owned by the community. Videoshala is thus a unique attempt in allowing the participation of local communities in creating educational content, imbibed with democratic values, while simultaneously providing them ownership over technology.

The Videoshala project, implemented in Gujarat since 2007, was created by two NGOs Drishti and Udaan in partnership with the QUEST Alliance. The objective of Videoshala is to set up Education Community Video Units (ECVUs) that focus on producing relevant educational videos for local children in local schools. These are 'community videos' – videos created by local people who are trained as full-time community video producers. The videos are on subjects that the students find hard to learn, teachers find difficult to teach, and are inculcated with values of democracy, citizenship and diversity.

These videos are shown in classrooms to children in local schools. Following the screenings a series of activities and interactive sessions are carried out by classroom facilitators who are also members of the community as well as the ECVUs. These sessions encourage children to think more broadly and holistically about the content of the videos which address values as well as the hard spots in the curriculum.

Videoshala entails:
- Use of locally trained community members to produce quality video based education content for local primary schools;
- The inculcation of values of diversity, democracy and citizenship in the educational content;
- Formulating a well-crafted pedagogical process as an instrument through which a child learns, forms opinions, beliefs and starts to understand the social realities of his/her environment;
- Creating an educational process that supports values, positive attitudes, essential life skills, critical awareness, and an understanding of the environment in the context of diversity.

This consolidated evaluation reports combines the result of two separate evaluations carried out by Center for Media Studies (CMS) and Nirantar on the Videoshala project in 2009. CMS is an organization working in the field of media and education and is based in New Delhi. Nirantar is an organization that serves as a center for gender and education and is also based in New Delhi. The broad objectives of the CMS evaluation were to track the progress of Videoshala in meeting its objectives, to identify the factors helping it achieve success and identify challenges and future strategies. The broad objectives of Nirantar were to evaluate the Videoshala films and to assess their content, quality and pertinence to the target populations.

2.1   CHAPTER BREAKDOWN

The succeeding chapter provides a background on the Videoshala project by enumerating and describing its partners and their responsibilities, the make up and organizational structure of the ECVUs and the sequence of the video production model. Chapter 4 lists the methodologies employed by the CMS and Nirantar teams in collecting and analyzing their data for their evaluation reports.

Chapter 5 provides a detailed content analysis of 7 Videoshala films made by the four ECVUs, carried out by the Nirantar evaluation team. Each film is analyzed based on the: the relevance of the film to the audience; the comprehensiveness of the subject matter; the implications of using video as a medium; creativity of the content and form; the kind of information communicated in the film; how the film integrates values in its content etc. Chapter 6 follows this up by providing an evaluation of the transaction and impact of the seven Videoshala videos. The analysis is structured around the video screenings the Nirantar evaluation team observed and is supplemented with data from interviews and group discussions with students, facilitators and teachers. Chapter 7 continues the analysis of the seven video films by concentrating on the process of making the seven video films.

Chapter 8 provides a technical assessment of 23 video films produced by the four ECVUs, on a list of ten criteria, carried out by the CMS team. Appraisal of all the twenty-three videos was done by the CMS evaluation team and supported by a technical expert, who had rich experience working as a senior

producer in a TV News Channels.

Chapter 9 demonstrates the results of the learning outcomes tests carried out with groups of ten to twelve students in each of the selected Videoshala (experimental) and non-Videoshala (control) schools by the CMS evaluation team. The objective behind this learning outcomes test was to make an objective assessment of the extent to which the videos had been helpful in facilitating and enhancing the mastery of hard spots.

Chapter 10 includes the results of the evaluation, carried out by CMS, on the involvement of the local community especially of the community video producers in the Videoshala project. This chapter lists the benefits and challenges the project has brought to the producers. Chapter 11 enumerates the responses obtained by CMS's evaluation team from classroom facilitators, teachers, students and parents on the Videoshala video films screenings and their impacts.

The concluding chapter, chapter 12, discusses the findings, recommendations and future strategies to consider for Videoshala emanating from the evaluations carried out by CMS and Nirantar. The CMS and Nirantar evaluation teams, along with other respondents they interviewed, deliberated upon important aspects of the project such as the relevance to the existing educational and school scenarios, feasibility of the modalities adopted, components of the program, outcomes realized, overcoming limitations, future strategies etc. This concluding chapter discusses the overall success and challenges of Videoshala and the scope for its future scalability and sustainability.

3   BACKGROUND OF VIDEOSHALA

3.1   VIDEOSHALA PARTNERS

There are a variety of partners working to make Videoshala a success for students, teachers and the local communities in Gujarat. The first type is those who manage the education community video units (ECVUs) and implement the project in the field, and the second are those who provide technical support/skills to the ECVUs. Besides the implementing and technical support partners a Central Coordination Unit (CCU) has also been created to coordinate and support the ECUVs. The NGOs, who are the implementing partners and manage the ECVUs are Sahyog, Udaan-Meghdhanush, Hind Swaraj Mandal (HSM) and Navsarjan Trust.

Sahyog (Urban ECVU): Sahyog is a grassroots organization based in Ahmedabad. It emerged after the communal violence in Gujarat in 2002, with the experience of working for the relief and rehabilitation of the affected community. It is working with Muslim children and youth to improve the learning levels of children and facilitate mainstreaming of children in this area. It currently runs six educational centers in Vatva region of Ahmedabad. More than 400 children are covered directly under its education program. Sahyog has implemented the Videoshala project in 30 schools of the Batwa slum of Ahmedabad city.

Udaan-Meghdhanush (Rural ECVU): In addition to being a resource centre, Udaan is directly involved in improving the quality of education in Panchmahal district through the Meghdhanush program. Udaan is working with approximately 75 government schools in order to improve the quality of education, by setting up education centers in each school and has implemented the Videoshala project in these schools.

Hind Swaraj Mandal (Ideology Based ECVU): Hind Swaraj Mandal is a registered voluntary organization working on issues of education, research, constructive work and social organization in Saurashtra region of Gujarat since 1988. One of the major interventions of Hind Swaraj Mandal is to modernize Nayi Talim education introduced by Mahatma Gandhi. HSM implemented the Videoshala projects in 30 Uttar Bunyadi and Nayi Taleem residential schools of Bhav Nagar, Surendra Nagar, Ambreli and Rajkot districts of Gujarat.

Navsarjan Trust (Dalit Dignity ECVU): Navsarjan Trust, a leading Dalit human rights organization, works in over 3,000 villages in Gujarat. Its mission is to eradicate untouchability through legal remedies and struggles against forced occupations, such as manual scavenging, and by ensuring Dalits' access to education and livelihood. Navsarjan runs 170 Bhim Shalas (learning centers where Dalit children come together in non-school hours) in Gujarat. In addition to this, Navsarjan also has three model schools for children from marginalized communities. Navsarjan has set up its own ECVU called Apna Malakma (in my country land) and has covered 43 schools of Patan, Mehsana and Gandhi Nagar districts of Gujarat. Navsarjan ECVU has also screened its videos in some of the Bhimshalas.

The technical support partners in the Videoshala project are Drishti Media and Udaan. They are involved in providing the technical training and other assistance to the ECVUs.

Drishti Media: Drishti was set up in 1992 by two filmmakers. It is a media, arts and human rights organization and has made documentaries on human rights issues by involving the community. It believes in the philosophy of media of the people, for the people and by the people. Having expertise in documentary filmmaking, Drishti Media had vital role in Videoshala at different levels in providing technical support.

Udaan: Udaan is a separate cell of the NGO Janvikas and came into being after the 2002 Gujarat communal riots and works in the field of primary education. Udaan started working with the riot victim children residing in relief camps by providing them educational opportunities and now runs 75 of its own schools. Udaan provides education and pedagogy support to Videoshala.

Central Coordination Unit (CCU): The CCU includes officials from the two founding organizations (Udaan and Drishti Media) and a program manager who oversees and manages each ECVU. The CCU provides constant direction and vision to building and strengthening the ECVUs. It also organizes a planning, review and sharing meeting every month to help different stakeholders understand the project's changing needs better, to share implementation concerns of the ECVUs and to identify new areas of support of them. The CCU also has weekly phone conversations with each ECVUs trainer and coordinator to monitor their work and find out if any additional support is needed. Based on the individual needs of

each ECVUs producers, trainers, facilitators and coordinators, the CCU organizes specialized workshops as and when required.

QUEST Alliance: The QUEST Alliance provides financial, technical and monitoring and evaluation support to the whole Videoshala project, and is actively involved in overseeing every facet of the project to enable it to become sustainable and scaleable.

3.2   MAKE UP OF EACH ECVU

Each ECVU has a team of six producers, two to five classroom facilitators, one trainer and one coordinator. All the team members have been trained by Drishti, Udaan, Quest and other external experts through a series of workshops.

Producers: The role of the producers also known as community video producers (CVP) is to identify hard spots for students and teachers in the local schools curriculum and to produce videos that address these hard spots, while also inculcating values of diversity, democracy and citizenship in the content. Towards this end the producers are trained in video film making, editing, scriptwriting, shooting, story telling, creating creative content, instructional design, educational pedagogies, learning from songs, dramas and illustrations, classroom facilitation and values of diversity and democracy. They have also been given guidebooks and other reference materials including textbooks and sample video films.

Classroom Facilitators: The classroom facilitators' main responsibility is to screen the videos in the selected schools and to conduct interactive session with the students during and after the screening. They have been trained in classroom facilitation and teaching techniques, on how children learn, administering worksheets, carrying out student activities and involving teachers in the video screening process.

Trainer and the Coordinator: Each ECVU is assigned a trainer who has been trained in video production and can guide the team through the project cycle. A coordinator who has also been trained to organize and manage the production and screening of the videos is deputed to each ECVU. Most of the coordinators have prior experience working in the field of education and have a basic understanding and perspective on education and pedagogy. The trainer and the coordinator have attended workshops to understand the production of value centered educational content, how children learn, and information about knowledge change, and its analysis with documentation.

3.3   VIDEO PRODUCTION MODEL

Brainstorming for Opportunities: The production of a video begins when the producers from each unit collectively identifying what students and teachers – in their target schools – are finding difficult to understand and teach. Based on this feedback, they start exploring topics and sub-themes for their videos.

Research and Knowledge Creation: Producers then visit some target schools to test the students' knowledge in the chosen subject and sub-themes of the video. Subsequently, they begin a research process to acquaint themselves with the relevant content addressing the chosen subject in class textbooks and other reference materials. They also interact with resource persons and subject experts, understand community perceptions on the topic and visit educational sites like the community science centre.

Script Writing and Pre-production: Producers then think of the values that can be incorporated in the teaching of the subject, and prepare a preliminary script for the video. They also plan activities that will be carried out during the screenings, which reflect the knowledge as well as the values to be imparted in the film. Feedback workshops are then conducted by the CCU with an aim to sharply articulate objectives, review the content and reiterate scripts. Shooting plans and locations are decided by the producers, who then also select local actors from the community.

Production: Once a rough cut of the video has been produced additional workshops are conducted by the CCU to provide feedback, and the producers implement the recommended changes before producing the final copy. The production process for each video is typically in the range of 40-50 days.

Parallel Inputs: During the entire video production process additional workshops are held by the CCU with inside and outside experts, catering to the individual needs of each ECVU, in areas such as understanding hard spots, script writing and editing, choosing and designing activities, incorporating values in films, implementation in schools measuring learning, and knowledge gains of students and teachers. All of these strategies are supported by examples and references which are localized and contextualized to the realities of the students and teachers.

Selection of Themes and Scripts: While each ECVU choose its own topics for its videos, each videos is based on the key pedagogical strategies to approach the hard spots from the lens of the values of inclusion and diversity; to target a dual audience of students and teachers; to make learning entertaining, interesting and fun; and to model instructional guidance for teachers by demonstrating examples of teaching methods.

Screening Videos in Schools: Each ECVU has a schedule for screening its videos in its target schools, which has been formulated in agreement with the schools principals. The screenings, meant for students and teacher audiences of around forty in number, are made on a TV and a DVD player that the facilitators bring with them. Each video is accompanied by an activity guide which informs the facilitators about the organization of the session. During the screening, they stop to discuss topics or carry out any activities as designated by the pauses in the videos. Post-screening discussions and additional activities with the students help initiate discussions and engage students in activities to explore and learn, while teachers are encouraged to pay attention to teaching techniques and interact with mixed gender groups of students.

3.4   COVERAGE OF VIDEOSHALA

The Videoshala Project has been implemented in different parts of Gujarat and the coverage of the Videoshala project under each ECVU and the videos produced by them on the issues are shown in Table 3.1 below.

Table 3.1: Coverage of Videoshala

Name of the ECVU	Names of the Videos produced (issues of the videos)	Name of the districts where videos were screened	Number of schools where the videos were screened
Hind Swaraj Mandal	Bhumi	1.Bhav Nagar 2. Surendra Nagar 3.Ambreli 4. Rajkot	30
	Urja		
	Aapna Hako		
	Lokshahi		
	Ahar Ane Arogya		
	Paryavaran Aney Teni Kudrati Sampada		
Navsarjan	Vanaspati	1. Patan 2. Mehsana 3. Gandhi Nagar	43 Schools
	Pradushan		
	Paryavaran Aneythenu Kudrati Santulan		
	Sthanik Swaraj Ni Sansthano		
	Gujraat Ni Lokjivan		
Sahyog	Vanaspati Etle Shu	1.Ahmedabad	33
	Juda Juda Kamo		
	Aapna Dharmo		
	Khushi		
	Karo Ramakda Kuch Kadam		
	Aa Ane Ee Ki Matra		
Udaan Meghdhanush	Water	1.Panchmahal District	75
	Earth		
	Communication		
	Respiratary System		
	Pupu		
	Learning Additions		

4   EVALUATION METHODOLOGIES

In the second year of its existence, 2009, Videoshala was evaluated by two separate organizations: Center for Media Studies (CMS) & Nirantar.

4.1   CMS EVALUATION METHODOLOGY

The broad objectives of the CMS evaluation were:
- To track the extent to which the Videoshala program has achieved its objectives
- To track the progress and growth of the participants/stakeholders in the program by focusing on the factors contributing to growth/change/transformation
- To identify the factors exerting the strongest influence in effecting change among children, teachers and the community producers
- To identify the challenges encountered and how they can be addressed
- Wherever possible to capture concrete examples of positive outcomes and impact of the project activities

CMS's research design consisted of:
- Descriptive analysis and interpretation of findings regarding the impact of operational and procedural steps followed in Videoshala;
- Quasi – experimental research design providing (i) pre-post- test (ii) experimental-control group data. Both quantitative and qualitative approaches in collection and analysis of data were adopted to show the impact of Videoshala.

Scope of the Study: Multi-stage sampling of schools from all four ECVUs that have implemented the Videoshala project was carried out. In the first stage, it was envisaged to cover all the Videoshala intervention districts. However, Rajkot district could not be covered as the only one school taken under Videoshala was not serving as a centre for Board examinations during the fieldwork of the study. In the second stage, 20 percent of the total number of Videoshala intervention schools was selected. As a comparative sample under the quasi-experimental design of the investigation, a proportion of Non-Videoshala schools from the same localities as the Videoshala schools were also selected. The number of Non-Videoshala schools varied for each ECVUs. Effort was made to have a good representation of these Non-Videoshala schools which was almost 1:1 for HSM and Navsarjan, about 2:1 for Sahyog and about 3:1 for Udaan-Meghdhanush (video vs. non-video).

Respondent Group: Information was collected from stakeholders of various categories involved in the Videoshala project at different stages and levels. This respondent group of the study included NGO representatives/ Program Directors, District Coordinators, Community Video Producers, Classroom Facilitators, Teachers, Parents and Students. Apart from this, information was generated in interactions with the Program Directors of all four ECVUs, representative of Drishti Media, Udaan, the CCU and Janvikas.

Sample Details: The details of the ECVUs schools comprising the sample of the evaluation and the samples of different categories of respondents are given in Table 4.1 below.

Table 4.1: Sample Schools in CMS Evaluation

Name of ECVU	Videoshala Schools							Non-Videoshala schools			
	Schools Covered	FGDs	Students	Teachers	Community Video Producers	Classroom facilitators	Parent	School Covered	FGDs	Student	Teachers
HSM	6	6	74	12	5	2	5	5	1	65	10
Navsarjan	9	9	105	14	5	3	5	5	5	61	10
Sahyog	7	7	79	13	5	3	4	3	1	60	6
Udaan	15	15	150	30	5	4	6	5	2	60	10

Tools of the Study: Different research tools were used in the evaluation, including:

- **Guidelines for focus group discussions (FGD) with children**: The FGD guidelines for children aimed at eliciting information on the children's opinion on different aspects of the videos. The FGD contained around twenty-five questions. Some of the questions were general in nature and related to what subjects/topics they like and which subject/topics they felt difficult.
- **Guidelines for In-depth interview with District Coordinator**: The guidelines for the in-depth interviews with the District Coordinators contained a number of queries like the personal profile of the Coordinators, their association with Videoshala, their role and responsibility in Videoshala in the process from identifying hard spots to video production and screening.
- **Guidelines for in-depth interview with Community Video Producers (CVPs):** The guidelines for in-depth interview of the CVPs had more than 35 questions. The interview guidelines had questions on how the CVPs developed an association with Videoshala, information on their personal profile etc. Apart from this, the interview guidelines had a number of questions on the process followed from identifying hard spots to the production of films. The questions were also aimed at studying the impact of Videoshala on the local community.
- **Guidelines for in-depth interview with Class-room Facilitators (CFs):** Since the role of the CFs was to screen the videos in the Videoshala schools, the interview questions for CFs aimed at studying the process of screening of the videos in the Videoshala schools; the responses of the children and teachers on the videos; the impact the CF's observed the videos has on the children and teachers; and problem faced in screening the videos. There were also questions on the personal profile of the CFs and their learning experiences as a CF.
- **Guidelines for in-depth interviews with Teachers**: The guidelines for discussion with teachers had queries on hard spot areas, the process of screening of the videos, their role and responsibility in screening of the videos in the schools etc. There were also queries on the relevance of the videos on hard spots, quality of the videos in terms of content and presentation, the impact of the videos on children and on themselves. Separate guidelines had been prepared for discussion with teachers of Non-Videoshala schools. The specific questions related to videos of Videoshala were not posed to the teachers of non-Videoshala schools.
- **Guidelines for in-depth interviews with Parents**: The guidelines had questions on the parents' observations on the impact and change in their children as a result of exposure to Videoshala. Some additional questions for parents who had worked under Videoshala project as actors were also included.
- **Guidelines for discussion with Project Directors and other key partners of the project**: The guidelines contained questions on the background related to the association of the concerned NGOs with the Videoshala project, the process of implementation of Videoshala, the limitations of the Videoshala, response and impact of the Videoshala on the schools, and target groups. The guidelines also focused on information on future plans for Videoshala.
- **Learning Outcome Tests**: Learning outcome tests were conducted with the help of the test papers used by the concerned ECVUs as the baseline study on the themes on which the videos were shown.

The above-mentioned tools were developed by CMS and shared with QUEST Alliance. The test papers used for this purpose were the same as had been used by ECVUs for pre-testing the issues covered in the videos. (All the tools used in the evaluation are included in Appendix I.)

The Field Team and their Orientation: Persons having wide experience of collecting qualitative and quantitative data in the field of education were divided into two teams. Before going to the field, members of both the teams were shown the videos used in the Videoshala project in order to acquaint them with the videos and issues covered therein. The team members were also given a three-day orientation on the concept of the Videoshala project and the kind of information to be collected from the field. During the orientation, each of the tools and related questioning to be done with the respondents were thoroughly discussed.

Each of the two teams was working as a unit; however, different members of the teams had different roles and responsibilities. Each team consisted of one researcher, two field researchers and two local field investigators. Researchers of the respective teams had the responsibility of supervision and guidance of their teams in the field. The researchers were also involved in data collection. The researchers interviewed District Coordinators, Community Video Producers (CVPs), Classroom Facilitators (CFs) of their respective ECVUs. The field researchers conducted tests and FGDs with the children, interviewed teachers and parents. The

local field investigators worked as modulators/narrators wherever there was language barrier between the interviewee and the interviewer. Each team collected research data from two ECVUs.

The fieldwork started on March 16, 2009 and continued till April 1, 2009. Apart from this, two senior officials from CMS also visited Ahmedabad (April 22nd and 23rd, 2009) and interacted with the Project Directors of all four ECVUs, representative of Drishti Media and Janvikas and CVP of Sahyog ECVU to have a better understanding of the process of implementation, achievements, limitations and future plans of Videoshala.

Method of Data Collection: The respondent groups were interviewed using the in-depth interview guidelines mentioned above and for each of the respondent groups, the guidelines had been prepared keeping in view their roles and responsibilities in the Videoshala project. The respondents were approached by the CMS team with prior appointment and at the place of their convenience (ECVU office / residence of the respondent).

Data collection on students of the sampled Videoshala and Non-Videoshala schools was done using mixed groups of ten to twelve boys and girls in each school. For Videoshala schools, both group discussions and testing was done. The test was conducted on two issues out of the six videos (issues) they had watched; pre-test data to serve as baseline information was available for these two issues. For the post-test, the participating students were given question papers and answer sheets and were given sufficient time to write the answers.

The proportion of boys and girls was almost 50:50 in every sampled school of all the four ECVUs, except one of the schools of HSM where only boys participated. The break-up of ECVU-wise students sample appears in Table 4.2 below:

Table 4.2: Class-wise Students' Sample (By ECVU) for CMS Evaluation

	HSM	Navsarjan	Sahyog	Meghdhanush-Udaan
Class	IX	V-VII	III-IV	III-IV
Number	74	105	79	150

In non-Videoshala schools, the test was conducted using the same test paper on students of the same standard as the Videoshala School. However, in some of these schools, a mini FGD (not the regular one) was also conducted with the students to identify the subjects and issues they felt were difficult.

Out of the total 18 non-Videoshala schools covered in the four ECVUs for the learning tests of students, FGD with the students was conducted in 10 schools. Like Videoshala schools, the FGD was conducted with the same students who took the learning tests. However, unlike Videoshala schools the questions were restricted to a few and covered general information on subjects they felt were difficult and how they tackled the difficulties. Since they were not exposed to Videoshala, no questions on the Videoshala were asked. However, they were probed whether they would like additional help on hard spots with the help of videos and, if so, why?

The interviews of the teachers of both the sampled schools (Videoshala and non-Videoshala) were also conducted in the said schools.

Analysis of Data: Since the purpose of the evaluation was to understand the process, interventional strategy and lessons learned during implementation of the project; it was deemed more desirable to adopt a descriptive and qualitative approach in generating and analyzing the data. However, to gauge the learning, outcomes tests were administered and compared with the baseline data. A matrix table was also developed where in responses of different respondent groups were put against the identified parameters, to analyze the information gathered.

Limitations of Study: The field team got full cooperation from all the four ECVUs and respondent groups. However, there were some limitations of the study. The field team had to change nearly fifty percent of the sampled Videoshala Schools for various reasons such as schools serving as the centre for Board examination, the schools being in the process of preparation for annual examination, etc., making it difficult for the teachers to spare comfortable time for discussion. However, the team managed to hold discussions to the satisfaction of its members. Again, since the videos had been screened in different

phases (some of the videos were screened more than one year back), the students and teachers had difficulty in recalling some aspects of the videos, which might have affected the findings in some manner. There were plans to collect data on attendance and retention of the students from the Videoshala schools, but in most of the schools the school authorities did not provide this information to the study team.

4.2 NIRANTAR EVALUATION METHODOLOGY

The objective of Nirantar was to evaluate the Videoshala content and assess the quality of the video kits produced by the four ECVUs. The evaluation of the content focused on the following areas:
- Curricular areas of video kits
- Perspective on concepts key to the Videoshala program
- Pedagogy
- Process of transaction of video kits

The evaluation process included:
- Review of videos produced by each ECVU;
- Desk appraisal of documents – Videoshala proposals, quarterly program reports, worksheets and activity sheets, Gujarat State Board School textbooks, central learning event reports and documents provided by the ECVU (which includes concept notes, the list of resource materials and information on team members);
- A five-day field visit to the four ECVUs from March 26-30, 2009. During the visit interactions and discussions were held with ECVU members as well as the CCU core team. Visits to schools where the videos were being screened were also part of the fieldwork;
- The evaluation team consisted of four members from Nirantar.

The overall design of this evaluation exercise included:

Content analysis: to examine subject matter accuracy, comprehensiveness, reflection of values of citizenship, democracy, diversity and gender and overall product.

Classroom observation: of film screenings using guidelines and a framework of analysis to examine the physical arrangement and environment in the classrooms, as well as human interactions - between facilitators and learners.

FGDs and interviews: with the purpose of covering the following areas:

For classroom facilitators:
- Nature and experience of training inputs
- Preparation for classroom transactions
- Analysis of the differences in teaching through textbooks vis-à-vis textbook-video combination
- Analysis of impact on learners
- Analysis of the accuracy and comprehensiveness of the subject matter
- Analysis of representation of values in the material
- Role in selection of topics and material creation

For learners:
- Discussion on videos that they liked, and reasons for it
- Analysis of the differences in teaching through textbooks vis-à-vis textbook-video combination
- Views on language and content in the videos
- Role in selection of topics and material creation

For producers:
- Selection process of members from the community
- Role in selection of topics and material creation
- Resource materials and inputs provided to them
- Representation and integration of local context
- Representation of core values of citizenship, diversity and democracy in the videos

The tools used were as follows:

- **Content analysis of video kits** – to assess the content and quality of video kits, understand the context and needs of participants in the program and assess ways in which the program has been able to address these. Learning from the reviews and assessment reports were used to strengthen the areas of enquiry of the current evaluation study.
- **Classroom observations** – covering schools in each ECVU. Classroom observations were held pre, during and post the video screenings. The observations allowed for the study of the effectiveness of video as a medium for teaching children. This method provided detailed and precise information on students' engagement with videos and their content. The observations also enabled greater learning on the transaction of videos and facilitation around key concepts and values in the classroom. The nature of facilitation and instruction in the classroom was useful in evaluating methods used by facilitators to address the varying needs of students and the challenges faced by them in teaching.
- **Focus group discussions (FGDs)** – with producers, classroom facilitators and learners in each ECVU. FGDs enabled for the capture of the nature of people's engagement with the Videoshala program. FGDs enabled the assessment of the program's effectiveness in improving the quality of education. This was also a tool for exploring people's perspectives on key concepts and values identified during the project.
- **In-depth Interviews** – with producers, classroom facilitators and learners in each ECVU. Interviews helped gauge the depth and nuances of perceptions of community members and students on values of citizenship, democracy and diversity. Conducting interviews was also useful to ascertain factors that have influenced learning in schools and in the community.

In addition Nirantar watched 22 films made by the various ECVUs and analyzed seven films that were screened during the field visit to Gujarat. Their analysis is based on benchmarks of curricular areas and pedagogy.

The schools visited as part of this exercise are listed in Table 4.3 below.

Table 4.3: Schools Visited by Nirantar

Name of Org	Nature of School	Name of School/Village	Block	District
Hind Swaraj Mandal	Run by Satubaba trust (govt aided)	Satubaba high School	Palitana	Bhavnagar
	Lokshala based on Gandhian ideology (govt aided)	Trivenitirth uttar buniyadi School (Vill- Kansar)	-	Bhavnagar
Meghdhanush	Run by Meghdhanush (govt aided)	Kalol School	Kalol	Panchmahaals
	Government school	Arad	Halol	Panchmahaals
Navsarjan	Run by Navsarjan (govt aided)	Sami	Mehsana	Patan
	Government school	Shobhasar	Kalol	Gandhinagar
Sahayog	Activity Centre (run by Sahyog)	Sahyog Activity Centre	Nawabpura Cluster, Vatwa	Ahmedabad
	Private school	Ashirwad School	Vatwa	Ahmedabad

Data collection was done through interviews, FGDs, and classroom observations. This has been summarized in Table 4.4 below.

Table 4.4: Methods of Data Collection by Nirantar

Name of Organisation	Head of org	Coordinator of ECVU/ Prog leaders	Facilitators	Teachers	Producers	Learners	Community	Classroom observations
Hind Swaraj Mandal	1 interview	1 interview	1 interview	1 interview	1 FGD 2 interviews	1 FGD 3 interviews	1 FGD	1
Meghdhanush	1 interview	1 FGD	1 FGD 1 interview	1 disc 1 interview	1 FGD 2 interviews	2 FGDs		2
Navsarjan	N/A	1 interview	1 FGD 1 interview	2 FGDs	1 FGD 2 interview	2 FGDs 3 interviews		2
Sahayog	1 interview	I interview	1 FGD + teacher		1 FGD 2 interview	1 FGD 2 interview	2 interviews	1
Total	3 interviews	3 interviews + 2 discussions	3 interviews + 3 FGDs	2 interviews + 2 FGDs	8 interviews + 4 FGDs	8 interviews + 6 FGDs	2 interviews + 1 FGD	6

5 CONTENT ANALYSIS OF VIDEO FILMS

This chapter provides a detailed content analysis of seven films, made by the four ECVUs, carried out by the Nirantar evaluation team. The analysis of the Nirantar evaluation team is based on the relevance of the film to the audience; the comprehensiveness of the subject matter; the implications of using video as a medium; creativity of the content and form; the kind of information communicated in the film; how it compares with textbook knowledge; how the film integrates values in its content; and the how the local context and the context of the particular ECVU impacts the content.

5.1 HIND SWARAJ MANDAL (HSM) ECVU

- **Urja**

This video deals with renewable and non-renewable energy and their various sources. The video begins with a puppet show. Some animal are driving a car, and when the petrol finishes, the car is pulled with bullocks. It then goes on to show consumption of energy in various forms – e.g. cooking food on stoves and lighting lanterns when electric supply is cut. In this video, students are encouraged to come up with drawings of the various forms of energy and asked to classify them into Renewable and Non-Renewable forms. They are shown solar and Gobar Gas plants and Windmills. The aspects of some sources of energy are explained to them through the question-answer method and also through experiments. The video uses various mediums creatively. The attempt to explain solar and gobar gas energy by actual field visits is an effective strategy.

However, while the distinctions between various sources of energy can be seen, the film does not go into details of how energy is created. The level of knowledge about energy which Standard VIII and IX students normally have is much higher than that shown in the films. The information about of energy displayed in the films is rather superficial, limited to technical terms and definitions. The concept of energy appears as in the text books, without delving into understanding what energy is, how we see it in different forms, how it is created. The different sources of energy have been identified only by their names and relevant pictures.

The way in which energy is talked about in the film assumes that the children have certain knowledge already. For example no information has been provided as to what a Silicon Plate is and how does it work. It simply says that these plates store solar energy. Similarly it has been stated that water energy comes only through turbines and it is a form of converted energy. However, the film doesn't explain what a turbine is and what is meant by converted energy. The significance of a Dynamo in the context of a windmill and how it transforms wind energy into power has not been explained in scientific terms.

The use of Kerosene as a form of fuel has been explained adequately through experiments. However, the video does not explain how the fuel is obtained from the bowels of the earth, the scientific methods and processes of fuel extraction.

The film has the potential to be a good source of information on energy, because the level of knowledge of Class VIII and IX students is limited. The film could have added to textbook knowledge to make the concept of energy formation, and renewable and non-renewable energy clearer. It is only through expanding the scope of the students' understanding of the various sources of energy in our country, their various processes of formation and use that it is possible to show how it is being misused. Also, while speaking about what energy is and its sources, the emphasis should be on local resources as well as others. Using puppets to explaining the concept of energy seemed a little childish for Class VIII and IX students.

The film integrates into its content the value of saving of energy. At the end of the film, the children organize a protest for saving energy, which is well done. The film shows a distinct awareness of gender and religious differences among students. However, the value of diversity is communicated through a song – '*Hum Hind Desh Ke Niwasi*'– which does not seem to have any bearing on the subject matter of the film. Also, this medium rather blurs the complexity of diversity, addressing it in a superficial manner.

- ### *Lokshahi*

Lokshahi deals with democracy, specifically the election process. This falls under the subject of Social Science of Class VIII and IX. This was the fourth film that HSM made. This film covers topics like – What is Democracy? What is the process of Elections? It raises questions about governmental responsibilities towards development in villages, especially water supply. Through this it attempts an understanding of the responsibilities and accountability of the government, and responsibilities of people to raise questions of the government.

This film also raises the issue of plastic bags. As plastic does not decompose like other materials, it harms the environment. As an alternative to these bags, paper bags are made in the film. The discussion about democracy happens whilst the children are shown how to make paper bags, which makes the film an absorbing one.

Discussions on democracy happen in different households and with various people –ranging from grandparents, school teacher and 'expert'. The information and knowledge thus generated is not based on any single person as happens in schools where the teacher alone is considered the storehouse of knowledge. The methods of collecting information are also quite novel. Different modes have been adopted to provide relief from a dry discussion or lecture, to see democracy in different contexts. For example, Govind Dadajee, a Gandhian, interprets democracy in Gandhiji's language. Sabir, a craft teacher talks about democracy with the creativity and balance shown in his teaching of the crafts. Devikant Bhai presents it in a question-answer form. The voice and concerns of women, also a part of the democratic structure, are heard through discussions in which they talk about their recurring water-problems.

Students in the film participate actively in the discussions, so that the information is not provided in a convention, top-down manner. Normally such subjects are dealt, at best, through the medium of stories or case studies. In this film attempts have been made to show their relevance with day-to-day life. An attempt has been made to involve not only students of different religions, but also different types of children in this video.

5.2 MEGDDHANUSH ECVU

- ### Pupu

Pupu is a well-made film, using a creative story-line. The entire story is child-centered. The main character is a little girl called Revli, and the film follows the story of her lost toy '*pupu*', which some of her little friends – both boys and girls – help her to find. Through the story about the search for the toy, the film covers concepts like states of matter and properties of solids. The children ask Revli what kind of toy she's lost, and Revli subsequently explains its properties. Through this, various properties of solids are discussed – like hard, soft, smooth, brittle, transparent, etc. The plot creates curiosity amongst the

children regarding what sort of a toy '*Pupu*' is, whether Revli will find her toy or not, and what will come next.

In terms of subject matter, it was quite relevant and comprehensive, and visually provided examples to children, which helped them understand states of matter and properties of solids. The subject matter was accurate and appropriate for the learners of this age group (Class III students), and the curricular requirements of their syllabus.

In terms of concepts, the film was a little heavy. Properties of solids were discussed at length at the beginning, and the various states of matter – solid, liquid and gas – were taken on later. This may have made it more difficult for children to understand. The properties are done wonderfully well and contextualized within the search for the lost toy. The film could have omitted the discussion on solids, liquids and gases and focused more on properties.

In the attempt to talk about different states of matter, smoke is mentioned as a form of gas. In the film, this is followed by a quick discussion on air pollution caused by smoke from a factory, and what needs to be done in order to prevent it. This seemed to be an unnecessary conversation to include, and it seemed as if the discussion on values was forced – superficial as well as instrumental.

Another example of attempting to interweave values in the film is through Revli's friends. From their names, it is evident that the children belong to different communities. The producers wished to represent the value of diversity through this aspect, but it seemed a bit tokenistic. Other values that are reiterated through this film are cooperation and mutual support, demonstrated by Revli's friends helping her look for her toy '*pupu*' and giving her support.

An element of caste-based discrimination is also shown in the film. Revli is shown to belong to a Dalit family. This is represented in a scene where Revli is shown to sit on the ground, while the other children sit on the bed. In the same scene, Revli cups her hands while drinking water, showing that she belongs to a so-called 'untouchable' caste, and can't drink from the same vessel as the other children. The other children, however, tell her that she should sit on top of the bed and drink water from the same vessel.

An observation we had about the films in general was that, while they do represent and showcase the 'ideal', highlighting values of equality and non-discrimination – albeit in a limited sense – there is no reflection of more real-life conflicts. Things seem too simplistic in the way they are represented and not as nuanced as they truly are in our daily lives. This is especially true of how caste-based discrimination is dealt with in the film. Overall, we feel it is significant even to make a symbolic reference to certain values, but it may not be understood entirely by learners if it is not linked more concretely with the context of the area and the lived realities of the children and their experience of marginalization.

5.3   NAVSARJAN ECVU

• **Gujarat nu Lokjivan**

This is the fifth film made by the Navsarjan ECVU. The film is based on the social and cultural life of people in Gujarat. It takes the students to different parts of the state. The film has children as its main protagonists. These children are transported to different parts of Gujarat through something like a time machine (called *bulbul*) which has been made by the children themselves. Children operate the machine and choose to go to a different region each time. The machine transports each child to a different region (Northern Gujarat, Southern Gujarat, Kutch, Saurashtra). The child gets to experience the region and culture and is then transported back. He/she shares then with others the experience of the region.

The film shows different types of houses that people live in, clothes worn by men and women, food eaten by people, handicrafts, geographical features and animal and plant life of the region, languages spoken, places of historical interest, industry and work done by people. At the end of the film children are also exposed to problems faced by people in Gujarat. Discrimination in wages, exploitation, migration, manual scavenging and the status of tribal people are some of the issues that children learn about in the film. The film also presents well contradictions that exist in Gujarat. It shows that the Narmada canal has provided water to many farmers, yet the dam on the river has caused large-scale displacement of people who have not been rehabilitated. The film also shows that while fishery is an industry in the state, the status of fisher people is not an issue of concern for the state.

The film addresses the issue of diversity in a positive way. It celebrates the multifariousness that exists in Gujarat. Information on social and cultural life of people in other regions is a learning for children who may never get to travel to these regions. The film builds on the local context: made by the Navsarjan team in Mehsana, the film takes the viewers to Patan and shows the famous Patola sari, the Sun temple in the region, dairy industry and fertile land which appeals to children from the Mehsana area. Viewers also get to compare and contrast their own region with other regions in the state.

The film has women and girls in significant roles: the actors are both boys and girls, and it is a woman who helps the children and provides information throughout the film. Popular songs and good quality of visuals ensure that viewers are engrossed in the film. The idea of the time machine is highly appealing to children and is an interesting medium to transport them to different regions.

The film has the possibility of opening up a discussion on structural and social inequalities and the exploitative role of the rich and 'upper castes'. However, there are some issues which have not been dealt with adequately. While women are part of the film, it does not raise the issue of gender-based discrimination. It shows women as manual scavengers (the reality being that it is women who are mainly in this profession) and as laborers. However, the issue of discrimination at work based on gender is not mentioned. The film also does not represent non-Hindu traditions and religions adequately. The adivasi culture is represented in the film, but there is no mention of Muslims or Jains or other religions that form a significant part of the state population.

Gujarat nu Lokjivan uses the medium of video to the fullest. The film is technically sound and its visual quality is good. There are well-taken shots of houses, clothes, food, places of interest and physical features of different regions. The medium also inventively uses the time machine idea – a ploy that is highly appealing to children and that only a video could have shown so well.

The film provides children information that broadens their horizons. Textbooks are often limited to providing information on life styles of people; they do not highlight issues of exploitation and discrimination, which the film does. Textbooks also present idealized situations and show diversity without differences or disparities. Gujarat nu Lokjivan does show heterogeneity and glorifies it, yet it does not shy away from showing conflict. The perspective of the producers and the E-CVU involved is well incorporated. Their understanding of Dalit issues and rights of marginalized people comes across well in many places in the film.

A Glimpse into the Textbook

'Gujarat: Social Life' in Social Science Textbook for Standard 5

The Gujarat State Board school textbook glorifies the diversity that exists in the state. The book has a four-page chapter which includes brief information on food habits, costumes, dwellings, celebrations, caste, languages and folk dances. The chapter presents the people of the state as being *"by nature humble, persevering and hard working."* 'Social Life' has a few illustrations and four photographs that show a fair, a temple and folk dances. There is an attempt to show both modernity and tradition – in addition to local food, clothes and styles of living, there are statements that tell the readers that men and women in Gujarat have also adopted modern clothes, there are multi-storey buildings and people are expanding their business to other states and countries. There are also statements like - *"the people of Gujarat love celebrations", "generally the life style of Gujarat is varied".*

Despite being a chapter about people and their culture, the chapter is written in a style that is dull and distant. Information provided on each region is very brief. Adivasis are mentioned only in the context of their language. The focus is on fairs and festivals – this section is the longest in the chapter. The illustrations don't give a real sense to learners about the types of houses and clothes.

Unlike in the film, there is no attempt in the textbook to present oppression or even talk about issues related to marginalized communities. The sense that a reader gets is that Gujarat is a great state where people with diverse practices live in harmony. This is a highly simplistic and problematic representation of reality.

- **Sthanik Swarajya Ni Sansthao (Gramya)**

The film is about institutions of local self governance (rural). The film begins with the local Panchayati Raj elections. It shows a local woman, Sakri Ben, contesting elections to the post of sarpanch. Sakri Ben wins the elections and is among the few elected women representatives in the area. She is ridiculed and challenged by men, who are in the majority in the panchayat structure. After winning, Sakri Ben does what few other people have done in the past – she revives the Gram Sabha and challenges discriminatory practices. She calls for the Gram Sabha meeting, gets a Dalit man to sit on the chair in the panchayat office, mobilizes women to come for the Gram Sabha meeting – including the other elected representative – going door to door and speaking to people. She also promises to raise people's issues at the meeting.

The film talks about the gram panchayat structure as Sakri Ben explains this to her daughter Roshni and her friends. At the Gram Sabha meeting, Sakri Ben addresses issues raised by people – most of these are issues of development. Roshni and Sakri also address the issue of caste-based discrimination at school. Sakri, with her transparent and democratic style of working, gets development work started in the village. The village is electrified, construction of a pucca road begins and drinking water is supplied to taps. Sakri Ben's efforts are appreciated by everyone and she receives praise from all quarters. The children learn about the Taluka panchayat through another man, Imran Bhai.

The film does not show idealistic situations. The challenge faced by women in politics – a male-dominated arena, is well represented in the film. The film also shows lived realities of people – the reluctance of women and other people to come to the Gram Sabha meeting because of the total lack of interest among panchayat members to address their issues, the domineering attitude of men who have been in power and the discriminatory behavior towards Dalit children in school.

Information on the tiers of the panchayat structure and work of the gram panchayat is provided in a simple and interesting manner. Ideas of local self governance, democracy and equality are shared in Sthanik Swarajya Ni Sansthao and yet the film is not message-loaded or instructive. The film has women as its main characters – Sakri, Kanta and Roshni are the lead characters who take the viewers through the film and provide information along the way. Children's questions and their inquisitiveness push the film forward. There is additional information provided on the taluka panchayat in the film.

Sthanik Swarajya Ni Sansthao breaks a gender stereotype by showing women in a public domain. Yet, the struggles of women like Sakri Ben are not highlighted adequately in the film. Despite facing hostility from other panchayat members, Sakri Ben appears to be a self-confident, articulate and assured woman who manages to gather support and initiate work within no time, and few obstructions. This is a simplistic representation of reality. While this does break the stereotypic image of women in panchayats being only dummy candidates for males, yet the scope of highlighting struggles of women could have been explored to a greater extent. The film stops short of building upon the value of citizenship. While the idea of women as citizens, as active participants who have agency in the process of democracy is quite clear in the film, it is not clearly stated, as a result of which it is easy for someone to miss the point completely.

While it is important to show the linkages of the different tiers of local self governance, the information on taluka panchayat appears to be an add-on in the film. The information is provided by a Muslim character. The effort to show people from marginalized communities as providers of information is well appreciated; however, the representation in this form in the film, with no real integration into the plot, appears to be tokenistic.

The choice of topic for the film is relevant and useful. Explaining the idea of local self governance by showing the challenges related to participation of women and other people is a very innovative and yet realistic method. Unlike textbooks which are distant from local realities, this film, based on the experiences of Sakri Ben, Kanta and Roshni, is very close to children's contexts. Locating the story in such a context helps learners understand information and issues quite clearly.

The medium of video is used well in the film; however, Sakri as the provider of information sometimes appears to be doing what a teacher would do in a classroom situation. While this process of learning is more interesting for the children as they travel with Sakri and get to understand her work as a sarpanch, and the functions of the Gram Sabha, yet the medium of video lends itself to more creative use which has not been fully explored in the film.

The influence of Navsarjan and its values is quite apparent in the film, as it looks at issues of gender, caste and realities of rural life. The low participation of women in panchayati raj is also a local reality which is well captured by producers of the film.

A Glimpse into the Textbook

'Local Self Government Organizations - Rural Area' in Social Science Textbook for Standard 5

The chapter in the Gujarat State textbook provides brief information on Panchayati Raj *("Panchayati Raj is a very important method to run the self government at the local level. It solves the problems related to the planning, development and locality quickly as per the expectations of the people. The organizations of Panchayati Raj are important for the economic and social development of the village").* Information on the three tiers of Panchayati Raj is mentioned in a few lines. The chapter has information on formation of the gram panchayat and the taluka panchayat – their functions, sources of income and administration.

The chapter on local self governance is highly de contextualised. Its content is dry, dull and distant from the local context. There is an overload of information. It does not talk about the situation in Gujarat; there are no examples, no photographs or illustrations. The institution of Panchayati Raj is described in a simplistic manner, with no challenges or complexities.

5.4   SAHAYOG ECVU

- **Bhasha Gyan**

This was the last of the six films that Sahyog has made. The hard spot here is language, more specifically consonants and vowels – *vyanjan* and *swar*; *aa*, *ee* and *oo* vowel sounds are focussed on. While attempting to teach these vowels, the film – a fiction/feature – also follows the story of Rani, a secondary school girl who is prevented from continuing her education because her parents think it unnecessary to study beyond secondary school. Another story – or motif/metaphor – in the film is of a parrot in a cage, Bittu, which belongs to Khushbu, one of the protagonists of the story. Khushbu tries to understand why Bittu is kept in a cage, unlike all the birds she sees.

The video has a plotline that is quite interesting and absorbing. Different threads of the story are tied together in a way that is not forced. The film begins with shots of Khushbu telling her mother about Rani dropping out of school, because her parents want her to. Rani appears in the film not long after, as the 'teacher' who explains vowels and consonants to the children. The parrot reappears at the end of the story, when Rani's parents have been persuaded to let her go back to school. Khusbhu, convinces her mother Rekha *ben* that Bittu be left free to fly with her friends, and opens the door of the cage and lets her out.

The film thus includes both content and values' component, and weaves them together with the help of a multi-layered fictional plot. However, the actual teaching of language doesn't differ much from classroom language teaching without a video.

After a quick recall of the consonants, children enunciate the vowel (*aa*, then *ee*, then *oo*) – first silently, and then with sound. After this, the children make words combining consonants and the vowel being taught – this happens through different games. Then the vowels are drawn on slates, or on the ground; the difference between how vowels appear in different forms by themselves or attached to a consonant is explained. This is clearly difficult for the learners to grasp – that the vowel appears in a different form on its own, and when it is attached to a consonant to produce a certain sound. Games like hopscotch, and word building in different teams, are played for the learners themselves to join vowels and consonants, and make words, or their names.

The video demonstrates a child-friendly language pedagogy, though not necessarily a very innovative one. Parts of the film, in fact, seem like the audio-visual version of a language class – for instance, when vowels are attached to different consonants on a slate. Also, though the person teaching the children is not a conventional *teacher*, the method of teaching is still top down – either by Rani, or by the gardener who works in their school. So even though an effort is made to question who the conventional giver of knowledge is, knowledge is still given from above.

Much of this language teaching in the video could be achieved by the teacher in the classroom, in fact be even more effective if the learners were given a few fun exercises to do. The video itself adds little to the information in the textbook. It is relevant and comparable to the work that the students do in the classroom, but it achieves a similar distancing that textbook or conventional classroom teaching does. Also, though elements like humour, and learning from peers (each of the children in the film makes a word for the different vowel sounds) are used to teach, language is still taught as broken down into consonants and vowels, which is difficult for learners to grasp. There is no attempt to teach language in a way that roots it in the everyday lives of the learners, or as it is used, rather than the way it is written.

Where the film is clearly effective is in the subplot about girls' education, and the undesirability of dropouts. This part of the film differs in style also from the rest of the film (which is much more like an educational video). It has characters – the girls' parents, members of the community who become involved in the incident. It takes place in peoples' houses; it screens the dynamics between parents and children, and between different members of the community.

There is an effort to locate both the film and the issue it is raising within the local community itself, and ask the local community to come up with a response, rather than an 'expert'. This is true of many of Sahyog's films, and maybe a reflection of the kind of work they do in the community, and the kind of relationships they build within it. Ironically, this 'fictional' part of the film is perhaps most easy to relate to for the audience, and most true. For instance, the value of equal right to education and a future for a girl is clearly understood and related to by even the primary school audience that the film has. The other subplot, of the undesirability of keeping a bird in a cage, links quite well to the story of the girl who is being held back from a future she is entitled to, and so the value of sensitivity and kindness to animals ties in the end to the value of gender equality.

So the film has a content component which does not quite do justice to the medium of video, and a values component which manages to capture the imagination of the learner and communicate the importance of the value, and its place in their everyday lives, quite well. The language component covers the hard spot it sets out to, but lacks in creative research on language pedagogy which could have set it apart from the language textbook, or which could have made better use of the video format to teach language, for example, a more experiential understanding of vowels.

In terms of the values the film communicates – these have little connection to the subject content of the film, which is language. In this sense, the subplot about girls' education, or even about the parrot in the cage, could have been part of any other film. Although the genre of a feature film gives the filmmakers the freedom to use subplots, and link them on the level of character – it would have been interesting and perhaps more effective to link language and values in some other, more organic way. Technically, the film leaves quite a lot to be desired. Some of the shots are quite jerky, and when a shot begins, it often seems like the actors are not entirely ready for it. Often, one is not sure why a certain shot ends so abruptly and is followed by another, unrelated one.

- **Juda Juda Kaamo**

This is the second of the films that Sahyog has made. It is on the different forms of work that people in the community and around them do. Forms of work are discussed and then the children go and learn in more detail about some of these different occupations. This content is in the social sciences curriculum, but some information on occupations is new to the learners, as is the questioning of certain stereotypes associated with some occupations in the textbook.

The video makes use of the medium in creative ways. It is shot really well, cutting from one image to another imaginatively – quickly yet without being jerky. It also makes use of music well, making you feel like you are watching a feature (almost Hollywood!), when in fact it's a documentary. The camera is highly mobile – in the sense that shooting happens in different locations and with a range of different actors. This range of people and places is not something one feels when reading a textbook – however good the textbook is. While some textbooks do attempt to cover different forms of work and the people who do them, they never delve into the structural reasons of why certain people only have access to certain kinds of work (why the same people are not journalists and sweepers).

In this video, there is an attempt to ask questions about who does what work, and the discrimination that some workers face. However, at the end, it leans towards a positivist equalizing of all kinds of work, highlighting all labor as a service of some kind, without an analysis of the unequal structures which

determine the 'choice' of one form of labor over another. In short, the video showcases a certain progressive perspective of labor of the organization and the filmmakers, and the value of diversity and citizenship, but stops short of a structural analysis of labor.

The video begins with cuts from one location to another, showing different forms of labor in places familiar to the audience. Shortly after, in a discussion format that forms the main mode of communication in the film (rather than the instructional mode, used in many films of other ECVUs), the facilitator (interestingly, Munira, the Sahyog ECVU coordinator) asks a group of children to name different kinds of work they see around them. A variety of forms of work come up – rickshaw puller, chai shop, kinara shop, chappal shop, toy shop, carpenter and so on. It's interesting to see – at this point, and afterwards in the film – the kinds of work that get shown.

Quite a few different forms of work that are generally invisible or part of the children's everyday lives are made visible in the film – cobblers, barbers, construction workers. After this, through the format of a riddle, different forms of work/workers are visually depicted and the children guess what the occupation is. This is an effective pedagogy, and also makes use of the medium of video to the maximum, as different aspects of the work are represented, in a way that is not boring or repetitive, and in locales that are familiar to the children (Bibi ka Talab) raising curiosity in the minds of the children.

The latter part of the film involves the children going – individually or in pairs or groups – to interview different people in different occupations. This as well seems like a much more effective learning strategy than just giving children information in a top-down manner. The children go to meet a construction worker, a farmer, a journalist, a radio jockey, a sweeper and a housewife. The choice of occupations depicted are urban, but they combine occupations that the learners' families may be engaged in, and occupations that the learners may be curious or excited to know more about (RJs, journalists). The language shifts from Gujarati to Hindi depending on the person and the location – for instance the conversation with the RJ has a lot of Hindi, which the children must also hear on the radio.

Questions asked are a combination of factual ones about the nature of work – even technical details, which are quite interesting – and everyday experiences of the different people interviewed, as well as questions like who takes care of the (female) construction worker's children while she works, and where she comes from (raising the issue of migration); who can become a journalist; whether the sweeper faces resistance from her husband about her work.

The recap with Munira not only reiterates the fact of different forms of work that exist around us, but also urge the children to raise questions about gender and caste discrimination in different forms of work. Why, for instance, are only men associated with some work (like construction work) when in fact there are many women who do it? Why is there so much stigma around the job of the sweeper, when it is such an essential job? The questions don't necessarily provide an analysis of the status quo in society, but definitely push the children to question what they see around them, which is a huge difference from the textbook. The effect of local shooting, and with places and occupations that the learners are familiar with increases the impact of the video – the distance between the learner and the information is quite small, and there is an ownership over the information that the learners get in the film, that is rare to see in other teaching/learning materials.

This film manages an integration of content (different forms of work) and values (diversity, equality, citizenship) in a deeper and more effective sense than many other educational videos. The values are recalled and reiterated by Munira in the film, but through the video they occur in the images of different people – men and women – from different backgrounds, and more importantly in the questions to these men and women about their lives and the challenges and discriminations they face. The people, locations, language and occupations seem familiar and local and immediately relatable. This makes the content and values have more impact and effectiveness.

6   TRANSACTION AND IMPACT ANALYSIS OF VIDEO FILMS

This chapter consists of Nirantar's evaluation of the transaction and impact of the Videoshala video kits. Their analysis is structured around the screenings the Nirantar evaluation team observed, the facilitation of the sessions, the activities and worksheets used, and the overall pedagogy of the transaction. Their observations have been supplemented with data from interviews and group discussions with learners, class room facilitators and teachers.

6.1   HIND SWARAJ MANDAL (HSM) ECVU

Classroom Observations

Urja was screened at the Triveniteerth Post Basic School, Kansar village, and run by the Sadbhawana Trust. It is based on the Nai Talim and Uttar Buniyadi Shiksha idea of education. It is a co-ed residential school, upto Class 12. This screening was limited to students of Class 9. Fifty students (20 girls and 30 boys) were selected for the screening. Six screenings had already taken place in this school. Since the classroom observation of the screening and session was an integral part of this evaluation we asked for a repeat screening, and the producers selected the film Urja for this purpose.

In the introductory speech, the Coordinator briefly elaborated the concept of Videoshala and then referred to the contents of the film. This latter was necessary since there had been no contact with the school for over two months.

We visited the school on a Monday, and learned that it was a weekly holiday so no teacher would be available. The students were also busy with their activities. However, within fifteen minutes the students collected. As they sat down on the ground, we noticed that there did not appear to be any mutual communication between the boys and the girls – it was as if they didn't know each other at all. They sat at opposite ends of the room. The atmosphere of the class did not seem conducive to an interactive and innovative session. Neither the coordinator nor the facilitator appeared to notice this classroom environment, or respond in anyway to the students.

During the screening, the children seemed to be watching the video, but without much enthusiasm. However, it is quite possible that this was because it was the second screening of this film.

During the screening, there was no activity or discussion. After screening, the facilitator plunged right into activities he was meant to do, without any discussion about the film. The entire atmosphere was of a convention classroom, where questions are asked and answers given. Also, the facilitator was asking questions to the same – all boys – over and over. He faced the side of the room where the boys sat, and talked to them only. This seemed contradictory to a progressive value-based system of education, enhancing student interest and facilitating learning.

The worksheet on Urja has questions which test only the information in the video. While there should certainly be some questions which reiterate the knowledge already gained, there should also be some which are analytical in nature, which push the learners to process the information. The questions seemed too simple for 14-year-old students.

We felt that the values displayed in the video film would certainly be taken up for discussion, and were disappointed that no discussion happened. However, when we discussed the impact of the values component of this film with the producers, Yogesh said that the issue of discrimination against children in the supply of kerosene has provoked many discussions with students.

Discussions with Facilitators and Learners

When we spoke to the facilitators at HSM, they said that they learned everything they knew about facilitation from the ECVU coordinator, or accompanying others for screenings. None of them had attended a training specifically for facilitation skills. The facilitators had no grounding in education or pedagogy, and knew about the content and pedagogy of the Videoshala films only by informal interaction with the producers (with whom they had been friends much before the program started). So their grasp of the content or the values in the film was limited, and explained the low energy and quality of the video kit transaction.

The students of another school we visited, Satua Baba School, admitted that observing the pictures on the video imprints the content in their minds and aids in recall of information. One girl told us that when a video is screened before the topic is covered in the classroom, it aids in understanding new concepts when they are taught. She also claimed that her marks had improved considerably after the Videoshala program had started at their school, as she could remember things she had watched in the video while writing her exams! She related the story of how she played with a child from another community after watching the film on *Aapno Hak*, as it built her understanding of the value of diversity. The local content of the video also helps them to absorb the information in the video. When they saw windmill in the film, they were able to relate to it, as there was one in their area also.

6.2   MEGHDHANUSH ECVU

Classroom Observations

We observed two screenings of the film Pupu. One was at the Meghdhanush School in Kalol, where about 30 children – both boys and girls – of Class III were present at the screening. All these children belonged to Casimabad – the semi-urban Muslim colony in Kalol – and nearby areas, where Udaan-Meghdhanush had been working after the riots of 2002. All but one child in the classroom belonged to the Muslim community. The second screening was at a government primary school in Arad village, which had also been affected by riots and violence in the 2002 carnage. Udaan-Meghdhanush has placed a volunteer in the school here to support quality primary education for children. Most of the children studying in this school belonged to the OBC community, and there were about 40 children present at the screening of the film Pupu that we attended.

One of the first things that struck us at the beginning of the session on Pupu at the Meghdhanush Kalol School, was that the teachers sang and danced along with the Videoshala team that was transacting this session and every child also danced along. The song was about 'What is this object like?' and was a good beginning to the session. In a sense, it gave an indication of what was the subject matter for the upcoming session and was a cheerful introduction to the film. This activity also indicated a great sense of engagement and involvement, and certain values of equal participation in the transaction process, because everyone – teachers, students, facilitators alike – were singing and dancing to the same song. There was a great deal of repetition of concepts during the session. This was done by using a combination of various media – video, oral repetition, through activities done in between the film screening by pausing the film, and at the end of the film through the activity sheet. This helped to strengthen the concepts related to states of matter and properties of solids.

The first activity involved making the children sit around in a circle; one child was called at a time and blindfolded. Then she was asked to feel the object provided to her and explain its properties. The facilitator called girls and boys turn by turn to the centre. It seemed like the children enjoyed this activity. And after each example, the facilitators asked the children to look around the classroom and identify other objects that have similar properties. We felt this exercise was important to build the children's actual understanding about the concept – because they were able to apply the same principles and properties to other objects as well. In fact, they were responding so well to these questions, we asked them if they had done this particular session before – but both the facilitators and teachers said that this was the first screening of Pupu with this group.

The second activity was done at the end of the film. Three chart papers, saying 'solid', 'liquid' and 'gas', were put on three different walls in the classroom. The learners were given different items, which they were expected to identify as 'solid', 'liquid' and 'gas', and stand under the appropriate chart paper. This was a good activity, but was a bit hurried. For instance, when a learner was given a glass full of water and asked to identify which state of matter it represents, it was a bit confusing, probably because s/he identified the glass as solid and the water as liquid, so there were two responses which s/he could give. The teacher did not give the child the space to clarify his confusion and asked him to stand under the chart paper that said 'liquid'.

The activities were creative and effective, but we felt that facilitators were in a hurry to finish the session and get the children to fill the worksheet. This might mean that though recall might be good – and can be gauged from the filled worksheets, the children may not get time for any substantive discussions to clarify any conceptual confusion.

A worksheet was given to the children at the end of the session. Their main task was to identify states of matter and properties of solids and color them with crayons. The teachers assisted the children a lot in this activity. All the exercises were to do with identifying and coloring the objects. This seemed to be monotonous after a point. There was no creativity in these worksheets.

The screening at the Arad government school was also quite good. Facilitators were patient and very organized in the messages they were giving the children, even though they did not stop the film for the scheduled 'pause' to do some activities in between. At the end of the film, the facilitators explained the concepts to the children, but did not encourage them to explore different objects and their properties in their immediate environment. They however gave many more examples orally than had been done in the previous screening in Kalol. For instance, an interesting example that was enjoyed by the children was that of ice lollies. The facilitators explained how the same ice lolly can take on various forms – solid when frozen and liquid when it melts. They also gave step-by-step instructions to the children to fill the worksheets at the end of the film.

The children watched the film with rapt attention. It was evident that they were not used to the audiovisual medium being used, and they thoroughly enjoyed the film Pupu. On the whole, however, the session was not as lively as it had been in the Meghdhanush Kalol School. Part of the reason could have been the environment of the government school, where children were much less receptive and the teachers sat on chairs on one side of the room. In the coloring exercise, there were no color pencils or crayons made available to the children in the government school, but they used their lead pencils to color the desired objects grey. It seemed as if the children had understood the concepts discussed. What was interesting was that the Meghdhanush teacher who was placed in the Arad school seemed to know very well the levels of literacy and skills of the class, so she personally helped out some of the students who were 'slower' to pick up the instructions.

There was one area in which more could have been done in the session – both in Kalol as well as in Arad. The whole discussion on why Revli was sitting on the ground, or why she would not drink water from the same vessel as the other children, could have been taken forward by talking a bit about caste and caste-based discrimination. The facilitators merely said that we should not practice discrimination; that we should treat all equally. They did not mention the word caste, or that it is the basis of discrimination for Revli and many others like her.

When we asked the children after the screening, they could also not identify the issue. They merely said that Revli was upset that her toy – 'pupu' – was lost and therefore, she seemed to be low.

One thing that struck us during the transaction – both in the Meghdhanush school, as well as in the government school in Arad – was that there were some delays and tensions due to technical snags. For instance, in the Meghdhanush Kalol school, the DVD got stuck and it took some time for the facilitators and teachers to get it in order. However, to some extent the process was smooth because one of the facilitators continued to keep the learners engaged by doing activities with them, and by repeating some of the things they had learned. It seemed like overkill, but given the technical problem, there was probably no other alternative. During this time the other facilitator and the teacher sorted out the technical problem and got the DVD going again.

Similarly, in the Arad school, no previous arrangement had been made for a television and the TV that belonged to the school was allegedly out of order. It was only after the facilitators checked it that they realized the TV was in order, and only a DVD player was required from outside, which had already been got from the Meghdhanush office. These technical issues caused some delays, and the producers and facilitators shared that sometimes there are other issues related to screenings – like lack of electricity, especially in interior villages; TV not being available in the village; absence of remotes to run the TV and DVD player, in addition to other technical problems that may emerge.

Discussions with Facilitators

Through the discussions and interviews with facilitators, we learned that the facilitators feel that to influence the effectiveness of the transactions and film screenings, it is important to build a rapport with the teachers, school principals and others beforehand and they see this as their role. This includes getting the technical things in order as well. They shared that this kind of logistical work is sometimes very challenging, especially when they have to screen films in villages that are distant and interior. And

more often than not, teachers and principals in government schools are quite resistant to outsiders coming and taking sessions using audio-visual media.

Overall, the facilitation in both schools was good. In terms of skills of the facilitators, the Meghdhanush group was very diverse, and this seemed to influence the effectiveness of the transaction. Most of the facilitators said that they do not do much thinking about the activities and worksheets. They rely on the manual prepared by the ECVU. Among the screenings that we saw, in the Kalol School the two facilitators were very new to the program – they had been in the organization only 21 days. But their skills of teaching and interacting with the children were very good, and this was probably influenced by their previous professional training in primary school teaching.

Discussions with teachers

The teacher in the Meghdhanush class where Pupu was screened mentioned that he had not covered the chapter on properties of matter in class yet, and would teach it in class within the next 10 days. He was of the opinion that if he did it after a small gap, the children would learn better, as otherwise their understanding of the film was limited to a recall of detail, not conceptual clarity.

We had a discussion with the other teachers at the Meghdhanush Kalol School also, regarding how they use the films and what value it adds to their ongoing classroom teaching. It emerged that the teachers here already use many interesting teaching-learning tools and methods in the classroom everyday. They were highly trained teachers of the Udaan-Meghdhanush program. Every six months they have intensive internal trainings of 15 days or more – on pedagogy, materials and other elements of teaching-learning. As a result of this, they were already using interesting and creative activities, tools and media in class. Therefore, it was not too clear what value it added to have this film screened in this school, or how it was different from the other sessions that the teachers took.

The teachers themselves gave an example that, while the film Prithvi was good, they felt that they would have anyway done the activities shown in the film, since in their regular trainings they were encouraged to do more and more activities with children. However, they did say that video as a medium is quite novel and therefore catches the fancy of the children.

The teachers at the Arad government school also said that the concepts covered in the film were relevant, accurate and well explained. The curricular areas corresponded with the syllabus of Class III. They also said that since the audio-visual medium is so appealing, the children remember what they have seen for a longer time, as compared to what they remember from textbooks.

The Kalol School teachers also mentioned that they sit with the children – in formal and informal spaces – to discuss values of equality, justice, diversity, citizenship and mutual support. They mentioned that, more than discussion on these values, what helped them was the demonstration of these values in their daily work. For instance, the teachers themselves clean the toilets and classrooms in the Kalol School. Through this action, they try and demonstrate that there is dignity in all kinds of work, and that we must do our work ourselves. Everyone in class sits together on the ground. This action also reflects the value of equality of all, and tries to do away with possible unequal power relations between various people.

The Kalol School teachers also shared that they feel the children in this school are different from children in other schools. For instance, they said that children of Class III here ask more questions. They have the curiosity and interest in learning new things. They felt that these children would probably perform better in comparison to children in mainstream schools where they might go to study beyond Class V. The facilitators also shared that the power of video is that it is an audio-visual medium, and lends itself to representation of real-life situations. This also helps better retention and understanding.

6.3   NAVSARJAN ECVU

Classroom Observations: Gujarat Nu Lokjivan

The film was screened at the Navsarjan School in Sami village (district Patan). It was shown to all 74 students (16 girls and 58 boys) of this residential school. There were about 5-6 staff members present during the screening. Mahesh Bhai, the producer of the film, introduced Gujarat Nu Lok Jivan. He asked children if they had studied this topic before. The children said that they had learned about it in the textbook. There was a high level of interest among the students in watching the film. At the end of the

film teachers and students were given worksheets. The worksheets had a range of activities – those that enabled students to recall information and also analyze it. The students took some time to fill in the worksheets; this was an indication of the fact that they were aware of the significance of this process.

At the end of the film Mahesh Bhai asked the children what they had seen in the film. The children said they had seen houses, life styles of people, languages and oppression faced by people. They said that Gujarat was a great state, yet there were problems as well. Mahesh Bhai did not push the discussion beyond this.

The children were amazed on seeing the description of Patola sarees of Patan. Mahesh Bhai provided more information and said that he had taken shots of weavers and of sarees to show the superior quality of its thread and weaving.

The producer of the film had been a teacher for several years. He was well aware of the needs of learners. He was also invited by the School on many occasions to conduct sessions on various subjects. This process of interaction was useful to both the production process as well as the teaching –learning process.

What was missing during the screening was a process of facilitation. No attempt was made to pause in between to assess if the children had been enjoying the film or to allow them to ask questions. The ECVU should consider including one or two activities or discussion points in each film to allow children to engage more with the video.

Discussions with Learners

The children really liked the film Gujarat Nu Lok Jivan. The pace of the film, the shots that transported them to various parts of the state, the music and the ploys used were highly appealing to the students. Recall was easy; the students could remember clearly what they had seen in the film. Among the lost list of things that they could recall, they listed – Patola sarees, Bhungas of Kutch, the sea shore (*"dariya kinara kabhi kitaab mein nahin dikhta hai"*), oppression of people, festivals and food. They also said that the film gave them new information on adivasi culture, dairy industry (they did not know that machines were used to wash and milk livestock) and girls' education in Kutch.

The students were well informed about the ECVU and its work. The context of the film, according to them, was real. They said that the location of the film was somewhere in Gujarat, some students said that the film was probably shot at the Dalit Shakti Kendra.

Students said that Gujarat Nu Lok Jivan and also other films made by the ECVU were more explanatory than textbooks. They said that the story format was very appealing. However, they said that it was not possible for them to ask questions while the screening was going on: unlike classrooms, where they could ask questions at any point, the film did not provide this space.

The students at Sami school said clearly that Gujarat Nu Lok Jivan is an attempt to show the diversity that exists in our lives. There was a high degree of awareness among students on values. They spoke about each film that they had seen in the past and shared the values that the films had incorporated. They also said that these values were clear in the films, but they were absent in textbooks.

The discussion with students at Sami School was of a very evolved nature. The pedagogy followed in this school was very different from other schools. Critical thinking was encouraged in the school. The teaching-learning environment was non-threatening. Children were provided new information – national and international as well. All these factors have enhanced the learning process. Children were highly interested and engaged with each video kit. The videos in turn helped in furthering their learning.

Discussion with teachers

There were four teachers at the Sami Residential School at the time of the group discussion. Two out of the four were women, one of them being the *mukhya shikshak.* The teachers said that they were involved in the process of film making. They help in the selection of topics, provide feedback when asked for and are also involved at the stage of the rough cut. They said that when the film Pradushan was made, they did not like certain shots, which were later edited. They also shared that before the films Vanaspati and Sthanik Swarajya Ni Sansthao were made, the producers had come to them and asked them to share

ideas and concepts that were tough for teaching and learning. They had also taken some important suggestions from learners.

The teachers said that they screened films after teaching a chapter. There is a gap of about 10-15 days between the time that the chapter is transacted and the film screening. They said that learners can relate well with the topic if such a process if followed. The film provides visual aid and also deepens their understanding. In addition to this it also talks about social issues that textbooks don't address.

The teachers said that ECVU videos were better than other audio-visual material as topics are selected from textbooks and then dealt with in a manner that all the gaps and problem areas are addressed. Issues of gender and caste are integrated in these videos and these are very relevant, according to the teachers. They also said that songs, music, location and language add to the effectiveness of the ECVU films.

The teachers also suggested that the ECVU make films on topics such as discrimination and inequality in educational institutions. They said that in villages this is a serious issue. They were also more than willing to help in the process of selection of topics, songs and characters for the films.

The involvement of teachers in the film-making process is ideal. The ECVU should consider how this can be regularized (and not remain ad hoc). Involving teachers in the selection of topics is a good way of engaging them and also ensuring that they are later interested in using the film as supplementary teaching material, not an add-on. In the future, when the program goes on scale, this level of involvement will ensure that teachers play a greater role in the screening and transaction of the videos.

Classroom Observations: Sthanik Swarajya Ni Sansthao

The film Sthanik Swarajya Ni Sansthao was screened at Shobhasar Primary School (Kalol taluka, Gandhinagar district). The film was shown to students of Standard V-VII. The classroom had about 70 students, five teachers and the head mistress of the school. The children watched the film with rapt attention. The teachers also seemed interested in the content of the film. Once the film was over, fifth standard students were asked to stay on as the film was especially for this group of learners. About 28 students stayed back. One of the facilitators asked them and the teachers to fill up worksheets which were provided to them. The facilitator said that the worksheets were for them to get feedback from students and teachers.

No introduction or orientation was provided before the film. The facilitators switched on the computer in order to show the film and immediately left the classroom. Once the film ended, there was no discussion whatsoever. The scope of the worksheet provided was exhaustive. It covered details of the content of the film and also included activities on a topic which had not been covered adequately (taluka panchayat).

<u>Discussions with Learners</u>

The children were able to recall issues covered in the film when they were asked what it was about. They said that the film was about Sakri Ben, the sarpanch of a village. When asked whether they liked the film, they responded in the affirmative and referred to the content that they liked. According to them the solutions to problems of roads, electricity and water were good. The children were not familiar with the Gram Sabha. On being probed to respond to what a Gram Sabha is meant to do, they said that its work includes collecting garbage, repairing roads and collecting water tax.

The immediate recall of learners was based on the experience of the main character, Sakri Ben. Learners could also recall core information about the Gram Sabha. Yet, they were not able to recall information related to the tiers of the panchayat structure. They could not respond when asked if they had or had not seen women as panchayat members. In order to comprehend their understanding of values, we asked them if there was any kind of discrimination shown in the film. One learner said that in the film a boy in school was not allowed to drink water because he was from a different caste. We tried to probe this further, but she could not respond beyond this. Most children said they liked the film, and on being asked why, they said that it was because of the visuals. When we asked them if they would be interested in watching films on other topics, one girl said that she was extremely interested in social science and religious stories like that of Eklavya and Shabri and would love to see films on these topics.

To the children, Sthanik Swarajya Ni Sansthao appeared to be an interesting film – visually appealing, but they could not relate it to what they had already learned through textbooks. This was also corroborated by government school teachers.

Discussion with Facilitators

During the discussion with Community Facilitators (CFs) at the Navsarjan ECVU, they shared their concerns about the pressure of work. These Community Facilitators are engaged in the work of the organization on issues of primary education, panchayati raj, women's rights and rights of Dalits. As a result of this they are unable to fix time and plans for screening of video kits. According to them, the work on rights issues is always more urgent and demanding, therefore, screening of video kits is low on their priority list.

The CFs said that they were not involved in the selection of topics for the video kits. According to them they only come to know about the topics at the stage of the rough cut. Prior to this they are not involved in any way. One of them said that they were not involved at the stage of the rough cut and that was because they did not have the time. They are required to travel as part of their work, work as para-legal workers, organize big events (*sammelans*) and follow up on cases that come to the organization. There was absolutely no time for them to engage with the process of film making. They organize screenings, collect worksheets and hand these to the producers for analysis.

Discussion with teachers

Two teachers who were part of the discussion said that the film had immense potential to build on the discussions that had happened on local self governance. The fifth and seventh standard teachers said that the screening was like a missed opportunity as it was not linked to teaching or textbooks, and children would not be able to understand the topic fully as there was no discussion before or after the screening. They said that children would only be able to recall information from the film if it was screened in this manner. The screening according to them was ineffective. They said that it was important to screen the film before a chapter is taught in the classroom: this would create an enabling learning environment for children and would help the teachers in transacting information. They also said that each film should be screened more than once in order to reiterate important concepts and ideas.

The teachers said that the film was well made; it explained concepts and ideas in an in-depth manner compared to the textbook chapter which was too brief. They also said that the film was located in the children's own context and therefore it had a different impact from textbooks. On being asked if values integrated in the film were relevant to learners, they said that gender ("difference between ladies and gents and caste discrimination") was important – this would help young girls gain confidence and also "solve the caste problem". They also said that other films that are shown to students have information, but do not incorporate values.

Only one out of the two teachers had seen another film made by the Videoshala producers. Sthanik Swarajya Ni Sansthao, according to her, was better than the other film that she had seen, Pradushan. The first film used difficult language and was more complex, this film was clear and concise.

The teachers were not involved in any manner in the film-making/ transaction process, yet they said that they could contribute by giving suggestions on topics during the selection stage (identification of hard spots) and also in developing the concept for each film.

The head mistress Urvashiben Patel was not aware of the Videoshala program. She had been in the school for over ten years (and had been head mistress since 2007), but neither had she seen other films made by the Navsarjan ECVU nor did she know about the program. She spoke about other audio-visual material produced by the Sarva Shiksha Abhiyan, which was also part of the school syllabus. She also spoke about the Mina Manch CDs which were in three parts and provided a lot of information. However, she had to be oriented about the Videoshala films and their content.

6.4   SAHYOG ECVU

Sahyog had already completed its cycle of film screening and classroom transaction when we visited the organization. We watched a repeat screening in one of the organization's activity centers – in Maliwada, Vatwa. The transaction of the films and their impact is based on the observation of that screening, and discussions with learners and facilitators in that activity centre and a private school that the films are screened at (Ashirvad School).

<u>Classroom Observation of Bhasha Gyan</u>

The film that was screened was Bhasha Gyan, the last film that Sahyog made. The group of 17 children in the Maliwada (Nawabpura cluster) activity centre was mixed, between 6-9 years, classes 1-4; boys and girls, Hindus and Muslims. There were 3 facilitators – Dina, Arpita and Amita – and 3 teachers from the activity centre. From the ECVU coordinator Munira we learned that they came from similar backgrounds, their parents were laborers, rickshaw pullers, or worked in factories – making agarbattis or dying dupattas. The Hindu children were mostly SC, the Muslims were mixed caste. This cluster was the first that Sahyog worked in, and is one of the oldest settlements in Vatwa. Families have been staying here for 500-600 years. There is not much of a focus on education in the families in this area, so the Sahyog activity centers run support classes for weaker children.

Before the screening, since we were waiting for the DVD to arrive, Munira, the ECVU coordinator who had accompanied us, sung an interactive song with one of the centre teachers. This was thoroughly enjoyed, and participated in. By the time the facilitator began discussing the film, the children's attention had been caught. After this, as an introduction, the facilitator asked the children which films they had seen and what they remembered from all of them. Quite strikingly, the children recalled all the films and bits and pieces from the plot lines of all and recited them quite enthusiastically. A more detailed introduction to the content of the film was not done, but seeing the age group of the audience and the content of the film, perhaps this was not necessary. One could see, before the film and during the screening, that the facilitators were highly engaged with the group, making sure they drew the learners in to the discussion, and then keeping a hawk-eye on the children while the film was going on. The use of humour as a way of connecting with the children, and also helping them to recall the films seemed like an important and effective strategy. All these strategies ultimately showed up in the success of the transaction of the video.

The students watched Bhasha Gyan raptly, even though at times the film is similar to a language classroom, and definitely less animated than the atmosphere we saw in the activity centre. A combination of the video format, and the fictional narrative of the film seemed to work to absorb the learners into the film for its entire duration. From the discussions with the children later also, it was clear that a combination of the medium and the engagement of the facilitators with the learners meant that the recall of detail of each video was quite high. Subject matter, storyline, characters and values were able to be recalled by the children – not just for Bhasha Gyan, but for even the first film they saw – Vanaspati Etle Shu, and especially Khushi. However, on pointed questioning, the children said that both textbooks and videos were important mediums of learning ("*padhenge nahi toh kaise seekhenge?*").

What was interesting for us was that the children showed little knowledge (a few seemed to know the Sahyog office) about who made the videos, even though Munira, the coordinator of the ECVU was a regular and popular visitor, and even a familiar face in the films. A later conversation with a member of the community whose son acted in one of the Sahyog films (Aapno Dharm) also reiterated that little was known about the producers of the films. More of an introduction about the producers may increase the interest level of the learners and make the transaction even more effective.

After the video, the facilitators had a discussion with the learners about their response to the film – whether they liked it, and what they learned. They were quick to rattle off what they had learned, both in terms of the vowels, and the story of the girl whose parents made her drop out of school. Discussions – about girls' education, keeping birds in cages, or about vowels – did not really happen in full, according to the guidelines in the activity manual. The session seemed to be happening at a very fast pace. In a circle, the facilitators made the children play a game where they made words combining vowels and consonants, which were written on different cards in front of them. The children had varying levels, but showed great enthusiasm and at least a basic level of understanding – which could have come from their school lessons, but had definitely been enhanced by the video.

The session ended with the very rapid completion of worksheets. These included exercises where learners had to recall the symbols representing various vowels, or make words. Children filled in the worksheets with great interest (even though they were doing it for the second time, at least), and perhaps the worksheets could have been a little longer or more challenging, even for these primary learners. Other worksheets we saw had very visual exercises, which combined oral and writing skills in creative ways: for instance the pictures representing opposites, or different situations that the learners had to choose from, in the Khushi worksheet; different forms of work in the Juda Juda Kaamo worksheet.

Discussions with Learners

Conversations with children at another school, where a film was not screened (Ashirvad School) showed, again, the strong impact that the films had had on the learners there. In spite of being dragged out of an exam revision class, the children were eager to chat about the films. As favorites, they mentioned Khushi, Bhasha Gyan, Vanaspati Etle Shu. However, further probing revealed them to be more able to talk about the values that different films had highlighted – cooperation, freedom, secularism, environmentalism, gender discrimination. While these learners emphasized that the visual quality of the videos aided in recalling the content (especially at exam time!), they also pointed out that many of the films were similar to the textbook – only different in that textbooks have single pictures, whereas videos have many. Children we spoke to individually pointed out that it would be good if science experiments, which they felt were difficult, were shown on video.

Discussion with Facilitators

The facilitators at were bright and creative, and this showed on the levels of involvement of the children with the videos, their grasp of the content and the values. Even though the facilitators and the teachers at the Maliwada activity centre claimed to not have received a separate training on facilitating the videos, or any training on education or pedagogy, their involvement with Sahyog, an organization that has worked on education for many years, clearly shows. They were able to use the video format to its fullest potential, and recognize what kind of impact it had on the education of the children they worked with.

For instance, they said that the film Khushi, a fictional video based on the need for a spirit of cooperation between people of different religious communities, had a very positive effect on the children and the environment they worked in. Even though discussions on communalism, labor and other issues were part of the sessions in the Sahyog activity centers, a film like Khushi made it possible to address and discuss these issues with a wider range of children, and even in government schools which Sahyog screened the films at. It aided in venting certain issues out that pervaded the still-strained area of Vatwa. Interestingly, the facilitators pointed out that the impact on the children in government schools was very noticeable – children who did not use to talk much in class, or express their opinions were now more likely to speak. These changes, the facilitators claimed, were even pointed out by the government teachers and principals, who thus assessed the quality and impact of the videos themselves and gave the facilitators feedback! The facilitators themselves admitted to a change/deepening in their understanding of values, and their openness to work with people from other communities. However, as mentioned earlier, in the screening of Bhasha Gyan that we observed, there was little or no discussion on values as per the activity manual provided to them. This may have been because it was a repeat screening of the film.

Even though the facilitation of the video was effective, the facilitators and teachers couldn't articulate what were the strengths of the video format over the textbook – beyond the fact that the videos were visual. In fact, since the facilitators were trained by Sahyog, they already had access to a certain progressive pedagogy, which also was reflected in the videos. We could see that a deeper engagement in the subject matter was necessary for the facilitators to make most use of the material. This could happen through a separate training of teachers who will facilitate the videos, or a higher level of participation of the facilitators in whatever research and training the producers go through while making the video.

Discussion with Jasbir Kaur: A Parent

A conversation with Jasbir Kaur, mother of the Sikh child Jasmeet in Aapno Dharm summarised the impact that the videos have had, and could have in the future quite succinctly. Jasbir said that the education that children were getting was too bookish, and required discussion of issues like religion and communinalism – otherwise *'bacchon mein kattarvaad aa jata hai'*. Jasmeet had taken his teacher by surprise when he stood up in class and told her knew what a synagogue was – and Jasbir was proud that he had learned enough about different religions to have a wider understanding of his own –*'dimaag mei*

kuch toh baithta hai'. She felt strongly that longer videos (and more) of this kind needed to be made and screened at as many schools as possible.

7   PROCESS ANALYSIS OF VIDEO FILM MAKING

This chapter provides the analyses, carried out by the Nirantar evaluation team, of the process of making the seven video films from each ECVU. The Nirantar evaluation team spent considerable time with producers and the CCU to understand the method by which the topic of the video was selected, how the research around this topic was done, finally to arrive at a concept and then a script. The levels and kinds of support, input and feedback were also discussed – resource materials, workshops, technical and content related support and so on. The role of and relationships between the CCU and producers were analyzed, with regard to the final products – the video-kits.

7.1   HIND SWARAJ MANDAL (HSM) ECVU

The video Bhoomi was prepared before Urja. Discussions with the producers shed light on the 'hard spot' research as a valuable way in which to identify areas which are difficult for students to learn. Science, Math and language were areas that the HSM repeatedly came to know as 'hard spots'. At the hard spot workshop organized by the CCU for the producers, science was seen to be a boring subject. Thus the first two films that the ECVU made were on science topics – Bhoomi and Urja. CCU aided in the selection of these topics, and also narrowed down their focus. The producers received lot of help from the hard spot workshop, in fact they refer to the workshop when deciding the themes for the films.

During our discussion with the producers, they said that when the video is screened, they discuss the topic for the next video with the learners. However, during our visit to two schools we found that neither the facilitator nor the coordinator posed this question to the children. The selection of the hard spot is the job of the producers only. The facilitator is not involved in this process. Research on the film is also done by the producers only, and this we saw as a gap between the product (the video) and its use. It was clear to us that that an involvement in the process of production would mean a better grasp of the content of the video. If the facilitators are involved in research and hard spot selection, then the session would also be facilitated better. We found during our visits that the facilitator completes the job in a very instrumental manner.

The whole process, from selection of the hard spot to preparing the video, requires around two months. This period involves preparing a concept note based on the topic and how it is going to be made into a film, extensive research on the topic, preparing an understanding of the subject area, writing the story, preparing the script, deciding the characters and location, shooting and editing. The producers shared that they receive feedback from their own team, and the CCU at every stage. There were many occasions when the CCU suggested resource persons and relevant material for the themes.

Most of the producers use the Sarva Shiksha Abhiyan textbooks as reference material. This is supplemented by a resource person who is an 'expert' in the area to prepare an understanding of the subject. For example, in the case of Lokshahi, they took the help of Vasudeo Bhai and Naseem Nikat (CSJ) while preparing an understanding on democracy.

The producers felt that a value of the Videoshala program, as well as of their ECVU, was involving the community in various ways. We met with a member of the community who did the music for all the HSM videos. All of the HSM films have only original music, composed and sung by members of the community. Although Dhruv did not seem to know a lot about the program, he seemed committed and enjoyed working on the films tremendously. Finding skills and talent in the community to strengthen their films is something the team said they enjoyed, and that they saw as a value. Apart from this, the producers also saw the community as an important source of information for their films, especially the social science films like Lokshahi and Aapno Hak. We met the principal of the local panchayat school, who was a committed resource person for the producers, providing a wealth of information on local issues, education and also staying up all night to assist in editing during production of the final cut! Although we did feel like the pool of community that the ECVU accesses is quite small – except in few occasions when they have done screenings of their films among the community and facilitated discussions among them[8] – they seemed to see garnering community support and involvement as a strong point of the program.

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[8] Screening of **Aapno Hak** in Bhatia village. Over 300 people attended.

Both the producers as well as the CCU admitted that feedback was an integral aspect of the process of video production. The feedback given is at different levels, and on different aspects of the video – content (subject areas and values), script, technical skills. During the discussions with the producers it did seem that with the involvement of a number of people in the process of feedback does affect the efficiency of the process, and makes it hard to see the validity of all feedback received. They said that often they were confronted with a new person at every stage of feedback, and were confused as to which feedback should be taken. They suggested that the same person provide feedback through the process of one video production, so there was consistency in terms of the feedback given at each stage. The team said the feedback from the CCU in the first phase of the Videoshala project was helpful for ensuring an understanding of the producers in terms of content and pedagogy.

The HSM ECVU is quite strong so far as technique is concerned. It can produce films independently. The team has benefited by the constant support of a technical trainer over the entire 18 months, and this kind of support may not be necessary in the next phase of the project.

The major challenge the group has faced, in spite of regular feedback has been the integration of subject and values. They hope this will improve in the next phase of video production. Values have been understood in a superficial sense, and it is necessary for the ECVU to understand their complexity – for instance, a value like diversity. Some producers feel that they lack a proper understanding of the methodology of research in social issues. They hope to receive inputs on these issues. Another gap that they identified is a strong perspective and understanding of gender issues, and therefore, an independent workshop for this purpose is necessary. This was drawn from independent conversations with the producers, based on their own experiences of working in the ECVU for 18 months, the changes within them, as well as from the video kits themselves.

7.2   MEGHDHANUSH ECVU

We presumed that the context of the facilitating organization would be a significant factor that impacts subject matter and content, representation of values and the entire process of film-making. Meghdhanush has been working in Panchmahaals district since the 2002 Gujarat riots that targeted the Muslim community, and displaced them from their villages by creating fear, using violence and terror. Large numbers of Muslims then settled in Kalol and Halol were organized first into camps, and subsequently into colonies. Udaan-Meghdhanush has been working in this area with children from the Muslim community.

This, however, did not seem to be reflected in the Meghdhanush films, except in one film Aavyo Sandeso Vahan Vyavahar No. This is interesting because even the composition of the producer and facilitator teams shows that there are Muslim, Dalit and Adivasi youth from the community. Despite that, the representation of Muslim people, their context in Halol and Kalol, their politics, conflicts and struggles, as well as their spoken language (Hindi) – did not find place in any of the Meghdhanush films, and appeared only somewhat in Aavyo Sandeso Vahan Vyavahar No. In later conversations with the organization leaders, we gathered that this had been an issue for debate in the initial stages, and since the ultimate aim was to mainstream these videos into mainstream curriculum and pedagogy, it was decided that the films would continue to be made in Gujarati – the language in which the mainstream education system functioned.

Teachers in the government school at Arad commented about the content of the film as good. They said the main advantage of these films is that the characters in it speak the same language and dialect as the children. Our observation is that in the Arad school, the majority of the children watching the films belonged to the OBC community. The major composition of students in that school was of this community, and their mother tongue is Gujarati. Therefore, they probably identified with the children in the film. By contrast, when we asked the children at the Kalol school whether the children in the film speak in the same language as them, they said 'no' – because these were Muslim children of Casimabad, whose spoken language is Hindi.

The group of film-makers (producers) was well-trained – as part of the Videoshala program, as well as part of the Meghdhanush program before that. For instance, Jankhna, Mudassar, Neeta and Gulab had been with the Meghdhanush program as teachers in the primary education program before they were selected in a workshop to become community film producers. They said that this made it easier for them to understand various elements of the teaching-learning process which they could use in the making of the films. However, they also mentioned how difficult it sometimes is to put values into films like Pupu. It is

basically a science film, and they said they found it challenging to think of ways in which to incorporate values into this subject matter.

The sensitivity and skills of teachers who are now producers should be tapped. They also need to be given guidance in dealing with the challenge of representing certain values in science-based films. Also, in order to help producers make sound films on education, it would be desirable for them to undergo strong trainings on pedagogy, curriculum and other elements of the teaching-learning process.

A large part of the success of the film screenings, the transaction and feeding into learning for children depends on how well the teachers who teach them regularly can integrate the Videoshala films into their ongoing teaching. In the Kalol school the teachers' ownership of these films was quite strong. They mentioned that they had participated in the film-making process by being involved in hard-spot identification, being involved in research on the subject matter of the film, in giving regular feedback during the scripting process, suggesting actors for the films, and being involved in activity and worksheet development. For instance, in the film Pupu, the producers included the concept of transparency and explained it with the example of spectacles, after they got this suggestion from the teachers during a feedback session. But there was no such engagement with teachers in the government school.

The program leaders of Udaan-Meghdhanush felt the importance of the Videoshala program was in that it involves members from the community in concept, plot and film development. They also felt it was valuable that the videos provide an opportunity to integrate values of equality and citizenship into school curriculum and teaching. They said it opened the window for Meghdhanush to engage with mainstream pedagogy, materials and ideology, and paves the way for bringing about structural changes in the education system. Since the program very consciously links the Videoshala program to its larger objectives, it seemed to be an organic part of the larger program. This was reflected in the team members' ownership over the ECVU films, and their evident commitment to integrating it as teaching-learning materials into their ongoing educational work. It was also clearly articulated by the organizational head in the interview we had with her.

We gathered from leaders of the Udaan-Meghdhanush program that the future plan was for ECVU films to be screened in a large number of government schools across Panchmahaals district. In fact, we also learned about how their strategies had changed over the past two years regarding the screening of the films in schools. For instance, in the beginning the focus was on doing film screenings in Meghdhanush and some government schools. In doing this, they realized that it would be valuable to speak to district officials before going into the schools. At the current stage, they are now even engaging with Block Resource Centers, through training of teachers, in order to ensure that qualitatively good film screenings take place, and organically build into the curriculum.

On the whole, the presence of Meghdhanush seemed to really impact quality of transaction of the films – both in Kalol and in Arad. Since they have been working on primary education in that area for about 7 years now, and there is a clear linkage they make with the larger program goals, the use of the films in both schools seemed meaningful.

One element that we felt requires some more reflection is the role being played by producers and facilitators. Programmatically, we understood that earlier there were more spaces for both to interact – whether it was in hard-spot identification, in the research process, scripting or other aspects of film-making. This, however, probably began to change when the push came for doing film screenings on scale. Therefore, there is now a whole new team that is expected to transact the films in government schools. There are a few issues here that need to be addressed. One – the facilitators are not involved formally in film-making or in research to understand the subject matter in a more in-depth manner. Moreover, while they are the 'face' of the program in the schools, the creative work of the producers often goes unacknowledged. In both schools in Panchmahaals, the facilitators did not share with the teachers or learners about who has made the films and why.

In our interviews and discussions, we found the facilitators also felt that the program had moved from a more organic approach towards greater fragmentation. Organizational leaders, however, felt that the issue of orienting facilitators or teachers to the films, or building an understanding on education could be tackled with good trainings for the facilitators. In any case the vision for the next phase is that government school teachers will take on the facilitation role. There was not much thinking on another important aspect of the program, namely, high turnover of women workers.

Role of the CCU

As far as the role of the CCU is concerned, we felt that the technical inputs over a period of a year and a half were quite solid. The Meghdhanush ECVU had been established as a community producers' unit and they had grown in confidence regarding their own film-making skills. The CCU also managed to put out a good model of functioning – starting from identification of hard-spots through workshops and speaking to children and teachers. They also got valuable insights from government school teachers to help in hard-spot identification. Subsequently the CCU provided technical inputs as well as substantive support by involving experts, besides guidance in scripting, rough cut and final cut.

However, in terms of perspective and elements of education (curriculum, pedagogy, materials, etc) we felt the understanding of the ECVU teams is limited and needs to be strengthened in future. We learned from the CCU that this role was primarily to be played by the organization Directors. Some books and resource materials were provided by the CCU, and others were taken care of by individual organizations. Based on discussions with producers and other team leaders in the ECVU we gathered that a large part of the resource material in Meghdhanush was provided by an active program leader (Arti). Other than that, producers mainly relied on Gujarat State Board textbooks, and to some extent referred to material from local libraries. We felt that the producers did not refer to existing alternative materials or curricula as much as they could have. We feel this may have impacted the producers' understanding of concepts, the research process, as well as content of the videos. It may also have implications on perspective – or the lack of it.

7.3   NAVSARJAN ECVU

Sthanik Swarajya Ni Sansthao is the fourth video kit made by Navsarjan ECVU. The producers had made video kits on science subjects before this. A mapping of teaching and learning difficulties in Standards 5-7 that was done by them made it clear that Social Science topics were also in the list of most difficult themes. [9] Institutions of local self governance were chosen as the topic for the fourth film. The coordinator of the ECVU, who has also been involved as a producer, suggested that this topic be taken up as it was challenging for teachers and learners and was closely linked to the local context. The topic also lent itself to raising issues of rights and discrimination.

There was an intensive process followed by the producers before the film was finalized. In order to understand the issue better, they did the following:
- Visited gram panchayats and taluka panchayats
- Interacted with the sarpanch of Sujatpura village to understand the work and functions of the gram panchayat and elected representatives.
- Analyzed the chapter on local self governance from the school textbook
- Watched films such as *Welcome to Sajjanpur*, and documentaries made by National Children's Film Society and *Gaam Nathi Koi Panchnu.*
- The film was also based on the experiences of a woman sarpanch who was beaten up in her village. She had approached Navsarjan Trust. Her story was the motivation for this video kit.

The preparatory work provided the team of producers with an in-depth understanding of the issue – the interaction with the sarpanch gave the team an overview of the functioning of the Gram Sabha and the challenges faced by panchayat members. This interaction and the analysis of films that had been used as resource material gave the producers an idea about the characters of the film and its location. The analysis of the school textbook also highlighted the limitations of existing material in providing clear, contextualized and concise information. This understanding and the experience of the woman sarpanch helped the producers develop the concept note script for the film.

At the stage of the concept note, the team decided that it would provide information that was essential. This would include information on the rural institutions of self governance- as opposed to including rural and urban institutions. The team felt that covering both issues in a film that was 30 minutes long would be unfair as it would be too much information with little analysis – like the textbook chapter. Special attention was also paid to inclusion of values in the story at this stage. Feedback was sought from the CCU on the script and the rough cut. This feedback helped the ECVU strengthen the use of local

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[9] Videoshala Quarterly Report October- December 2008.

knowledge, language and realities in the film. Feedback also enabled them to include songs and make the film technically sound.

The producers mentioned during the discussion that the CCU had asked them to not include shots of violence faced by the woman sarpanch. This was because the CCU felt that showing her struggles in this manner would take the focus away from institutions of local self governance and would highlight her story.

There is an intensive process of research that precedes the making of each video kit. For producers who are involved in this research, this is a process of significant learning. Not only does this provide in-depth information and clarity on themes, it also deepens their perspective on values that are core to the program and upgrades their technical skills as well. The producers have a deep sense of commitment towards the ECVU. For them each process of film making is energizing.

In the case of the Navsarjan ECVU there seems to be a systematic process of seeking feedback from the CCU. At each stage the feedback has been useful and constructive. Critical feedback in some cases has also delayed the process of timely completion of video kits. Both the CCU and ECVU should take this into account as the pressure for completion of films is tremendous.

7.4   SAHAYOG ECVU

Production of Juda Juda Kaamo

Although we did not see the transaction of this film, it did come up for discussion with the children we spoke to, who said that it combined information that they had from various sources, and new information – on occupations like journalists, radio jockeys etc. We were interested to know what the process of making this film was, since it combined textbook and local knowledge in a way that was quite commendable.

The research on the hard spot, and the narrowing down of this area to focus on occupations was quite exhaustive:[10]
- *Interview with school children* – in groups and individually, to determine their knowledge and understanding of different occupations.
- *Textbooks* - Both in terms of analyzing what the textbook content on this subject was, but also to see what kind of stereotypical representations of different occupations exist in the textbooks, and to create content that challenged these stereotypes.
- *Other books*: Especially those that had a strong gender and caste perspective, and enabled the producers to understand the way manual labor or women's labor is represented.
- *Films:* A range of documentary films on occupations were watched by the producers to see other content on occupations and the discriminatory attitude towards some of them, and also to explore the technical options in making a film on occupations – how interviews can be shot.
- *Conversations with interviewees*: This was both to speak to the people featured in the film about the kind of involvement expected, and gauge what kind of responses they would give, and what kind of content the film would have.

This process of research clearly shows in a well-development and clear concept – to communicate to children different kinds of occupations in the world around them, and inform this information with an understanding of why certain work is invisibilised or discriminated against. The genre of a documentary film worked well to maximize the video format – a range of people were chosen to feature in the film from the children's everyday lives, and figures who the children were not familiar with but curious about.

For a fairly mixed group of producers – age, religion, socio-economic background – many of whom had never handled a camera before, the video shows a certain level of technical skill and comfort with the medium. To the extent that the producers could clearly tell how to make the medium tell the story they wanted, in the best possible way.

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[10] Information from the Progress Report for the quarter January-March 2008. However details of which books and films were used as resource material were not available.

Later discussions on Khushi and Bhasha Gyan (both of which use the fiction genre) showed that the producers were clear on when to use which genre, its strengths and weaknesses.

Production of Bhasha Gyan

This video seemed to have gone through quite a challenging process of production. The team had chosen to do a film around the hard spot of language – which many learners we also spoke to raised as a difficult subject. The first script and storyboard of Video 6 revolved around Television, as children had raised this as a medium they wanted to know more about. However, after the research, story and script had been finalized, and the rough cut produced, the CCU gave the team feedback that their film be based around the hard spot of language. The hard spot research, concept building and storyline was thus redone – a process both frustrating and challenging for the team. Inputs on Gujarati language and vowels were given by Udaan and an external resource person Mr. Keshav Chatterjee. The team saw these as essential in building an understanding of language concepts and pedagogy.[11]

From the discussion we had with the producers it was clear that the CCU's feedback was sought and given at each stage of video production. The CCU's suggestions were seen as valid and helpful. However, it was clear that the feedback process was desired to be more streamlined – in that the same people should give feedback at each level of production so the process doesn't move back and forward till the end. Also that feedback is not sought from an external person too close to the end of the production cycle. There was seen to be the potential of compromise and discussion with the CCU, in case the team did not agree with the CCU's feedback. However, the considerable decision-making power of the CCU seemed quite clear from the producers, as well as from the process of production of Bhasha Gyan.

From both the discussions with producers and the films at Sahyog, it was felt that the team had a strong perspective on values – of diversity, citizenship and gender. The tendency was to move rather boldly away from curricula content, to other areas where they thought values could be interwoven. The producers – both individually and as a group – spoke about how their strength lay in being able to link values with the content of the films.[12] They admitted that certain values – of equality of religions and gender – crept into their films almost unconsciously. They also spoke about the visible impact of the films on the community they worked in, in terms of the issues raised and the discussions in classrooms. They saw the video format as one among different mediums they used to spread a certain message in the community, which they were trying to spread through their other work. That the Videoshala program was one among the many innovative methods that Sahyog employed was clear from conversations with the coordinator of the ECVU and a trustee of Sahyog that we spoke with. The latter spoke about monthly meetings in which the entire Sahyog team met, and also joint trainings on pedagogy, education and values which all organization members received. The program seemed well knit into Sahyog's work. At the same time, we got the impression from the producers that they had imbibed the strengths and values of the organization into a fairly independent video-production unit.

The CCU feedback seemed to attempt, in many production cycles, to bring the team closer to curricula concepts (for instance in Bhasha Gyan). While it may have been relatively easy, and close to home, for the Sahyog ECVU to make films that generated discussions around values (because of the context in which they work), it is also important for them to push themselves to bring these discussions into films on science, geography and language. This emerged from discussions with learners as well.

The Sahyog ECVU seemed a little inconsistent in terms of technical skills – some films were much superior to others. The need for more consistent technical support was raised by the producers and specifically the coordinator, who held that it was difficult to give her team critical feedback on technical aspects of the film when she hadn't been trained in the technical part of filmmaking. The need for a longer and more research intensive production process was also articulated, which should differ with films produced for screening in schools, and for the community. The research material – textbooks, other films, some books – seemed limited, and the producers agreed that other innovative teaching/learning material produced by other organizations may push the level of their own material to be better.

It was interesting to discuss the power of the video format with the Sahyog ECVU, as they had trainings in pedagogy, and the video kits were not the first time that they had experimented, or had discussion

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[11] Information from the Progress Report (January-March 2009).

[12] Cf. interview with Ramesh bhai, producer from Devdi gaon near Vatwa.

around values with learners. They still saw the video as a powerful medium to visually depict stories and situations which provoke discussion with children. They also saw the strength of the videos in their local, accessible language and visuals, which even sets them apart from other audio-visual mediums like the internet. At the end, though, the producers saw the effectiveness of the videos in a combination of strong content and facilitation, strong information and value components.

8   TECHNICAL ASSESSMENT OF VIDEO FILMS

This chapter provides a technical assessment of the video films produced by the ECVUs, carried out by CMS. Appraisal of all the 23 videos produced under the Videoshala project was done by the CMS evaluation team and supported by a technical expert, who had rich experience of working as a senior producer in a TV News Channels. Except Navsarjan ECVU, six videos each produced by the three ECVUs were assessed. In case of Navsarjan, five videos were assessed.

The Videos produced under Videoshala project have been evaluated on ten parameters. These are:

1) *Beginning/Closing shots*: Marks were given on the basis of how effective is the first and the ending sequence which set the tone and the pace of the film. Opening and last shots of the films leave an impression and that should be well thought of in advance.

2) *Camera Composition*: This suggests framing of shots. Shots should be: well framed, subjects should have proper head room and looking room, should not abruptly cut any body parts of the subject. Camera should focus well whatever is being talked about. Camera angles whether low angle, top angle or at an eye level forms important part of the camera composition. Proper cut aways and variety of shots form part of camera composition.

3) *Camera Movement*: Shots should be steady and smooth. Wherever required the tilting or pan or zoom in and zoom out should be well focused and steady, no jerks in between. Block shots should be neat and clear.

4) *Picture Quality*: This parameter suggests the quality of camera work done. Picture is underexposed or over exposed or the right exposure is maintained or not. Exposure should be consistent and should be maintained in the exterior and interior shots. Shots should be sharp and not out of focus. White balance has to be done to ensure right tone of the picture.

5) *Sequencing of film/Direction*: Characters of the film have to be guided to enact seriously and bring out the message of the film in an effective manner. The direction of the shots (meaning the way the film moves and the story line of the film evolves) has to be in a certain logical manner and so do the shots one after another. Shots have to be self-explanatory and have to be shot in a proper sequence and not break the flow of the story. Innovative ideas to explain simple things require good direction.

6) *Editing*: is a great tool where most of the look of the film is given shape. It takes care of the sequencing of the film and shots have to be put in a simple cut to cut edit. Wherever required add fade in and fade out is needed to bring out the proper mood of the story. Proper stay has to be given to the shot and moving shots should not be cut abruptly.

7) *Graphic Plates*: is used to enhance the quality of the film by adding special footnotes or registering certain important pointers in the film. Maps, or any visual presentation of the points or only text written on a simple black plate is called graphics and it can help register certain important points in a better way. They compliment the film shots.

8) *Usage of Music*: any music in the film should set the right pace and uplift the mood of the film. Background music should be chosen carefully.

9) *Sound Quality*: the sound of the film is a natural sound and used to bring originality of the surrounding, Sound bites used should be clear, sound levels in the film should be consistent and no sudden jerks in the sound should be there. Over all the sound levels should be at the right level.

10) *Message clarity/Presentation*: The message, whatever the subject is, in the film should come across clearly. Story line should be such that is seamless and communicative. Innovative ideas that bring out the 'subject' play an important role.

The videos were rated against each of these parameters on a scale of **1-5, where 1= Very Poor, 2= poor, 3= Average, 4= Good and 5=Very Good.** This was done to bring in more sharp comments in the process of evaluation, which in turn is expected to help the CVPs and the technical team to take into consideration the areas of improvement in the video production, in the future.

8.1   HIND SWARAJ MANDAL (HSM) ECVU

Urja

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	5/5
2	Camera Composition	3 (More variety of shots would enhance the production quality)
3	Camera Movement	4
4	Picture quality	3 (Exposure changes suddenly in between the shots, background is burning in few shots)
5	Sequencing of film / direction	5 (Idea of puppet show to show the importance of fuel is well thought and brings freshness in the film. Breaks the monotony).
6	Editing	4
7	Graphics plates	None
8	Usage of Music	4
9	Sound Quality	5
10	Message clarity/presentation	5
Overall Remarks: This film deserves special mention, well thought beginning/closing, original ideas and presentation style is good. Good angular shots and variety in shots can be seen. Characters chosen in the film were articulate and message of the film comes across effectively.		

Apna Hako

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	4/3 (Film takes off well with the Sadhu character setting the right tone through his song, ending shot could be better)
2	Camera Composition	4 (More cut aways could be used while teacher is interacting with the school kids to make the conversation interesting.)
3	Camera Movement	4
4	Picture quality	4 (Exposure in *thana* shots changes)
5	Sequencing of film / direction	4
6	Editing	3 (Moving shots are getting cut by another shot, more stay in few shots is needed)
7	Graphics plates	5
8	Usage of Music	4 (Sadhu character preaching through his songs is a good add on)
9	Sound Quality	4
10	Message clarity/presentation	3 (Message is clear but the presentation style could be more effective)
Overall Remarks: Good attempt to instill confidence to fight against exploitation. Film should have right and consistent light exposure. Better-cut aways would increase the production quality.		

Bhoomi

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	5/5
2	Camera Composition	4 (good variety of shots at suitable chosen locations)
3	Camera Movement	4 (Good job while taking moving shots from the bus)
4	Picture quality	4 (Light exposure changes in between the shots in few places)
5	Sequencing of film / direction	4
6	Editing	4
7	Graphics plates	None
8	Usage of Music	4
9	Sound Quality	4
10	Message clarity/presentation	4 (good ideas used to explain complicated subject)
Overall Remarks: Neat film, shots are well thought, editing is good, music is appropriate.		

Aaharaney Aarogya

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	4/4 (Good establishing shots, smooth)
2	Camera Composition	4 (Neat block shots, jerks in between the shots)
3	Camera Movement	4 (good follow up of the characters and the subject, few shots not steady)
4	Picture quality	4
5	Sequencing of film / direction	4 (good activity on the location, efforts taken to explain food items, looses it's magic towards the end)
6	Editing	4
7	Graphics plates	None
8	Usage of Music	4
9	Sound Quality	4
10	Message clarity/presentation	4 (In the last sequence, children doing cleaning up and ending on these shots looks little out of context)
Overall Remarks: Last shot should be well thought and planned. Avoid jerks in between the shots.		

Lokshani

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	5/4
2	Camera Composition	5
3	Camera Movement	5
4	Picture quality	3 (Footage overexposed, background is burning in most of the places)
5	Sequencing of film / direction	4
6	Editing	4
7	Graphics plates	None
8	Usage of Music	3 (Better music needed to enhance the production quality)
9	Sound Quality	3 (Audio mixing to be done in a better way)
10	Message clarity/presentation	3 (ending is little abrupt)
Overall Remarks: Audio mixing has to be smooth, more cut aways and well thought ending would improve the quality.		

Paryavaran Aney Tenu Kudrati Sampada

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	3/2 (Such a vast topic is not packed in tightly, beginning and end could be well thought)
2	Camera Composition	3 (Better framing of shots required, Bite frame could be better, more depth in the frame would bring better quality, avoid showing mike in the frame, use lapel mike instead)
3	Camera Movement	4
4	Picture quality	3 (Exposure fluctuates in between, suddenly light is thrown while children are coming to chat up with *dadaji*)
5	Sequencing of film / direction	2 (Repeat shots make the film boring, lack of variety of shots, more stock shots are used, fresh shots would have enhanced the quality)
6	Editing	2 (Moving shots are getting cut and replaced by another shot, avoid it, dissolves are not required while kids are talking, too many location jumps, continuity breaks while girl is serving water)
7	Graphics plates	3 (Too jazzy and distracting background, simple gfx would look neat, jerks while editing put them in the loop and use)
8	Usage of Music	4
9	Sound Quality	3 (Audio levels not consistent, keeps changing when dadaji is explaining and suddenly resonance increases when narrator comes in, mixing have to be smooth)
10	Message clarity/presentation	2 (This film has a great scope to explain things though the direction, sequencing takes a back seat in terms of shots used, lot of stock shots are dragging the film, invention of wheel and fire could be shown in sepia which can create effect of past days effectively)
Overall Remarks: Vast subject could not be handled effectively; film got confused while using shots and sequences. More focused approach could improve the production quality.		

Swashan Tantra

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	4/4
2	Camera Composition	3 (Shots of the central character are not neat, his body parts are getting cut, more block shots and cut always needed)
3	Camera Movement	3 (Camera movement should have been better while girl is explaining the diagram on the mud, more focus on the diagram is needed as she explains)
4	Picture quality	4
5	Sequencing of film / direction	4
6	Editing	3 (slow motion of the act – while the boy throws stick and its repetition to bring impact is not needed)
7	Graphics plates	5
8	Usage of Music	3 (Music in the opening sequence could be better, bad music when the boy throws stick and decides to get in the river)
9	Sound Quality	4

10	Message clarity/presentation	5
Overall Remarks: Presentation of the film is good, original ideas to explain the *Swashan tantra* system. Effective conversation between the girl and the boy while explaining the process through diagram. Innovative style of boy to pick up stuff like dry leaves etc to make the diagram and bring clarity.		

Water

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	5/4 (Beginning shots are well thought of, sets the right mood, closing shots are good, use of natural ambience while kids moving with the message is preferable)
2	Camera Composition	4 (More variety of shots of kids in the class needed, close up of *Dholak*, children singing would enhance the production quality. Use more block shots while kids are near the well. Kid asking question to the lady, boys' face is not visible. Looking room is missing in some shots)
3	Camera Movement	3 (Faces are getting cut, while camera is moving in the class)
4	Picture quality	3 (Pictures are not very sharp at few places, long shots specially)
5	Sequencing of film / direction	4.5
6	Editing	3 (Repeat shots to be avoided, lotus flower shot used twice, extreme close up of teacher to be avoided. Don't change from one moving shot to another moving shot. Good use of slow motion, enhances the mood)
7	Graphics plates	None
8	Usage of Music	4 (Starting music is good. Avoid music from films wherever not needed, use of natural ambience preferable)
9	Sound Quality	4 (Sound Mixing is good)
10	Message clarity/presentation	5
Overall Remarks: (Message of the film comes out very well. Interactive session of the students and teacher is very interesting. Pay attention to camera composition and avoid repetition of shots)		

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The Earth

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	5/4 Neat take off and ending was simple yet had an impact
2	Camera Composition	3 (Frame getting cut, no headroom in few shots and looking room should be better)
3	Camera Movement	5 (Good silhouettes, smooth and steady shots)
4	Picture quality	4
5	Sequencing of film / direction	4
6	Editing	4
7	Graphics plates	None
8	Usage of Music	4
9	Sound Quality	5
10	Message clarity/presentation	4
Overall Remarks: (Innovative way used to send the message. Pay more attention to the framing of shots.)		

Pu Pu

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	4/4
2	Camera Composition	4
3	Camera Movement	4
4	Picture quality	3 (Footage over exposed while kids are searching Pu Pu)
5	Sequencing of film / direction	3 (Direction is loosing it's magic in between, too stretched conversation, could be more interesting sequences)
6	Editing	4 (Good window split)
7	Graphics plates	None
8	Usage of Music	4
9	Sound Quality	5
10	Message clarity/presentation	4
Overall Remarks: Nice film, explanation thro simple idea of Pu Pu is interesting. Better direction would improve the film quality.			

Sandesho Aavyo Vaahana

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	4/3 (Good establishing shots, mid-long shots used)
2	Camera Composition	4
3	Camera Movement	4
4	Picture quality	3 (Footage overexposed, light jump drastic when mother is lying ill)
5	Sequencing of film / direction	4
6	Editing	4
7	Graphics plates	None
8	Usage of Music	3 (Better music to enhance the production quality)
9	Sound Quality	4
10	Message clarity/presentation	4
Overall Remarks: Simple shots, fresh shots, neat film, pay attention to the light jumps.			

Sarvada

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	4/4
2	Camera Composition	3 (More neat block shots could be used, more variety in the shots especially colorful and beautifully done up class could improve the production quality)
3	Camera Movement	4
4	Picture quality	4
5	Sequencing of film / direction	4 (Unnecessary cut aways used in between not jelling in the sequence)
6	Editing	2 (Avoid fast cuts, axis jump, lip sync of the girl – main character who is teaching is out)
7	Graphics plates	None
8	Usage of Music	4
9	Sound Quality	3 (Audio levels not consistent, audio dips at a few places, ambience is too loud at places)
10	Message clarity/presentation	4
Overall Remarks: Film comes up with a unique and interesting way of teaching addition. Also the idea of using comic bubble is interesting and registers well. Overall the story comes out effectively. Technically, right editing would improve the production quality.			

Vanaspati

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	2/4
2	Camera Composition	3
3	Camera Movement	4
4	Picture quality	3 (Light exposure needs to be corrected, more sharp images required)
5	Sequencing of film / direction	3 (Lack of activity in the shots)
6	Editing	2 (Editing is not smooth, one frame of a girl appears in between)
7	Graphics plates	2 (Do not need to write pause, slow fade out to black could be used to give the pause in between the sequence)
8	Usage of Music	2
9	Sound Quality	4
10	Message clarity/presentation	3 (Presentation could be more innovative an new ideas could be incorporated)
Overall Remarks: Editing should be better, crisp and pay attention to the light exposure.		

Paryavaran Aney Thenu Kudrati Santulan

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	5/4 (Good establishing shots, not smooth though)
2	Camera Composition	3 (Variety of shots like Top angle break the monotony though Head room of the mother character is not appropriate while she is explaining her son.)
3	Camera Movement	4
4	Picture quality	2 (Footage is over exposed at many places so looking washed out and not sharp enough, White balancing is out not in most of the classroom shots)
5	Sequencing of film / direction	3 (Some un necessary shots in between, characters enacting the film need to look serious and give right expression)
6	Editing	3 (Jerks in between the shots, repeat shots to be avoided)
7	Graphics plates	None
8	Usage of Music	4 (Background music is good, at one place, use of fast music and then suddenly regional music comes, mixing needs to be better)
9	Sound Quality	3 (Mixing to be done more smoothly)
10	Message clarity/presentation	4
Overall Remarks: Sound mixing to be done smoothly, use right cut aways to boost the film quality.		

Gujrat Nu Lokjivan

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	5/3 (Film takes off well, neat block shots of children)
2	Camera Composition	3 (Better framing of shots required)
3	Camera Movement	2 (Movement is not steady, it's shaky in most of the shots, need neat shots to bring impact)

4	Picture quality	2 (Extreme long shots taken on tele look washed out and they are not required, lowers down the production quality, Exposure not consistent in most of the places.)
5	Sequencing of film / direction	2 (First sequence is too stretched and is not required, can cut it short, make it more crisp. Sequences at various locations are not flowing well. Aesthetics are missing out in shots.
6	Editing	2 (Shot changes while the first shot is moving, Repeat shots when referring to the same location, avoid it. Too many location jumps, More stay in some visuals required to bring out the impact)
7	Graphics plates	Not used, maps with the location supers and the important points while referring to the location could be written by using graphics window for better comprehension.
8	Usage of Music	2 (Music changes abruptly, regional music could be used effectively to set the right mood)
9	Sound Quality	1 (Audio of children speaking is missing out in between, audio levels are not up to the mark, bad audio mixing)
10	Message clarity/presentation	2

Overall Remarks: Film takes off well but later on the production quality goes poor. Film keeps loosing its flow and most of the shots fail to bring an impact. This film should use neat, block shots, not much movement, and good music and bring out the rich culture of the region in nice colorful shots, maintain the picture quality.

Pradushan

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	5/4
2	Camera Composition	3 (Too many long shots while kids interacting with teacher, mid long and close up shots could bring more quality and variety)
3	Camera Movement	3 (Shaky camera while kids taking out the procession, focus out at few places)
4	Picture quality	3 (sharpness missing in few shots)
5	Sequencing of film / direction	4 (Idea of tree speaking to the girl is a good idea)
6	Editing	3 (moving shots, pans shots are getting cut while moving)
7	Graphics plates	None
8	Usage of Music	5 (Good background music, lifts up the mood)
9	Sound Quality	3 (Audio not clear in long shots)
10	Message clarity/presentation	4

Overall Remarks: Shots need to be more engaging. More clarity in shots and proper editing.

Sthanik Swaraj Ni Sansthao

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	3/4
2	Camera Composition	3 (Establishing shots not impressive, shots of the Panchayat building exterior and interior shots not up to the mark.
3	Camera Movement	3 (Not smooth, jerky)
4	Picture quality	2 (Background burning- exposure is not correct, specially the interior shots , exposure keeps changing)
5	Sequencing of film / direction	3 (Few shots are staying for too long, few getting changed very fast, avoid it, bullock cart in the

S. No.	PARAMETERS	RATING (on a scale of 1-5)
		background has reached in the middle of the frame, shot changes and bullock cart disappears completely- avoid these jumps in the frame)
6	Editing	4 (Fast cuts, no stay, location jumps, interior to suddenly exterior shot, can use dissolves if required, Long shots then jump to extreme Close ups is avoidable, footage looks jerky)
7	Graphics plates	None
8	Usage of Music	3 (Music in first sequence creates a mood of mishap, better music to be used)
9	Sound Quality	3 (Audio levels not consistent, mixing not good)
10	Message clarity/presentation	4
Overall Remarks: Good attempt but fix the right light exposure, right choice of music would be appreciated.		

8.4   SAHYOG ECVU

Aapna Dharmo

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	4/3 (Beginning shots are good, characters can be directed better to look happy and give right expressions while taking close ups, ending could be more effective)
2	Camera Composition	4
3	Camera Movement	4
4	Picture quality	3 (Light exposure changes at 2-3 places)
5	Sequencing of film / direction	
6	Editing	(Fade to Black out transition is not smooth, better cut aways needed, jump from exterior to interior shots and back to exterior shots while visiting *Gurudwara* should be avoided. More stay of shots required at some places while kids are interacting with *Dharm gurus*)
7	Graphics plates	Avoid using Pause, it breaks the flow, fade to black out and black in could be used instead as a transition in between the two sequences.
8	Usage of Music	4
9	Sound Quality	2 (Ambience is too loud at most of the places, ambience is overshadowing the conversation of the kids and one bite of the person in the *masjid*)
10	Message clarity/presentation	5
Overall Remarks: Great attempt by the kids to bring out the message effectively, more angular shots and variety of cut aways to bring out the production quality is recommended.		

Juda Juda Kamo

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	3/4 (Opening sequence is too long, starting with night shots is not a very good idea, music is too loud, End shot is good)
2	Camera Composition	2 (Interactive shots of school kids with teacher need more variety, close ups, mid long shots from other angles would make it interesting)
3	Camera Movement	4 (Follow up shots of students e.g. getting into FM office are not smooth, jerky camera movement at many other places)
4	Picture quality	4 (Exposure change disturbs the picture quality)
5	Sequencing of film/direction	4.5

6	Editing	1(Too many jerks in between the shots, dissolves not neat at all, avoid stills in between – breaks the flow)
7	Graphics plates	None
8	Usage of Music	3 (Too loud, could be soft at few places)
9	Sound Quality	3 (Ambience is good to use but too loud in most of the places and is disturbing the conversation)
10	Message clarity/presentation	5

Overall Remarks: This film has accommodated lot of professions to bring out the message, good attempt, especially use of original ideas to describe various professions. Innovative style. Put ambience sound under control, variety in shots could boost the film production quality.

Khushi

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	4/4
2	Camera Composition	4
3	Camera Movement	4
4	Picture quality	4
5	Sequencing of film / direction	5
6	Editing	3 (More stay in shots, don't change the previous shot while it's moving)
7	Graphics plates	None
8	Usage of Music	4
9	Sound Quality	4
10	Message clarity/presentation	5

Overall Remarks: Good ideas of presenting a film on a difficult and a sensitive subject. Both the representatives of Hindu-Muslim Dharma could be more emotive and articulate.

Vanaspati Etle Shu

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	4/3 (Starting sequence is good, end shot could be better)
2	Camera Composition	4
3	Camera Movement	4
4	Picture quality	4
5	Sequencing of film / direction	4 (Girl, the main character of the film could be more expressive and articulate)
6	Editing	3 (long silent shots, more cut aways with good music could enhance the production quality)
7	Graphics plates	2 (Pause activity 1, 2,3 is not needed, especially after pause activity 1, there are 5-6 still shots which are not required, they break the flow, stay of plates is also too long)
8	Usage of Music	4 (Music is good wherever used)
9	Sound Quality	3 (Mixing could be better)
10	Message clarity/presentation	5

Overall Remarks: Gfx plate with pause written on it breaks the monotony, use fade ins and fade outs instead. Do not use still and silent shots.

Bhasha Gyan

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	4/4
2	Camera Composition	3 (Head room and looking room needs to be corrected, though good close ups, variety of shots

		and angles are enhancing the production quality)
3	Camera Movement	4
4	Picture quality	3 (Shots inside the room are not as sharp as taken outside, use proper exposure)
5	Sequencing of film/direction	4 (well directed, characters are lively and make the learning easy and interesting)
6	Editing	4 (Fast cuts, no stay, location jumps, interior to suddenly exterior shot, can use dissolves if required, Long shots then jump to extreme Close ups is avoidable, footage looks jerky)
7	Graphics plates	None
8	Usage of Music	4
9	Sound Quality	4
10	Message clarity/presentation	5
Overall Remarks: Film manages to leaves an impact though right exposure in the interior and exterior shots would enhance the film quality.		

Karo Ramakda Kuch Kadam

S. No.	PARAMETERS	RATING (on a scale of 1-5)
1	Beginning /Closing shots	5/4
2	Camera Composition	5
3	Camera Movement	5
4	Picture quality	5
5	Sequencing of film / direction	5
6	Editing	4
7	Graphics plates	None
8	Usage of Music	4
9	Sound Quality	5
10	Message clarity/presentation	5
Overall Remarks: This film is very good in terms of thoughts, idea, presentation, and good cut aways keeps you engaged.		

9 VIDEO FILMS LEARNING OUTCOMES TESTS

As part of CMS's evaluation of Videoshala they carried out learning outcomes tests with groups of 10-12 students in each of the selected Videoshala (experimental) and non-Videoshala (control) schools. The objective behind this learning outcomes test was to make an objective assessment of the extent to which the videos had been helpful in facilitating and enhancing the mastery of hard spots. The non-Videoshala schools served as a comparative (control) sample not subjected to videos. Videoshala and non-Videoshala schools from the same vicinity and students of same grades were selected to ensure matched groups, with some exceptions where the cooperation of the desired schools was not available. Schools from a different location were selected in such cases.

An important aspect, which needs to be kept in mind while gauging the students' performance, is that these videos were shown at different point of time of the project cycle. This might have had an impact on the recall of the students. However, on a particular issue, the screening of videos in all the schools took place, more or less within the same time span (within a month or so). For example, if a video on *Urjaa* (Energy) was screened, then screening in all the schools under that particular ECVU was done within a month.

As informed by the project functionaries, in each Videoshala school, on an average, four to five videos were screened. For the learning outcomes test, the CMS evaluation team selected two issues on which Baseline data (pre-test) was available. In each of the selected schools, test was conducted on these two identified issues. The students were given between forty-five minutes to an hour for writing the answers. However, the evaluation team ensured that test was held in a relaxed atmosphere and in case a student needed more time to write, it was given to her/him.

As reported in the methodology section, the number of schools selected for evaluation was in proportion to the total number of schools covered by each ECVU under the Videoshala project. The number of schools and students per ECVU are reported in Table 9.1.

Table 9.1: Learning Outcomes Tests Information

ECVU	Number of schools		Number of Students, who appeared in the Learning Outcomes test (post screening)
	Under Videoshala Project	Sample schools	
Hind Swaraj Mandal (HSM)	30	6	74
Navsarjan	43	9	108
Sahyog	33	7	76
Meghdhanush-Udaan	75	15	151

As can be seen from the table above, on an average, from each school around 10-12 students were randomly selected. In a few schools, during the tests (in each school two issues were covered), one or two students dropped out after the first test and did not appear in the second test.

Learning Outcomes Test Results

The results of the learning outcomes test are discussed below for each ECVU. It is pertinent to mention that during the pre-production round of tests conducted by ECVUs (to identify the hard spots), the answers were categorized into correct or incorrect, although the answers for many questions were more subjective than objective in nature. In order to maintain uniformity with the baseline test, the same method was applied in the present evaluation round, which to some extent, the CMS evaluation team was not comfortable with. Further, the CMS evaluation team procured 'model answers' from each ECVU for questions of the test paper to know the expected answers. The external evaluators examined the answers with reference to the model answers. In the following sections, findings on the videos selected for post-test have been presented under the respective ECVUs.

9.1   HIND SWARAJ MANDAL (HSM) ECVU VIDEO FILMS

In the schools under ECVU-HSM, two issues selected were - Urjaa (Energy) and Apna Hako (Our Rights). While Urjaa was screened in the schools during December 2007, Apna Hako was screened during June 2008. The videos had been shown to the students of grade VIII-XI.

Urja

The analysis of scores on *Urja* (Table 9.2) clearly shows that the level of understanding of the students of Videoshala schools on the topic has improved considerably, after watching the video on the 'hard spot'. In general the percentage of students giving right answers to various questions in the post-test ranges between 50 and 93, which is outstanding. The percentage of students giving right answers is approximately double that of non-*Videoshala* schools in seven out of eleven questions, which goes towards establishing the effectiveness of the video intervention. Improvement in percentage of students giving right answers is even better when performance of pre-test is compared with post-test of the Videoshala group. For example, on some of the questions, the percentage of students responding correctly has gone up multiple times, i.e. from as low as 5-10 percent to as high as about 76 percent. This further substantiates the validity of the video on Urja.

Table 9.2: Percentage of Students giving right answers (in %) for Urja

Questions	Videoshala (N=74)	Non Videoshala (N=66)	Baseline (N=40)
1. What do you understand by energy?	**50**	27	20
2. What are the different types of energy?	**93**	47	50
3. What do you understand by renewable and non-renewable sources of energy?	**76**	76	10
4. Give examples of both types of sources of energy?	**69**	68	20
5. What do you understand by solar energy?	**59**	59	20
6. How is wind energy used?	**76**	45	5
7. In what form does wind energy come?	**86**	44	50
8. What do you understand by biogas?	**55**	24	13
9 What are the advantages of using biogas?	**58**	26	12
10. From where do we get energy?	**69**	29	5
11. How do we use energy in our daily life?	**70**	2	10

Apna Hako

The results of *Apna Hako* (Table 9.3), too, indicate that the project was to a great extent able to meet one of its key objectives- to improve the level of knowledge of the students on the hard spots. Within the Videoshala post-test tallies, there is a big range (93-26 percent), across various questions. This shows that the video contents have been effective in case of some aspects of the topic covered, while not so for the other aspects such as question nos. 4 & 5. For 6 out of 8 questions, the right answers were either close to 50 or more than 50. In contrast, the baseline tallies are invariably low, and markedly so, there is a sharp contrast between performance on post-test and pre-test (baseline).

Table 9.3: Percentage of Students giving right answers (in %) for Apna Hako

Questions	Videoshala (N=74)	Non Videoshala (N=65)	Baseline (N=40)
1. What do you understand by democracy?	**73**	31	25
2. What are the different rights given under democracy?	**93**	72	10
3. What do you understand by the right to equality?	**72**	35	10
4. What do you understand by right against governance?	**39**	8	5
5. What are the different types of freedoms we have been given?	**26**	20	5
6. What are the different duties of a citizen of India?	**49**	18	10

7. What are the human rights?	**69**	43	0
8. What has been included in the right to equality?	**47**	14	10

Also the Videoshala group, as compared to non-Videoshala group, showed markedly high performance on the test, going by the percentages of students who answered correctly. The non-*Videoshala* group shows extremely poor performance even in absolute terms, which means, performance on none of the questions is even touching 50 percent mark on right answers.

9.2   MEGHDHANUSH ECVU VIDEO FILMS

In the schools under ECVU-Meghdhanush, the two issues selected were - Earth and Respiratory System. While Earth was screened in the schools during March 2008, Respiratory System was screened in December 2008. The test was administered to students of grade III and IV.

Earth
The analysis of the learning outcomes test on *Earth* (Table 9.4) shows that while both experimental (Videoshala) and control (non-Videoshala) students were able to answer the question on the shape of earth, they were not able to answer questions like, how the earth came into existence or how do day and night occur? Comparison with the Baseline could not be done because the data were not available. However, both the Videoshala the non-Videoshala data indicate that students need more clarity on 2 out of 3 questions the topic of earth. The findings on this, however, have a limited value as the test is too short in length, its reliability being affected for this reason.

Table 9.4 Percentage of Students giving right answers (in %) for Earth

Questions	Videoshala (N=150)	Non Videoshala (N=61)	Baseline (N=)
1. What is the shape of earth?	75	69	Not Available
2. How did the earth come into existence?	9	0	
3. How does day and night occur?	31	0	

Respiratory System

On the respiratory system (Table 9.5), which was one of the recently shown videos under the Videoshala project, in the post-test, performance was a mixed one across various questions. While, 76 percent students could answer the question-Is breath taken by nose; only 13 and 17 percent of the students could answer the questions like, 'is the windpipe attached with the tongue' and 'where does the breathed air go', respectively. Comparison with the Baseline data shows highly significant improvement in the performance of the students in post-test; though the rise in the level of performance varied from question to question. When drawing a comparison between Videoshala and non-Videoshala groups one fails to observe a significant trend of improvement as only three questions (4,5,8) show noteworthy higher performance. However, strikingly low performance in pre-testing provides a reason to doubt the validity of the test.

Table 9.5: Percentage of Students giving right answers (in %) for Respiratory System

Questions	Videoshala (N=151)	Non Videoshala (N=60)	Baseline (N=175)
1. Which part of the body circulates the blood in the body?	53	47	14
2. Which part of the body keeps the blood clean in the body?	60	55	23
3. Is breath taken by nose?	76	75	55
4. Where does the breathed in air go?	17	0	3
5. What is the exhaled out air from the body called?	61	38	3
6. Which part of the body is attached to the windpipe?	13	32	0
7. Does the lungs clean the breath in air?	38	42	2
8. Does the windpipe, like a pump, circulate the blood in the body?	58	33	0

9.3 NAVSARJAN ECVU VIDEO FILMS

In the schools under ECVU-Navsarjan, two issues selected were - Vanaspati (Vegetation) and Sthanik Swaraj Ki Sansthano (Institutions of Local Self governance). While Vanaspati was screened in the schools during December 2007, Sthanik Swaraj Ki Sansthano was screened in the month of September 2008. The screening was done for the students of primary and upper primary grades.

Vanaspati

The results of the test on *Vanaspati* (Table 9.6) show a mixed response. While on some questions in the post-test, the students of *Videoshala* performed better as compared to the pre-test, on other questions, the performance was not encouraging. However, performance of students of Videoshala schools was found to be markedly and consistently better than those of non-Videoshala schools. The percentage of Videoshala students answering correctly ranged between 64 and 4, with only two questions scoring below 10 percent. The performance of students from non-Videoshala schools, as such was very poor with most of the questions scoring zero to five percent. Only one question obtained right response from 45 percent of students. Hence, even though there were lots of inconsistencies of trends in comparing Videoshala students on pre-test and post-test they were found to be certainly better than non-*Videoshala* students.

Table 9.6: Percentage of Students Giving Right Answers (in %) for Vanaspati

Questions	Videoshala (N=105)	Non Videoshala (N=60)	Baseline (N=121)
1. Draw a forest?	26	5	40
2. What do you understand by vegetation (Vanaspati)?	9	0	26
3. What are the different Types of vegetation?	60	7	48
4. What is bushes?	35	0	10
5. What is grass?	4	0	12
6. Can you identify a shrub?	64	40	10
7 What is a plant (*chod*)?	20	0	29
8. How can you identify a plant?	18	0	29
9. Can *jasud* be called a shrub?	38	5	47

Sthanik Swaraj Ni Sansthano

Analysis of responses of the learning outcomes test (Table 9.7) shows that out that Videoshala students' performance on Sthanik Swaraj Ki Sansthano (local self governance) was far more superior than non-Videoshala group. Compared to the pre-test or Baseline data, the performance of the students in this post-test round was not found to be significantly different. Videoshala students' responses, were found to be significantly better only in four out of eleven questions during post-test as compared to the pre-test. Performance of non-Videoshala students in comparison to the other two groups was alarmingly low on a majority of questions, which needs to be investigated. The non-Videoshala group and the baseline group, may at worst, be at par on performance which is not the case. As mentioned earlier also, there is a reason to doubt the method adopted to examine the baseline responses.

Table 9.7: Percentage of Students Giving Right Answers (in %) for Sthanik Swaraj Ni Sansthano

Questions	Videoshala (N=108)	Non Videoshala (N=58)	Baseline (N=121)
1. Define "Sthanik Swaraj"?	3	0	42
2. What is Sthanik Swaraj's Organization?	0	0	50
3. Which organizations are "Sthanik Swaraj Organizations"?	75	10	38
4. What kind of work does the "Gram Panchayat" do?	75	17	59
5. What are the sources of income of a "Gram Panchayat"?	50	17	52
6. Who manages the Accounts of a "Gram Panchayat"?	63	19	67
7. What is the term of a "Sthanik Swaraj Organization"?	62	33	44
8. At what age, a person can cast vote?	71	55	55
9. Who can become a Gram Panchayat Member?	37	0	43
10. Match the following	50	31	50
11. True & False	75	51	45

9.4   SAHYOG ECVU

In the schools under ECVU-Sahyog, two issues selected were - Vanaspati Etle Shu (What is Vegetation?) and Juda Juda Kamo (Different types of occupations). While Vanaspati Etle Shu was screened in December 2007, Juda Juda Kamo was screened during February 2008. The screening was done for students of grade III-V.

Vanaspati Etle Shu
The analysis of test results of *Vanaspati Etle Shu* (Table 9.8) indicates that performance of students improved in the post –screening test compared to the baseline results. A very high percentage of students answered most of the questions correctly (ranging between 92 and 80), as compared to Baseline scores. Non-Videoshala schools were exceptionally poor on two questions (3 & 4), but were nearly at par with Videoshala students on four questions out of seven not lending thereby a sharp difference between the two groups. Here, too, the findings of impact on video are not very conclusive.

Table 9.8: Percentage of Students giving right answers (in %) for Vanaspati Etle Shu

Questions	Videoshala (N=76)	Non Videoshala (N=60)	Baseline (N=78)
1. Have you heard the word "Vanaspati"?	**92**	95	63
2. What is "Vanaspati"?	**80**	28	58
3. What does a Gardner do?	**64**	3	10
4. What is a seed?	**38**	0	58
5. Have you seen climbers, bushes and shrubs?	**89**	95	18
6. Is bitter gourd a climber plant?	**89**	73	58
7. Does rose grow in bushes or plant?	**91**	73	38

Juda Juda Kamo

The analysis of learning outcomes test on *Juda Juda Kamo* (Table 9.9) showed that the students were able to mention the names of only two occupations though the number of occupations mentioned in the video was eight. At the time of baseline test too, a high percentage was able to mention different types of occupations. Non-Videoshala percentages on both the questions given for the test were, however, markedly low (13 and 0) indicating strong differences between the experimental and control groups. However, the ECVU team was not able to clarify on the criteria followed (number of occupations) for marking an answer as 'correct'. Also, it would be pertinent to understand the reason(s) for selecting such issues for hard spots, on which the pre-screening research results have shown a high percentage of students answering correctly (as per baseline norms).

Table 9.9: Percentage of Students giving right answers (in %) for Juda Juda Kamo

Questions	Videoshala (N=76)	Non Videoshala (N=61)	Baseline (N=60)
1. What are the different types of occupations/vocations?	96	13	85
2. (To be asked only if child says yes about vocations) Can the work that your mother does be called an occupation/vocation?	55	0	88

The table below (Table 9.10) provides an overview of the average number of students (from Videoshala and non Videoshala schools along with the students who took the baseline tests) providing rights answers to the questions for each video film

Table 9.10: Total Percentage of Students Giving Right Answers

ECVU	Name of Video	Number of Questions	Percentage of Videoshala Students Giving Right Answers	Number of Videoshala Students Answ Questions	Percentage of Non Video-shala Students Giving Right Answers	Number of Non Video-shala Students Answering Questions	Percentage of Baseline Students Giving Right Answer	Number of Baseline Students Answering Questions
Hind Swaraj Mandal (HSM)	Urja	11	69%	74	40%	66	20%	40
	Apna Hako	8	58%	74	30%	65	10%	40
Meghdhanush	Earth	3	38%	150	23%	61	N/A	N/A
	Respiratory System	8	47%	151	40%	60	13%	175
Navsarjan	Vanaspati	9	30%	105	6%	60	27%	121
	Sthanik Swaraj Ni Sansthano	11	48%	108	21%	58	49%	121
Sahyog	Vanaspati Etle Shu	7	77%	76	52%	60	43%	78
	Juda Juda Kamo	2	75%	71	7%	61	86%	60

9.5 SUMMING UP

Overall, the learning outcomes tests of each ECVU did show that the level of understanding, as projected by performance on the post-test as well as in comparison to a matched control group, amongst the Videoshala students has improved. However, the extent of recall of the content of the video was not found to be very satisfactory on some questions. This could be due to four possible reasons-one, the time gap between screening of the videos and conducting the post-test; two, in spite of the clarity on the issues, students were not able to express it through words in the learning outcomes test; three, the post-screening interactive sessions were not able to clear the doubts in the mind of the students and four, some of the videos and learning outcomes tests need to be reviewed for their reliability and validity of content.

There are also a variety of factors which need to be controlled in order to arrive at some conclusive findings based on an intervention program like the one in question. Similar conditions may not have been available across various videos, schools, students etc. However, based on interaction and discussion with students and teachers, it may be concluded that they found the videos very informative, interesting and effective as a source of additional help in teaching-learning process. The pre-screening briefing or post-screening discussion modalities may need to be looked into, in order to make Videoshala more beneficial.

10 ROLE OF LOCAL COMMUNITY IN VIDEOSHALA

This chapter provides the result of CMS's evaluation focusing on the participation of local community members in Videoshala.

10.1 INVOLVEMENT OF COMMUNITY VIDEO PRODUCERS

The CVPs played a vital and key role in Videoshala project as they were the persons who not only produced the videos but also identified hard spots of the subjects taught in school curriculum; prepared scripts of the videos to be produced on the identified themes of the hard spots imbied with values; identified actors and place of shooting; conducted the shooting; and edited the videos. Hence, their involvement as local community members in the project is very important.

Mode of selection and profiles of Community Video Producers (CVPs)

From each of the four ECVUs, five CVPs were interviewed by the CMS evaluation team. The CVPs were asked about the process of their selection, their motivation behind working as a CVP, the training they received under the project, their role and responsibility as a CVP, the process of content development of video kit and the process of producing videos.

The interaction with the CVPs revealed that all the four ECVUs had followed a uniform procedure and criteria for the selection of the CVPs. The process consisted of the following steps:

- Each ECVU invited applications from the community members for joining the project as CVP.
- Initially, each of the four ECVUs short-listed twelve persons for the responsibility of the CVP.
- Finally, six of the twelve were selected for the job of CVP.

As informed by head of each ECVU, the selection of the CVPs was primarily done by taking into consideration the extent of the interest the persons showed to work as a CVP, their educational background and experience, their interest in the field of education and experience of working in the community. In addition to this, while selecting the CVPs, all the ECVUs except Navsarjan ensured that the team of CVPs should have representation of team members belonging to different religions and if possible, castes. Navsarjan works with the Dalit community and hence had the CVP team comprising members from Dalit community only. In the case of the other three ECVUs they work in areas with a mixed population. As one of the program partners said, "The idea behind having a CVP team with representation from different communities, particularly Hindus and Muslims was to present an example of communal harmony and to build a platform to bridge the gap between communities and understand each other better". In addition to this, all the four ECVUs ensured that the CVP team had both male and female members. The brief profile of the interviewed CVPs presented is given in Table 10.1.

Table 10.1: Profile of Community Video Producers

Name of the ECVU	Gender of the CVP (M-Male, F-Female)	Age (approx) of the CVP	Educational Qualification of the CVP	Social Group
Meghdhanush-Udaan	M	42	B.A.	ST
	F	42	B.A.	General
	M	23	B.A	OBC
	M	19	10th	Muslim
	F	25	B.Com	General
HSM	F	27	M.A. B.Ed	General
	F	23	12th, PTC	OBC
	M	26	B.A.	General
	M	22	12th	Muslim
	M	24	M.A.	General
Navsarjan	M	31	M.A., B.Ed.	SC
	F	19	11th	SC
	M	21	B.A.	SC
	M	35	M.A.	SC
	M	35	M.A., B.Ed	SC
Sahyog	M	19	12th Trained in Performing Arts	Muslim
	F	22	B.Com	Muslim
	F	28	12th	Muslim
	F	40	12th	OBC
	M	25	B.A.	General

The age profile of the CVPs suggests that a majority of them were youth. The average age was around 27 years, with the youngest being 19 years and the oldest 42 years. This, as shared by the program partners, was a result of wanting to have a mix of youth and experience for better understanding and transfer of knowledge in the script writing and video production process. The academic qualifications of the CVPs indicate that majority (13/20) of them were graduate or above. A few (3/12) held Bachelors in Education degree. As mentioned earlier, there was an effort to involve people interested in education process due to the fact that the videos were to serve as teaching-learning material for both teachers, and students.

On the motivational front, the interaction with the CVPs revealed that most of them came to know about Videoshala and requirement of CVPs in the Videoshala through the volunteers of the NGOs (responsible for their respective ECVU) or through their friends. Some of the CVPs were already associated with the respective NGOs and showed their keen interest to work as a CVP. On being enquired about what motivated them to work as a CVP, one of them said, the innovative concept and the urge to learn a new skill and to contribute in the field of education was the motivating factor. For others, too, Videoshala's concern with education of the children and opportunity for the CVPs to learn and produce videos was the most attractive part.

Technologically speaking, none of these who joined as CVP had any knowledge and/or experience of technology (video-making). Some of them had handled a still camera but none of them had ever handled a video camera. However, some of the CVPs of ECVUs managed by Navsarjan, Udaan and HSM had experience in the field of education (had taught in schools and had undergone training in teaching). They could relate with the kinds of difficulties one faces in teaching some of the topics to the students. The CVPs of Sahyog were comparatively young and had no experience in the field of education.

Training of CVPs: Modality and Adequacy

After the selection of CVPs was completed, all of them were given an intensive and extensive training on identifying the hard spots, script writing, video production/film making. The training session was spread over a period of four to six weeks. However, since the female CVPs had problem in staying for so long at a stretch, more than one training (two to three) sessions of shorter duration were utilized. A seven-day residential training (from October 8-14, 2007) was held at Dalit Shakti Kendra Ahmedabad. The other trainings were held at each ECVU and were given by the trainer selected by the Central Coordination Committee (CCU). Along with the trainer, the Resource team from the CCU, too, interacted with the CVPs. They even visited a few schools along with the CVPs to facilitate the process of identification of hard spots on which a video was to be made.

As shared by CVPs, the interaction with Resource Persons was very enriching as it helped them in understanding various aspects of video production. As one CVP from Sahyog said, "No specific task was assigned to any particular member. Instead, each member had to do all kinds of activities depending on the needs, which ranged from selecting the location and actors, picking and dropping the actors at their residences, to technical aspects like operating a video camera, and handle specifics related to light and sound. We even learned how to do editing of rough cuts on computer." This know-how not only removed the initial hesitation and doubt in their minds about whether they will be able to perform their responsibilities as a CVP effectively but also gave them a sense of self-confidence.

Such views were also expressed by CVPs of other ECVUs. As one CVP from Navsarjan shared that being part of the Videoshala project did help in fulfilling his dream of becoming a teacher. He added that ordinarily as a teacher, he would have used books to teach the subject, but fallowing his association with this project, he can now help even other teachers to use videos developed by him in order to teach the issues. To comment on the adequacy of training of CVPs, the dimensions of video-production covered during the training, the duration of four to six weeks and modalities adopted go towards making the venture a useful and successful one.

Role of CVPs in Video Content Development

The interaction with the CVPs showed that all the four ECVUs followed almost similar methods for identifying hard spots to produce videos on. All the four ECVUs did a rigorous exercise in identifying the hard spots. In the process of identification of hard spots the ECVUs organized a one-day workshop with teachers. Subsequently, the CVPs made school visits and interacted with teachers and students to identify portions/topics in the curriculum that students and teachers have difficulty in transacting. In the process, they arrived at more than one subject and within a subject more than one topic that both students and teachers found difficult.

It was a difficult task for the CVPs to select one subject out of a number of subjects/themes mentioned by the students and teachers as hard spots. Sharing their experiences, the CVPs mentioned that teachers in general and students in particular mentioned English as difficult to understand. But it was difficult for the CVPs to make videos on the subject as the understanding of the CVPs themselves on the subject was not up to the mark and they were not comfortable dealing with the subject. Hence, among the difficult subjects or themes identified in the final selection videos were made on topics on which the CVPs were

confident of their understanding and knowledge. The other aspects like availability of resources with the ECVUs for making the videos on the subject were also taken into consideration in final selection of the subject/themes.

The CVPs shared their experience of going through the process of identifying the hard spots, which was enriching for them in many respects. This exercise made them aware of the difficulties of the students and teachers in teaching- learning process in general. Though most of the schools they visited for the purpose, welcomed the idea, some like one in Ahmedabad, as shared by a CVP from Sahyog, did not allow the team to interact with students and teachers, as the school authorities felt that it will disturb the classes.

To know further about the extent of knowledge students have on the identified hard spots, the next step aimed at assessing the existing knowledge of the children on these topics. However, the method of assessment varied from topic to topic and ECVU to ECVU. For some of the topics/themes (identified hard spots) the ECVUs conducted group discussions with the students, while for some other topics, formal testing (pre-test) was done.

Once the hard-spots had been identified, the CVP team held discussions and short-listed the topics for video-production. On the topics thus selected, the CVPs consulted textbooks, and organized workshops with subject experts to have better understanding. As reported by the CVPs, all these exercises improved their knowledge and understanding of the subjects and the topics selected for the videos, and they felt more confident towards video-production on these topics. For example, a CVP of Sahyog felt that the exercises he had to undergo during the process had brought about a sense of perfection and meticulousness in him.

Video Production

After finalization of the hard spots the next step was to *prepare scripts* for video production. To begin with each of the CVPs prepared a script on a given issue, which was taken up for discussion within the team. Various scripts on one issue were brought together and collated to generate a new script which would satisfy the criteria and requirements. Then the script was discussed with the CCU. In this process, as revealed by the CVPs, sometimes altogether a new script had to be prepared. According to the CVPs script writing was one of the most difficult tasks for them and as reported by them, while writing a script one has to keep in mind many things: it should be close to real life, should be locally contextualized, should have characters with which audience could relate or identify, clearly brings out the issue which needs to be highlighted. It was further added that to keep the audience glued to the video, stories should be interesting and have climax sequence as well.

Once the scripts were finalized, the CVPs identified the location for the shooting and selected the actors from the community. The shoot plan was, then, prepared. While selecting the location, many aspects regarding the location had to be taken into consideration including the location should not be very far off. In order to provide an easy accessibility, the location should be relevant to the issue under consideration.

An interesting incident shared by one of the CVPs (from Navsarjan) throws light on the kinds of problems that emerged during their work. The incident goes as follows: during shooting of one of the videos on local self-governance, the Panchayat members raised objection against the story sequence which showed a Dalit village head not being allowed to work freely and being dominated by a member of another caste (Patel). The objection of the Panchayat member was that since these kinds of things are not being practiced in their village, the village and their Panchayat building should not be used for the purpose. The CVP team had to clarify that they are just shooting a film which has no reference to their village. The shooting had to be stopped for a day and could start only after the CVP team pacified the Panchayat members.

Identification and training of the actors was another important step of video production. It was a big challenge for the CVPs. In the Videoshala project, 'actors' who had never faced video camera before i.e., those who were not professional actors were identified. The other difficulty was felt that the girls were reluctant to take any roles for the videos. In some cases parents did not allow their child to take a role for the video. It may also be mentioned that not only the children were actors in the videos but adults were also required to take acting role. The adult actors were also selected from the community. So identification and selection of adult males and females; boys and girls who can take up acting roles for the videos and can give good performance as an actor, was a challenging task before the CVPs. However,

as reported by the CVPs, identification and selection of the actors for the videos never came before them as a big problem. Those who were selected for acting roles were given three to five days training (depending upon their requirement of training and nature of the video). The training broadly covered the aspects like dialogue delivery, expression, emotion and timing. The selected actors were trained by the CVPs. As the CVPs reported, those who were selected for acting roles in the videos did not disappoint but performed to their satisfaction.

After selection and training of the actors and selection of the location, the CVPs shot the videos and prepared rough cuts of the videos. Workshops of experts from Udaan, Drishti Media, and CVPs of other ECVUs were organized to provide feedback on the rough cuts. The rough cuts were critically reviewed and discussed and changes were made in the video before finalizing it.

Some Interesting Experiences Shared

Some interesting cases of parents/students who acted in the videos and whom the field researchers interviewed are presented below:

- Sharing her experience, Ms. Rashida Hamid Sheikh mother of a student named Sonu Hamid Sheikh, mentioned that working in the video 'Paani' was a memorable experience for her. Though, in the video, she acted in a short still, it left an impact on her. She mentioned that working in the video brought confidence in her that she can do anything. It also brought about self-respect in her. She wished that if she had opportunity to work in other videos, she would definitely work. Regarding her son, Sonu, who had also acted in the video, she mentioned that her son also got motivated to go to school regularly as a result of working in the video. According to her, it was a matter of pride for her to see her son as an actor in the video.
- Mr. Narendra Koteria - the father of a student of Hindswaraj Mandal Videoshala School, had acted in a video of Hindswaraj Mandal. According to him, working as an actor for educational video was a very good and exciting experience for him. He also mentioned that he enjoyed the company of the team members of the ECVU involved in video production. According to him, his participation in the video brought in him confidence and a sense of worth. His association as an actor in the video enabled him to come out of narrow thinking of caste, creed and gender. He feels that Videoshala has given him much more than he contributed to Videoshala.
- Ms. Ramila Bharat Parmar acted in the video 'Sthanik Swaraj Ni Sansthano' of Navsarjan ECVU. She mentioned that though her role in the video was a very brief one, this was a great opportunity that made her a changed person. According to her, she came in contact with the team of CVPs (both males and females) and interaction with them brought confidence in her that a female can do what males do, besides her duties of household chores. Earlier she was fully dependent on the male members of the family for outdoor works. Now as a result of working in the video, she has become so confident that when she or her children fall ill she does not feel the need to take help of male family members to go to doctor/hospital. She also started visiting school to get teachers' feedback on the child's studies. She gives all the credit of this change in her to Videoshala. She wished that she got another chance to work in the video.

10.2   IMPACT ON COMMUNITY VIDEO PRODUCERS

This section discusses gains and outcomes observed and reported by CVPs as they emerged during planning, development and execution of the video-content development.

Technical Know-How and Skills Among CVPs

According to the CVPs, every exercise and activity in the process of video-production was a new learning for them and added to their technical knowledge and skills, which got enhanced as the video - production progressed. By the time the CVPs had produced 6 videos to cover various topics of interest, they felt confident in (i) video-production technology, and (ii) their ability to understand the issues involved in our educational system. Sharing his views on technological gains as a result of association with Videoshala Mr. Mahesh, CVP, Navsarjan mentioned that now he is very confident of his technical-know how in video production. He not only learned the art of video production but also learned using Apple Computer. He feels that his skills in video production can be now adopted as a profession and a source of earning.

Sharing her technical gains as a result of association as a CVP in Videoshala Ms. Jyoti Bhalabar mentioned that before her association with Videoshala she could not even hold a video camera but now she can make a video even. It's a great achievement for her. She had never imagined that she could also

become a skilled person. The other CVPs also had similar views about the technical gains as a result of their association with Videoshala. They were all confident that technically they had reached the level that they by themselves can produce a video.

Community support available to CVPs

The CVPs faced no resistance from their families or society for joining the project as a CVP, with a few exceptions in the initial stages of the implementation of the project. A case in question was that of a female CVP from a Muslim community who faced resistance from her community when she initially joined the Videoshala. They did not like her associating with male members, and that too, was from the Hindu community. However, she showed patience and, ultimately, her good work was recognized, and encouraged by her community. Another case of this kind was reported by that of a female CVP of Udaan-Meghdhanush. Her family did not approve of her remaining outdoors for six to seven hours everyday. Such problems, however, maybe encountered in any other job.

CVPs Day-to-Day Gains in Life

Most of the CVPs reported that their association with the Videoshala has been gainful in day-to-day life. Working in a team made them learn good values from each other. It equipped them with problem - solving techniques and facilitated their problem - solving efforts in their personal-social life. Ms. Acharya Dipti of HSM, sharing her views mentioned that working as CVP has made her a disciplined person. Her association with Videoshala has brought a sense of responsibility and commitment to her responsibilities. She was of the view that she is now a changed person in attitude towards work and responsibility.

Better Connecting with the Community

For many of the CVPs, the association with Videoshala has made them think beyond their self-interests and contribute to the society. It has provided them a platform to come closer to community and understand community problems. It has been instrumental in bridging gaps in different castes and communities. For example one CVP from Sahyog ECVU reported that she had been nurturing wrong notions about the Muslim community and avoided going into Muslim localities. After joining the Videoshala and interacting with fellow CVPs and other community members during content development, she became aware of her misconception.

Ms. Payal shared her experience that during production of the video 'Aapna Hako', her interaction with persons of different castes and creeds and the response she got from them made her realize that all communities are equally good. Now she has not only respect for all but she also interact sand exchanges views on issues of the community/village with all sections of society whether Dalits or others. Similarly, sharing his views, Mr. Kirti Kapadiya mentioned that working as a CVP has made him popular with the community/village. His interaction with the community has become frequent and his relationship with them has become closer. Now he is aware of the problems and issues of the community. He further mentioned that as a result of what he learned as a CVP, now he discusses the problems/issues of the community.

Inculcation of a Sense of Pride

It came to light during the interaction with the CVPs that not only the CVPs but the entire team of Videoshala got a sense of pride out of their association with the project. They thought that they have been instrumental in providing better education to children. The community members and the teachers on the receiving end have taken it very positively, too. The Program Directors of the ECVUs were of the opinion that the CVPs had gained reputation as persons committed to the betterment of school education.

As many of the CVPs mentioned that apart from other gains of their association with the Videoshala as a CVP, they have imbibed a sense of satisfaction and pride that they are doing something for the benefit of the children of the community. The appreciation for the videos from teachers, students and villagers brought a sense of pride in them that their efforts are recognized and is liked by all.

Effectiveness of the Videos

As reported by the CVPs, teachers and students alike enjoyed watching the videos projecting the 'hard spots', which were otherwise difficult to grasp. The teachers appreciated the innovative method utilized in

the videos. An exception in this respect was noted as reported by a CVP of Udaan-Meghdhanush. According to the teacher in question watching the video said the video was not topic - specific. However, in general the videos were rated 'high' on learner-teacher involvement in the curriculum thus transacted.

10.3 CHALLENGES

A variety of challenges were encountered by the CVPs. Across the ECVUs, similar problems and difficulties were reported. These problems related to script writing, procuring and training of actors, commuting to the shoot-site, restricted time frame, bias against media, shooting skills of the CVPs and rigours of shooting. These have been discussed below:

- Script writing for the video was a daunting task for the CVPs. They had to undertake rigorous exercises in writing, revising, and refining the scripts. Workshops had been organized to review, discuss, and finalize these scripts. The extent of changes made in the process went up to 50 percent. Scripts of videos titled 'Prakash' of Navsarjan, 'Earth' of Sahyog were cited as examples.
- Once the actors were identified, problems in convincing them and their parents to act in the videos were encountered. Parents were reluctant to send their wards to work for the videos as this would divert them from their studies. However, ultimately the CVPs were successful in convincing the parents.
- All the CVPs reported it was a tough task for them to train persons, who had never faced video camera, to act. According to them, initially many of the actors became nervous while facing the camera. The CVPs had to consistently interact and boost their self-confidence to make them act in the video.
- In all the ECVUs the CVPs reported that despite their extensive technical training on video production, they faced difficulties at all stages of shooting, particularly so while shooting the first video. The CVP of Sahyog informed that during the production of their first video the trainer was present from beginning to end of video-production. However, after the first video was completed, the CVPs were more confident and the trainer's help was taken only when shooting for relatively difficult scenes.
- Problems were also encountered with schools while taking away the children for the shoot. One such instance occurred during the shooting of 'Pupu' by Udaan-Meghdhanush.
- Program-director of Sahyog pointed out that working in the urban slum was more challenging. Here, since the youth and families were exposed to media like TV, and to communal riots, the community was wary of video shooting and its purpose.
- Operational problems like a restricted time frame, and the need to meet the deadline of 40-50 days had to be faced by video - producers and this made their schedule very hectic.
- Lack of logistical support like facilities for commuting to the far off shooting site was experienced by Udaan-Meghdhanush while shooting their video titled 'Vaahan Vyavaharo'.

Introspecting on the video shooting and re-shooting, the CVPs reported that they did not have to face the situation of a total re-shoot of the rough cut of the Videos. However, in all the cases they had to make some changes and some parts of the videos had to re-shot As shared by CVPs as well as the technical resource persons, initially they felt bad when a video produced by the team was asked to be re-shot. They did not like it when they were asked to rework on the script or to re-shoot because the CVPs felt that resource persons were not 'familiar' with the ground reality.i.e. limitations and problems they face while shooting a particular shot or video. But later on they realized that it is for their good that the Resource Team is critical of their work. As shared by a representative of Drishti, to make the process participatory, the review of rough-cut was made in the presence of all CVPs. This not only helped them to learn from each other's experience also enabled them to take the criticism in the right spirit.

The CVPs were appreciative of the guidance and support received from the CCU which enabled them to produce the videos. However, in one ECVU some of the CVPs reported that initially the CCU was in constant touch with the ECVU but later their guidance and support was not very frequent.

The overall experience of the CVPs was very enriching. They worked in their respective teams in a very amicable environment. They were fully satisfied with the outcome of their effort. The CVPs appreciated the rigours of the process followed in the production of videos and in the relevance of content projected therein. The fact that the topics were selected in consultation with the students and teachers, was impressive, and validated the content chosen.

10.4   VIEWS OF OTHER STAKEHOLDERS

The representative of the CCU had a very high opinion about the CVPs. She appreciated the dedication and commitment of the CVPs towards the responsibilities assigned to them in the Videoshala program. The representative of the CCU mentioned that she had not imagined that the persons who were of poor educational background, the persons who had no any technical know-how prior to joining as a CVP would give such wonderful results. She appreciated the competence of the CVPs and their understanding about the project. She cited the example of their understanding about the Videoshala and application of their ingenuity when they used pot wheel in the video 'Earth' to describe rotation and revolution of earth.

A Representative of Drishti Media was also full of appreciation of the understanding and dedication of the CVPs towards making videos. According to her working with them made Drishti Media team feel proud of the CVPs who, though, did not know anything about the technology of film production, learned everything in a short span of time.

All the heads of NGOs (HSM, Sahyog, Navsarjan and Meghdhanush-Udaan) were happy with the entire team of their respective ECVUs. They were of the view that the team also enjoyed working in the Videoshala project. According to them it was new learning experience for them. In these ECVUs almost the whole team from the beginning to completion of six videos remained associated with the Videoshala project, that itself was a proof that the team members enjoyed working with Videoshala. However, the dead of Navsarjan had some dissatisfaction with some of the members particularly the Coordinator of the ECVU. But the dissatisfaction was not on incompetency of the team members but on ideological issues.

11   VIDEO FILMS SCREENINGS AND THEIR IMPACT

This chapter enumerates the responses obtained by CMS's evaluation from classroom facilitators (CF), teachers, students and parents on the Videoshala video screenings and their impacts.

11.1   CLASSROOM FACILITATORS VIEWS

Screening of the videos had been executed by classroom facilitators (CFs). The role of the CFs was very important in the sense that they were the main agents through which Videoshala ultimately reached its target audience consisting of children and the teachers. To understand the specific role and responsibilities of the CFs and the impact of Videoshala on its target audience, the CFs from each ECVU were interviewed. Table 11.1 presents the ECVU- wise number of CFs interviewed, their educational background and gender.

Table: 11.1 Profiles of Classroom Facilitators

ECVU	Gender of The CF	Age	Qualification	Social Category
Udaan Meghdhanush	M	28	12th	General
Udaan Meghdhanush	M	21	B.Com	General
Udaan Meghdhanush	M	20	12th	SC
Sahyog	F	22	10th	General
Sahyog	F	23	B.A.	General
Sahyog	F	20	11th	General
Navsarjan	M	32	10th	SC
Navsarjan	M	34	12th	SC
Navsarjan	M	35	B.A	SC
HSM	M	22	BRS + B.Ed	OBC
HSM	M	22	B.A.	General

On the basis of discussion with CFs the investigating team came to the conclusion that broadly speaking, the process followed by all the ECVUs was more or less similar. In each Videoshala school, the videos were supposed to be screened for forty children. These forty children were to be selected from the classes for which the videos were produced. The classes chosen by different ECVUs varied. HSM had produced videos for class VIII and IX and Navsarjan had produced videos for classes IV-VII. Udaan and Sahyog had

produced videos for class I –IV. Also, there were no fixed criteria for selection of forty children for whom the videos were screened.

Each ECVU followed its own method. As the Program Director of Sahyog reported, the children who were comparatively weak in performance were selected for viewing the videos. In Navsarjan the videos were screened in the Bhimshalas. Bhimshala is a centre, set up by Navarsarjan in the villages where volunteers of Bhimshala teach and provide guidance to Dalit children - where only Dalit children viewed the videos. However, where there is no Bhimshala in the villages, Navsarjan screened the videos in schools where children of all social categories participated. The ECVU Hind Swaraj Mandal screened the videos in the residential schools of Gandhian Nai Taleem.

Discussion with CFs revealed that for some video screenings, the number of children ranged between fifty and eighty.

It also emerged that the role of the CFs in screening of the videos was very important. They had to arrange for a TV set and CD player to be used for the task of screening. Rapport building activities like songs, riddles, and plays were conducted with the children and briefing about the video was also done before screening of the video. Each video had an activity guide, which had information on how the session was to be conducted. The Facilitators followed the guidelines in screening of the video which included giving of pauses in places to hold discussions. Post-screening activities included discussion and filling up of activity sheets by the students. The whole process of screening of video took approximately two to two and a half hours.

The interaction with the CFs revealed that the children liked watching videos on the hard spots. Watching the videos made them understand the topic better, and to have conceptual clarity. Some of the videos were liked more than others. For example, the CF of Sahyog reported that 'Khushi' was more popular than others as it happened to target social issues. Similarly, a CF from Navsarjan reported that 'Pradushan' was liked most as it was very interactive and informative. The video 'Sthanik Swaraj Ni Sansthano' screened at Navsarjan was liked because it provided information on functioning of the local self-governance.

Gains for CFs

Association with the Videoshala was gainful for the CFs in many respects, too. The CFs reported that working as CF provided them opportunity to learn many new things in the field of education. Some of the examples of impact on CFs as reported by them are presented here:

- One of the CFs of Navsarjan mentioned that he had heard about the pollution but he was not aware of the impact of degradation in the environment. The CFs reported that their role and responsibility in the Videoshala improved their knowledge on the topics covered in the videos they screened. They also learned values on citizenship, diversity and democracy. As a result they not only practice the values they learned but try to convince others in the community to do away with beliefs regarding discrimination in caste and creed. The videos have made them understand the community, the problems the community faces and the causes of the problems.
- Mr. Sanjay Kumar Parmar, describing the learning experience resulting from his work as a CF mentioned that after watching the video Vanaspati he stopped using polythene bags.
- Describing the impact of association with Videoshala as a CF, Ms. Deena Bayas of Sahyog mentioned that before joining Videoshala she did not like to interact with members of Muslim community and she had very wrong notions about them. She avoided going to Muslim locality. But according to her, after joining as CF in Videoshala "I am completely changed. Now I have a number of Muslim friends and sit and eat with them".
- Mr. Bharat Bhai one of the Classroom Facilitators of Navsarjan mentioned that all the videos provided him knowledge on the respective topics they tapped. However, according to him, it was 'Sthanik Swaraj Ni Sansthano' that made him more aware about the structure and functioning of local self-government.

The CFs of all ECVUs did not face any big challenge in executing their responsibilities. However, in ECVUs like Navsarjan and HSM, the CFs had to face the problem of carrying the TV sets and DVD players to remote schools. Power cut was also one of the problems that the CFs faced during video screenings.

Impact of Videos on Students and Teachers- As Reported by CFs

Classroom Facilitators were the first people who could observe and receive the immediate reactions, responses, queries of the target audience (i.e. students and teachers) on the videos. The CFs were of the view that children and teachers watched the videos very attentively. The videos facilitated the students' understanding of the topics on which the videos were prepared. Some of the CFs mentioned that the children liked the videos so much that whenever they (the children) met them (the CFs) on the way or in the village they wanted to know if they would be shown more videos in future.

According to the CFs, the videos have not only been beneficial in knowledge enhancement in the students but other positive impact has also been observed in the children. After screening of one or two videos, the children shed their shyness in asking questions and became more interactive. According to the CFs the understanding level of the children also increased. After watching the initial one or two videos the children were able to infer and understand the content of the subsequent videos more clearly. The CFs mentioned that the children became more disciplined while watching the videos in comparison to screening of the first videos. The videos made the children more aware, thoughtful and proactive on the issues like pollution, environment etc. It brought among them a sense of fraternity, equality and values and appreciation of the contribution of different people.

The CFs reported that the teachers were very appreciative of the videos in terms of its content and the manner of production. According to the CFs the teachers took the videos very positively. They not only proved helpful to them to understand subjects and themes difficult to transact but also helped in their teaching methodology. The CFs reported that teachers shared their experiences that after the video screening the classes became more interactive and the children became more articulate in asking questions to clarify their doubts on the topics being taught.

11.2 STUDENTS VIEWS

Content analysis of student data obtained through interactions and interviews gave rise to important findings about (i) effectiveness of video-screening on the student community as far as general impact on interests and attitudes towards various issues taught goes, and (ii) their learning outcomes on specific performance test related to difficult topics which could not be handled well by teachers. Findings thus elicited have been put under relevant heads below:

Student groups were enquired about the subjects/ topics they found difficult. Most of the students of Hind Swaraj Mandal (HSM) and Navsarjan who were of upper grade (8-9 and 5-7 respectively) mentioned Mathematics, Science and English, as the difficult subjects. On the same question, majority of the children of ECVUs *Sahyog* and *Udaan-Meghdhanush* belonging to grade 3 and 4, mentioned Environmental Science and Mathematics as the difficult ones.

On being asked about how they managed to cope up with the difficult subjects, the students gave different responses. However, majority of them shared that they worked hard and took teachers' help to understand the topics difficult to comprehend. Some of them took help of their parents. While a few candidly informed that they did not make any special effort towards it.

Recall of Videos

It may be mentioned here that the recall level of the content of videos was higher among the students of HSM and Navsarjan (students of grade IX and grade V-VII respectively),. Even though the students from Sahyog and Udaan-Meghdhanush (grade III & IV) also responded well on different aspects of the videos, such as why they liked the videos, what they learned from the videos etc. The students of ECVU-Navsarjan commented that all the videos were very informative on the respective topics. They mentioned the videos not only provided information on these difficult issues but they also changed their thinking and behavior. They reported that after watching the Videos on Pradushan, Vanaspati, Paryavaran Anethenu Kudrati Santulan, they have become more serious towards keeping their surroundings clean and green. The video Sthanik Swaraj Ni Sansthano has made them aware about functions of local self-governance and rights of a citizen.

Similarly, for the students of HSM ESVU, all the videos were very informative and knowledge giving. The students recalled the videos on Bhoomi, Urjaa, Apna Hako, Lokshahi, Aahaar Ane Arogyaa and on Nayesargik Sampaada. They informed that they learned about different kind of energy, and its use in our

daily life. Through one of the videos on 'own rights', they understood the importance of exercising our rights. Some students also recalled the need to conserve our natural resources like land and its upkeep. With reference to one of the videos, they reported having learned the importance of taking balanced diet for keeping oneself healthy and fit. The students under ECVU-HSM were of upper grades (VIII-IX) and hence their recall on the content of videos was better than students covered from other ECVUs.

In general, the students were successful in recalling the number of videos they had watched. The average number of videos recalled was 4-5, which compared with the actual number that the ECVU reported. The recall of the names of the videos screened was comparatively poor among the children of lower grade (like in ECVUs Sahyog and Meghdhanush-Udaan). However, the children were able to recall the content of the videos which is, perhaps the most important indicator of the impact the videos had on learning. Almost all of these students of Sahyog recalled watching the videos on issues like Vanaspati, Juda juda kaamo, Apna Dharmo. Some of the students also mentioned Khushi, Karo ramakda kuch kadam, and Bhaasha Gyaan.

Extent to Which the Videos Were Liked

On being enquired about whether they liked the videos, most of the children said that they liked the videos very much. They felt that the topics covered under the videos were very appropriate. Interaction with the students in the schools of the ECVU Udaan-Meghdhanush revealed that the topics like Earth and Respiratory System which were difficult to understand merely by reading books or as taught by the teacher, were understood well after they watched the videos. They further added that after watching the video on earth, their curiosity regarding the shape of earth was satisfied to a large extent. Similarly, video on respiratory system helped them clear their doubts and confusion. It facilitated their learning of the human respiratory system. They also liked other videos titled Water and Vahan Veyavharo, as they found them very informative. The learning outcomes test (discussed in detail in next section) did show that a majority of the students answered some questions correctly while for some other questions the performance was not up to the mark.

When students were asked which topic they would like to watch videos in future, they mentioned the subjects such as English and Biology rather than mentioning topics or sub themes of the subjects of curriculum.

Extent of Learning

Good learning outcomes were reported by the students. They shared that after watching the video on Vanaspati they could understand the different types of vegetations and their importance. Similarly, the video on Juda Juda Kamo helped them understand that every kind of work is important. They learned that no work is insignificant and all work contributes in the development of the society. While mentioning about the gains from the video on Aapna Dharmo, they said that they could know more about different religions practiced in their community. Some of the children of Sahyog ECVU mentioned that from the video Karo Ramakda Kuch Kadam and Khushi they learned to walk like a soldier and help the people in need, respectively. Though all the six videos were reportedly screened by Sahyog, the recall level was higher for videos on Vanaspati Etle Shu, Juda Juda Kamo and Aapna Dharmo, as compared to the other three. Also the learning outcomes test results of the topics on vegetation, are in consonance with the views expressed by the students. However, in the test conducted on Juda Juda Kamo, the students were not able to recall all the occupations shown in the video. A majority could recall only two of them. Further the local language being the medium of expression in the videos as well as the familiarity with illustrations and examples, made it easy for the students to identify with the contents.

Value Outcomes

One of the key objectives of the Videoshala project was to help imbibe the feeling of citizenship and democracy amongst the students, which was evident in the students from higher grades. Students in general, expressed a keen interest in acting in future productions of such videos and urged that more hard spots should be identified for this purpose.

11.3   TEACHERS VIEWS

Teachers' Involvement

The Videoshala project, besides empowering the local community members, was an approach towards providing a tool which will facilitate teaching in the classroom. The participation of schoolteachers right from the initial phase of the project to the screening and after was, therefore, very important. As informed by the project partners, teachers were involved right from the time of identification of 'hard spots'. During the in-depth discussions with teachers in one of the Videoshala schools under ECVU Udaan-Meghdhanush, two teachers reported that they were part of the process of identifying hard spots-'earth' and 'water'. One teacher, each in Navsarjan and Sahyog schools reported that they participated in the discussion held in their respective schools to identify hard spots. It may be mentioned here that in the sampled Videoshala schools only a few of the teachers reported that they were part of the identification of hard spots.

As reported by the CVPs and Coordinators, who visited on an average of four to five schools (for every hard spot), a few of the teachers and students were consulted in the process of identifying the hard spots. As reported by the program partners, initially the authorities in the government schools were not very supportive of the idea and did not show much interest. One reason reported was that they had to take permission from the higher authorities before allowing the Videoshala team to visit the schools. In a few private schools too, the school authorities were not very responsive to the idea and felt that this might disturb the academic session of the school. However, after watching the initial videos, they appreciated the concept and showed their willingness to participate in the project more actively.

The next phase of teachers' involvement was during screening of the videos in their respective schools. However, as reported by teachers their involvement during screening was limited. They were basically responsible for collecting the children to whom the video was to be shown and make them sit in a classroom where the video was to be shown. The main role during the screening of the videos in the class was that of the Classroom Facilitators (CFs). However, the teachers did watch the videos and as shared by them the videos could be useful tool in effectively transacting a particular topic to the students.

Teachers' Opinion on Videos

Almost 100 percent of the teachers appreciated the concept of Videoshala and the videos thus produced. They were convinced of the effectiveness of the videos in teaching. A majority of the teachers were of the opinion that some issues/topics of the videos produced were of good quality. A good majority of the teachers have rated the content of the videos as very good and relevant; presentation of the videos as attractive; language of the videos as easy to comprehend; and overall quality of the video as very good and attractive. The teachers further added that the modality of teaching through videos is very effective as there is a possibility of using more examples and illustrations that facilitate teaching of a difficult topic.

The teachers own understanding of the topics/subject matter got enhanced. For example, one of the teachers reported after watching a video on Vanaspati (vegetation) that it came as a new learning to him that bamboo was a type of grass, and that it is the longest grass. Similarly, using sticks and leaves for explaining respiratory system was an eye-opener for them and they learned that even the complicated issues can be simplified with the help of the things available in the surroundings.

In non-*Videoshala* schools too, the teachers liked the concept of Videoshala and agreed with views of their counterparts in Vidoeshala schools that difficult subjects and issues in the curricula can be better addressed through videos. Though they had not watched any videos of Videoshala, they were of the view that the idea of developing videos on the difficult subjects and issues of the curricula by the community members in local language could be very effective and relevant.

Teachers' Observation on the Impact of Videos on the Students

Regarding the change the teachers observed in the students as a result of watching the videos, a majority of the teachers mentioned that the students had more clarity on the issues that the videos tackled. Many teachers also noticed the change in behavior and conduct of the students towards their peers of other community and social groups. The students , they felt have also become conscious towards keeping the surroundings clean and green.

More of such changes were noticed amongst the students of schools covered by the ECVUs- HSM and Navsarjan, possibly due to the reason that these students belonged to higher grades as compared to those of other two ECVUs (Meghdhanush-Udaan and Sahyog). In some schools of ECVU- Udaan-Meghdhanush, the teachers informed that after watching the video on 'water', the students stopped wasting water. On knowledge gained by students through the videos, the teachers across the four ECVUs reported that the videos had definitely been helpful in improving their knowledge on the issues covered. The learning outcomes tests results (reported herein) too supported their contention.

Teachers' Felt Involvement for Future

There was mixed reaction from the teachers on the question whether would they like their involvement in the screening of the videos more. Some of the teachers wanted more involvement such as in the actual screening of the videos which was absent earlier, while others did not want to be given this responsibility. However, for majority of the teachers, the video has been beneficial in understanding hard spots and in learning to use examples and illustrations from the surroundings, making it easier to teach and to learn.

The teachers mentioned a number of topics like digestive system, stages of human development, parts and functions of human body and universe etc. for future videos. Furthermore, all the teachers alike felt that the screening of the videos should be integrated with the initial teaching of the topics. According to them, the videos alone cannot be as useful when shown separately.

11.4   PARENTS VIEWS

The interviews with the parents (either mother or father) of Videoshala students revealed that most of the parents were aware that videos were being shown to their wards in the school. Some of the parents interviewed had participated as actors in the videos. All the parents were appreciative of the video-inputs being used to facilitate learning of children. According to the parents, when the children came home after watching the videos in the school they shared it with them. Most of the parents also mentioned that the children came back home very happy the day they watched video in the school.

Regarding whether the parents observed any change in their ward's behavior subsequent to watching the videos, most of the parents mentioned that they found many positive changes in their wards. Two of the reported cases are:

- Ms. Vinodini, mother of Pankit Trivedi of HSM Videoshala school mentioned that after watching the videos her daughter has become serious in her studies and has become more confident. According to the mother, it was the impact of the videos she watched in the school that motivated her to participate in the school function on the occasion of Republic Day.
- Mr. Pankaj Lalji Bhai mentioned that the thinking of his son towards Dalits and other communities has changed. Now his son has friends from Dalit and other communities which was not there before.

These are just examples of the positive change the parents mentioned that they observed in their wards after watching the videos in the school. They cited many more such changes.

In brief the parents not only liked the idea of videos but most of them requested that videos on other subjects should be made and shown as this method, according to them, has been very beneficial for their children in many respects.

12   FINDINGS & RECOMMEDATIONS

The insights in this chapter are based on the analyses carried out by the CMS and Nirantar evaluation teams, along with the responses they received from other stakeholders during the course of the evaluations. The CMS and Nirantar teams along with other respondents deliberated upon important aspects of the project such as relevance to the existing educational and school scenario, feasibility of the modalities adopted, components of the program, limitations of the scope and support, outcomes realized and future strategies. This section discusses the overall success and challenges of Videoshala and its future scalability and sustainability.

12.1   CURRENT STATE OF VIDEOSHALA

Reflecting upon the process of the project initiation and implementation, all the project partners were of the unanimous view that Videoshala project has been by and large successful in achieving its intended objectives. They felt that one of the key achievements of the project was that it was implemented in the manner in which it was intended during the project planning.

All the ECVUs had the Community Video Producers (CVPs) as well as the Classroom facilitators (CFs) selected from the local communities. Further, as desired, in spite of these CVPs not being experienced hands in video production, they were, as desired, able to not only identify and develop the content but also were successful in producing the videos of good quality within the stipulated time framework. The program partners were therefore, confident that in future efforts too, the idea of involving community members in producing videos could be retained.

Regarding the production of the video films the CVPs went through an intensive process of research before each video was finally produced. This involved discussion, trainings, field visits, reading and referring to resource materials that included both watching documentaries and reading books etc. This was enriching for the CVPs, who are able to build an in-depth understanding on the topic before the film was made. Additional workshops on hard spots selection, on the process of script writing and on the development of concept notes were also useful for the producers.

The ECVUs teams included women and people from marginalized communities (except for one E-CVU where there is only one person from a minority community). This composition of the team also reflected the diversity that exists within the program, enabling it to bring in different experiences and learning into the film-making process. Further the CCU also played a positive and rigorous role in the film-making process. Inputs, resource material and hand-holding provided to the producers yielded encouraging results. Additionally there is a structured process of feedback that exists between the CCU and the ECVUs.

In terms of physical targets achieved, the Videoshala project had envisaged reaching out to about two hundred schools in eight districts of Gujarat. With the exception of the ECVU Navsarjan, the remaining three ECVUs: Udaan-Meghdhanush, HSM and Sahyog, were able to achieve their respective targets. Navsarjan could cover only forty-three of the stipulated seventy-five schools. The reason, as per the PDs version was attributed to the coordinator appointed by the ECVU who left in the middle of the project. Overall at the end of the two years of existence Videoshala had reached 7,957 children in 194 schools through 640 classroom video films screenings. At the same time the project had provided alternate livelihood opportunities to 24 people as CVPs and to 21 people as CFs, with all hailing from local communities.

Video Films

The following issues relate to the video films:
- The videos produced by all four ECVUs are child centric. All videos have children as the main protagonists. Their questions, inquisitiveness and anxieties are addressed in all films. Yet they are not shown as being ignorant or uninformed, but in many films are confident and articulate. It is either a child or a group of children who take the viewers through a film and learn new information and ideas along the way. This learner-centered strategy ensures that children – the main target audience of the videos – are involved and engaged as viewers and can relate to the content easily.
- In most videos children are encouraged to learn by gathering information, going to different places, conducting interviews and doing things themselves. Seeking information is an effective way of learning and this is a method that most videos have adopted. This is in contrast to the conventional top-down approach of the teacher as the only provider of all answers to children's questions.
- The videos produced by all four ECVUs are unique in that they provide information and address values of citizenship, diversity and democracy. This is unlike all other audio-visual educational resource material available to schools in the area. This is quite commendable for the program. Teachers and principals of both government as well as non-formal schools also appreciated this feature of the ECVU videos. The information provided enhances quality of education in schools. Values incorporated into the subject areas enable learners to think critically.

- Most videos are not value-loaded, nor are there an overload of information. The selection process of information to be provided is thorough, as a result of which most videos are clear and succinct.
- The videos are based on chapters from Gujarat State Board School Textbooks. Core curricular areas in textbooks are referred to and yet in most cases there is an attempt made to broaden the horizons of learners by providing new information or by contextualizing the information. The information in textbooks is dull, detached, simplistic and in some cases, problematic. In contrast, several videos are refreshing as they are located in the lived realities of learners – they show their own geographical areas, people (and children) who are similar to them and speak the same language.
- There are a few exceptions to this. Some of the videos, while being located in the learners' contexts, do not represent the complexities and nuances of this context adequately. In fact, these videos fall short of adding information or perspective that is beyond the textbook. There are some videos which place one character as the provider of information – like the textbook where the teacher gives knowledge to learners.
- The language used in most videos is simple and accessible, unlike textbooks which are written in a more formal and difficult language. Simple Gujarati is the language spoken by most children. Children from Muslim backgrounds speak Hindi at home; however, they follow simple Gujarati. An effort has been made to show people speak Hindi in some videos. The local flavor of the language used is laudable, however, in some videos, concepts and definitions have not been explained. Difficult words have been used without being broken down into simpler, more accessible sentences. This is in the case of some videos on Science themes.
- Most videos have made an effort to incorporate values of equality, democracy and diversity in different ways, however, this is not done in a way where values implicit or embedded in the content. In some videos there is a superficial understanding of values, as a result of which they appear to be forced or just an add-on to the topic. In mainstream textbooks idealized situations are presented to learners, chapters also present values in the form of messages which are flat as well as one-dimensional. In the videos, there is an attempt made to move away from this, however, the values presented are not multi-dimensional. In some videos there are only characters with names that suggest their background. While it is important to have such characters, their roles should not be limited. This is especially in a context where communal and caste-based discrimination is a serious issue and contributions of marginalized communities are not acknowledged.
- The Social Science themes especially lend themselves to incorporation of values quite well. However, it has been challenging to incorporate values in videos that focus on Science and language.
- An attempt has been made in most videos to show women as providers of information. They are shown in varied roles – as panchayat members, teachers, activists and women engaged in domestic work. This is a refreshing departure from conventional textbooks where women and their roles are invisibilised and where only a few people or 'experts' are shown as providers of information. In the ECVU videos, women have agency; they are aware of their rights; they are active citizens in public domains; and they are decision makers.
- People from marginalized communities are also shown in positive roles in most videos. There is no stereotyping of roles or professions. People from Dalit, Muslim and working-class backgrounds are adequately represented. Their knowledge and skills are treated with respect and their contribution to children's learning process is recognized. This effort is well appreciated; however, in some films there appears to be a tokenistic representation of marginalized groups.
- Most videos produced by all four ECVUs show discrimination on the basis of gender, caste, religion and class. They indicate the power hierarchies that exist in society. This is unlike textbooks where there is no indication of any conflict. In some films, however, the story moves quickly to showing idealistic situations. While it is necessary to show positive examples to learners, there is a need to highlight struggles and complexities adequately.
- Most E-CVU videos are well produced. They have used different genres of film making. Both fictional as well as non fictional ploys have been used in videos and this effort is commendable. There are plots and sub plots which are woven together in a coherent manner. The visual medium has been used to its fullest potential in many films. There are a few aberrations to this – some videos are not well shot, have plots which are unrelated and end abruptly.

Implementation of Video Films

The following issues relate to the implementation and screening of the video films in the target schools by the ECVUs.

- In schools where the videos are screened, facilitation is as important as the screening itself. In the absence of facilitation, the video becomes an interesting activity that does not necessarily stimulate critical thinking. In schools where facilitation was good, the video was very effective. Children were able to understand concepts and information provided. However, where facilitation was absent, the video was like an 'interesting activity' which was not linked to curricular issues.
- In most ECVUs, very little time and resources have been invested in training facilitators. As a result of this, it is upto each individual facilitator to decide how he/she will transact a video. It is based on their existing skills and interest that this is decided. In some cases, screening and transaction of films is not prioritized given the existing work commitments of facilitators. However, in ECVUs where orientation and inputs have been provided to the facilitators, the classroom transaction is creative and inspires children to engage more with the video and the activities.
- There has also been a high turnover of facilitators in some ECVUs. While this is inevitable for any program, it has had an impact on the learning opportunities available for them and their overall engagement with the Videoshala program.
- There is no common point at which a video is introduced in the school syllabus. It is upto each E-CVU to decide whether a video will be screened before/after/during the time that the topic is being covered in school. This also depends on the availability of the facilitator in some cases. This lack of clarity and ad hoc manner of transaction has led to some amount of confusion in the ECVUs. In some places there is a long gap between the time that the topic is covered and the screening, making the impact or effectiveness of the video inconsistent.
- There is almost no discussion on values that takes place in classrooms. Facilitation is usually around information and concepts that are introduced. While values are in the realm of the abstract and therefore difficult to discuss, no effort is made whatsoever to raise any question or debate around diversity, citizenship and democracy.
- Each E-CVU has worked out its own process of involving facilitators in the process of film production. In some ECVUs feedback is sought from facilitators at different stages. Teachers of schools are also involved in the process of hard spot selection and in developing scripts and providing feedback on the rough cut. However, in other ECVUs, the facilitators and teachers have no role whatsoever in the film-making process. Their role begins at the time that the film is ready for screening. This has meant that the facilitators are detached from the entire process and therefore organize the screening in a similar manner.

Cost Viability of Videos

The video production was found to be cost effective in the following manner:

- The estimated cost of the production of the videos as reported by stakeholders and technical support partner (average Rs.1.5 lakhs per video) was kept in mind while evaluating the expenses incurred. The actual expense as reported by NGOs heads and technical partners was also close to the same amount.
- The same job would have been done by professional at three times the above cost, which shows the viability of using CVPs.
- The cost effectiveness of the project also increases due to the training of the CVPs as they continue to make additional videos and also contribute in training any new CVPs that are hired.
- Based on analysis of the videos by technical evaluators, it was concluded that the final product meets the desired standard of video production given the costs incurred.

12.2   RECOMMENDATIONS FOR THE FUTURE

Videoshala nurtures quality of education at the very roots of the education system by relating it with contextual realities and the local community. The experience of implementing this project through the involvement of the community members has been, by and large, successful across various districts/schools and has inspired the ECVUs greatly. Videoshala, however, could be sustained, expanded and scaled up to reach larger sections of society. To realize this, the following recommendations are presented:

General Considerations

- Set-up a special cell at the state level to provide physical, financial, social support and resources to NGO's and public-sector undertakings interested in participating in such activities as a concerted effort with definite goals.
- Identify and enlist participation and cooperation of increasingly more committed voluntary agencies in the field of education and social work.
- Prepare a pool of resources such as expertise, non-consumable items of use in video at State/District/Block levels to serve as a repository for teams interested in utilizing the resources. This will be more economical and save duplication of efforts.
- Prepare, with the help of experts, a prototype program and pedagogy including guidelines for preparing audio-visual aids, provide training in audio-visual aids production, preparing training and other manuals, and preparing functionaries for using videos.
- Prepare a pool of topics/issues/hard-spots needing extra attention, from various courses and curricula.
- Prepare a minimally desirable qualification profile of community members and participants such as video-producers and classroom facilitators.
- A parallel program utilizing the lessons learned from the present project and having an built-in follow-up plan may be conducted to enhance the effectiveness of the Videoshala concepts.
- The present report should be disseminated in stakeholders, partners in the government at the policy level and others.

Production of Videos

- As reported by some of the CVPs the production of videos including all formalities of pre-production has resulted in monotony and fatigue. In the future phase of Videoshala this aspect may be discussed to find out best ways of utilization of the resources. One possible way may be that at a time six CVPs should be involved in different phases of the production. Variety may be introduced in their work by rotating their assignments.
- As reported by some CVPs and PDs more comfortable time for production should be made available. For some of the videos the time (40-50 days) may be adequate but taking the available resources and logistics with ECVUs in consideration, the time duration for production of a video is not adequate.
- The producers have received a number of inputs; however, the inputs in technical aspects are more than those on conceptual issues or content. There needs to be a balance in the nature of inputs provided otherwise producers will largely be dependant on the CCU for feedback and suggestions on content and values.
- The CCU can also consider developing benchmarks for assessing quality of videos at different stages of the film-making process. In the future, if the ECVUs function in an independent manner, the benchmarks will help them monitor quality and effectiveness of videos and the process of production.
- Feedback from the CCU needs to be time bound. Any delay can cause delays in production of new films as a result of which ECVUs will not be able to meet targets.
- The CCU and the E-CVU coordinators should enable producers to access and transact the resource material that is provided. Merely providing reference material is not enough as the ability to select and use this material is a skill which requires facilitation.

Content of Videos

- It is important to develop content of videos according to the age and learning levels of children. In some films mediums which are for children of a different age group have been used. This may make the medium ineffective for children who may be ready for more nuanced mediums.
- It is important for the videos to explore the potential of opening up discussions on social and structural inequalities. While most videos do indicate these inequalities, sometimes in very subtle ways, they stop short of taking the discussion further, as a result of which it is quite possible for the viewer to miss the point completely.
- The project should also develop an understanding on values by unpacking ideas and concepts. For example, while talking about equality, it is important to talk about core concepts behind the idea of equality and look at how inequality exists in the everyday life of the learner. Reflective workshops for producers of videos on values are also essential to build a deeper understanding.

- It is also important for the E-CVU and the CCU to address the issue of integration of values in films on Science, Language and Math. These are topics which are most 'difficult' for learners. It is all the more important to integrate values in these topics – a task that is challenging, but critical for the program.
- The E-CVU must look at approaches that will enable them to locate videos firmly in the local context. The realities of children from families affected by communal violence, caste-based discrimination, gender biases need to be articulated more strongly in the videos. Up scaling and mainstreaming is an objective of the program in the next phase and therefore highlighting conflict may not be well received by mainstreams institutions. However, in videos where idealistic situations are shown, it is important to make sure that conflict and disparity is also indicated.
- The ECVUs and the CCU should look at the recent innovations in textbook writing. At the national level, efforts have been made by the National Council for Education, Research and Training (NCERT) to develop textbooks that focus on child-centered

Screening of the Videos

- The role of the teacher in screening of the videos was not more than arranging and controlling the students. The teachers can be a very important agent to meet the objectives of the Videoshala and hence their involvement should be more worthwhile. The responsibility of screening of the videos can be assigned to teachers of the respective Videoshala schools. This will not only curtail the budget of the project but they can also link the videos when they are teaching the subjects/topics.
- To make the content of videos more clear to students, the same videos should be screened more than once, if required.
- The CCU should intervene and suggest structured guidelines for facilitation which correspond with the videos. The CCU should, without being prescriptive, suggest to ECVUs the mandate for facilitators. In addition to this the CCU should also look at models that have been successful (in terms of facilitation) and make recommendations to ECVUs on the basis of this.
- Inputs on pedagogy, values, creative teaching should be provided to facilitators. Each E-CVU should organize inputs for its own facilitators and the CCU can play a role in organizing an input especially designed for facilitators.
- There should be a strategic involvement of facilitators in the process of production of videos. They could be involved in the selection of hard spots and in providing feedback at one stage of film making. If the program plans to scale up its operation and involve government school teachers as facilitators, this involvement has to be very strategic in nature.
- Teachers can be involved in hard spot selection so that they engage with the videos as resource material that has been developed with their involvement and inputs. Otherwise, there is the danger of the distance between the facilitator/teacher and the video increasing further.
- There has to be some logic to when a video should be introduced in schools. It cannot be left to the individual facilitator to decide. The impact of the video on teaching in classrooms can be maximized only if it supplements and enhances the quality of education. Therefore, a discussion between the ECVU and the CCU on this is extremely critical.
- Worksheets should be developed for varied purposes. They should help students recall information from the videos and should also push them to think, analyze and reflect on the information and values. Worksheets can also help learners to reflect on values which are often not discussed in classroom situations.

Scaling up & Sustainability

- The ECVUs or the CCU (whichever may be possible) should get in touch with the school authorities at Block Resource Centers (Bras), Cluster Resource Centers, and made them aware of the Videoshala concept. This would help Videoshala in getting permissions to screen Videos in government schools.
- Videoshala should target all the students of (for the grades focused upon) Videoshala schools. By showing the videos to all the students the utilization of the videos can be optimized. However, at a time, the maximum number of children of forty for the screening of the videos should be maintained for better impact of the videos on the students.
- There should be up-to-date data base on Videoshala (related to the number of schools covered, dates of screening of the videos in the schools and other activities done by each ECVU) at a central place so that the information can be easily accessed as and when required.

- In many schools the facilitators are the face of the program. The larger objectives of the Videoshala program and the local producers are not known to people in schools and to the larger community in many places. Since one of the objectives of the program is to empower local people to produce educational material to improve quality of learning, it is essential that this information be shared with various stakeholders. The ECVUs should look at forums where their work can be promoted and publicized.

12.3   PARTNERS VIEWS ON FUTURE STRATEGIES

The partners of Videoshala also had some views regarding future strategies to consider:
- As an alternative mechanism to boost Videoshala, it was suggested by the project director (PD) Meghdhanush ECVU that the Videoshala films content be integrated with the education system. For this, the ECVUs are already in touch with the State education department. On the other hand, they also want to fan out to more NGO's to be partners in expanding the Videoshala project.
- As another strategy of expansion, the PD of Navsarjan had a suggestion that there should be some independence to the ECVUs to implement the project. The ECVUs should not be guided and monitored by the CCU in this venture. The CCU should be more of a technical support partner. Then again, she was also of the opinion that the target of developing six videos per ECVU (as was fixed for the program period of one and a half year) and its screening should not be made too stringent as this would lead to compromise with the quality. The emphasis should be on outcome rather than output. She suggested that in the meetings of the CVPs at CCU, the project Directors and the representative/s of concerned NGOs of the CCU should also be invited so that the respective NGOs could keep pace with the developments of the ECVU.
- The PD, Navsarjan ECVU felt that the Videoshala team should be technically so sound that in addition to producing videos for themselves, the team gets invited by others for the purpose. This could also be one of the possible ways of making the Videoshala self-sustainable.
- Also, as a future strategy, the ECVU Navsarjan would like to screen the videos in *Panchayat Bhavans* so that the screening should cater not only the Dalit groups but also to a mix of social groups.
- Some ECVUs felt that the CCU should visit the villages and interact with community, including children, more often so that a better understanding of limitations, challenges and issues can be developed to strengthen future efforts.
- Citing the example of one of the CVPs who benefited from the Videoshala in enriching his thought process to enter higher education, and speaking highly of the Videoshala, the PD Sahyog ECVU recommended the necessity of dealing with government schools to strengthen future efforts. Speaking about his future plans for the video project, he revealed that he would like to screen the videos in the community including parents and children as well as teachers of different schools. He informed that in the next phase of the project, Sahyog would like to produce four videos for children and two videos for the community.
- The PD of HSM ECVU contended that the Videoshala should be made part of the school curricula with a greater involvement of teachers. To make it more participatory, at local level, a committee of local people and teachers should be formed and they should decide on the topics and values to be incorporated in the videos. All of this would pave the way for making the Videoshala self-sustainable. Marketing of the videos maybe adopted to generate a good resource for sustaining the project as the expansion of the program is very much needed and should not be confined to selected few schools.

It was evident that all the key stakeholders had a positive experience with Videoshala; hence all of them felt the need to scale-up the project in future. Gagan Sethi, the head of Janvikas felt that the extent of acceptance and appreciation of Videoshala program reiterates the felt need of such programs in the present educational context. Sharing the thoughts on scaling up the project, he felt that setting up a CVP unit of Videoshala could retain the local contextualization of videos for two Talukas (sub-division) per district. This will help in preserving the basic essence of the concept of Videoshala-localization and could at the same time, be made available to all the schools in the region. He further mentioned that to integrate the Videoshala program with government schools, the dialogue at different levels of government is in progress and according to him some positive response are expected from government side.

12.4 SPECIFIC RECOMMENDATIONS FOR EACH ECVU

The following are specific recommendations for each ECVU:

HSM ECVU

- Videos on scientific subjects should be made taking into consideration the level of knowledge of the children, and should add to the knowledge the children already have from other sources. The presentation of the science topics should not be merely in the form of definitions but explanation of scientific concepts. Language of the science films should be simple, in contrast to textbook transaction of this content.
- The films should contain local information and also contain local context and issues. The context of the organization – its work on the environment and ecology of the Saurashtra region should be incorporated in the films.
- Before the film is screened it should be ensured that the atmosphere in the class is conducive to an interactive and innovative teaching learning experience. The students should be in a position to link themselves with the subject and the video, and think critically about the content. Screening of the film should not be seen in an instrumental perspective, as an activity that has to be done.
- The facilitator needs to be very active during the session, focusing on the needs of every student. The responsibility of the facilitator does not end with the screening of the video. S/he should initiate and facilitate discussion on the subject, and on the values in the film. The capacity of the facilitator should not be built merely to screen a film, but on educational activities and subject matter of the screening.
- It is also necessary for the facilitator to participate in research and selection of hard spot. Both these processes can help enhance knowledge of the subject.
- The questions in the worksheet should add to the knowledge gained from the film. Some questions should to revise what they have learned and some should be analytical questions.
- Producers mostly refer to SSA material for the subject content. However, it is advisable to look up to alternative material such as Eklavya, Bodh, Digantar, and Avehi Abacus also. This would help in exposing the producers to different methods for understanding and teaching a complicated subject.
- When contacting resource people, care should be taken that the 'experts' also include local people and people of different backgrounds from the community. Otherwise the process of filmmaking is comparable to the making of other Teaching Learning material, even textbooks.
- HSM should look to how the community videos and the ECVU are creating a place and name for themselves, especially in the context of expansion. At the moment, few people in the community and even in the schools know who has produced the videos.
- The HSM E-CVU is quite new. During the last one and half years, they have achieved high technical skills but their understanding of pedagogy and values of education are still weak.
- Feedback is more effective if it is not too scattered over many people and points in the production process.

UDAAN-MEGHDHANUSH ECVU

- The E-CVU should try and make films that are positioned more within the local context, in terms of language, issues prevalent in the community, and build on local knowledge.
- Producers to access more effective alternative resource and reference material of other educationists in order to enhance their understanding of concepts and to enable them to bring about creativity in film-making, activity and worksheet development.
- More strategic involvement of facilitators and teachers to be encouraged – at suitable points in the film-making process – to bring to the table hard spots, help bridge the divide between film-making and its transaction, and ensure quality and continuity in curricular flow during classroom teaching.
- More time to be allotted in the film-making process to substantive discussions and understanding of content and values, rather than giving more time to technical aspects, which are anyway strong.
- Creative thinking about use of video as a medium in showing values within science-related films (e.g. - in 'Pupu').

NAVSARJAN ECVU

- The analysis of the worksheets and activity sheets should be shared back with the teachers at some stage. The ECVU can consider sending a report to the teachers in order to inform them about the learning from each screening.
- The facilitators at the Navsarjan ECVU are activists with a strong sense of commitment towards their work on rights issues; however, the role of the CF is new and fraught with tensions. The CFs clearly articulated that it was not possible for them to play this role. The CFs are skilled and have a lot of work experience; however, they are not trained as facilitators. As a result of this, their facilitation skills were poor (as we had seen at the Shobhasar Primary School). A short orientation provided was not very useful to their work. Facilitation is a specialized skill. An activist with other commitments should not be expected to work as a full-time facilitator. There is a need for the program to select a new set of facilitators who can work in a focused manner on organizing the screenings and transacting the video kits.
- There is a huge distance that exists between the CFs and the producers at Navsarjan. We sensed some amount of tension in this relationship. The producers are those who work intensively on making the video kits and in the process learn a lot about the theme and related issues. The CFs are not involved in any manner in this process, however, they are the public face of the video kits. The producers feel that they are not recognized or acknowledged by teachers and learners because they are not part of the screening and facilitation. The CFs on the other hand typically feel detached from the film because their involvement in its making is minimal. The ECVU should address this immediately.
- There already exists a distance between the teachers/ headmistress of government schools and the process of transaction of video kits. There is a danger of this distance increasing further in the absence of any classroom interaction or discussions with teachers. If reaching out to a larger number of state-sponsored educational institutions is an objective of the program in its next phase, it is of utmost importance that the ECVU facilitators interact with students and teachers.
- There is no plan for the number of screenings that is to be organized by each CF. Some of them had done about six to seven screenings thus far and some had done about 25. It was clear that the number varied because it was up to each CF to decide when and where he/she could organize the screening.

SAHYOG ECVU

- Further technical training - building on the skills they already have. Working with actors is an area that could be improved, also editing. Basic technical training for the ECVU coordinator
- A more rigorous process of research for films on curricular areas – like language, science. The team could do with workshops on creating innovative science teaching learning material, for instance, and this input should include discussions on how values can be made part of the content more seamlessly. Other creative T/L material should be provided to the team to raise the bar of their own materials.
- The facilitators should be involved to a greater extent in the research and training that goes into a film, so their grasp of curricula content is stronger when transacting films. They should also be talked through the discussion points in the activity manual, or receive training on perspective building, so that they can facilitate a better discussion on both content and values. The facilitators –whether these are teachers or not - should receive a few rounds of intensive training on transaction, pedagogy, content and values.
- The program, both Sahyog and Videoshala, needs to be better known in the community – beginning with the children who watch the films, to parents of the children who watch the videos, children who act in the video, and extending to the wider community in Vatwa. One way to do this is to do screenings with the community. Another way is to frame the screenings with a little discussion on who makes the videos, their context and so on. The impact of the program could be much more if it was better known.

APPENDIX I

I Guidelines for Focus Group Discussion (FGD) with Children

Instruction for the field researchers: *Before starting discussion with the children introduce yourself and brief the group on the purpose of the meeting/discussion, making a clear reference to the video project. Ensure that all the participating children are comfortable and in a mood to talk in the group without any fear or shyness)*

    A.   District: _____

    B.   Tehsil / Block: _____

    C.   Gram Panchayat: _____

    D.   Village: _____

    E.   Name of School: _____

    F.   Name of Field Researchers: _____

    G.   Date & Time of discussion: _____

Information on the Children attending the Group Discussion

Sl. No.	Name	Age	Gender	Standard (Class)
1			M / F	
2			M / F	
3			M / F	
4			M / F	
5			M / F	
6			M / F	
7			M / F	
8			M / F	
9			M / F	
10			M / F	

1. Can you tell the name of the subjects/issues you read?
2. Which are the subjects that you like
3. Which are the subjects and topics you find difficult
4. How do you manage with the difficult subjects/issues?
5. Did you watch the video/s shown in the school (*researchers can mention the date of the screening of the video/s in the school*)
6. What were video/s about? What did you learn from the videos?
7. Did you like the video/s you watched on the issue? Why did you like or dislike the video/s you watched on the issue..............?
8. How these videos contributed to your knowledge on the issue?
9. What message does it convey beyond the subject knowledge?
10. What activities did you do along the videos?
11. How those activities were helpful in understanding?
12. What role facilitators and teachers played while screening videos?
13. What changes this video has brought in your thinking, behavior and practice? (*Probe if no answer is on values*)
14. When and what did you, your friend or family last practice any of the message you received from the video? (*Probe if no answer is on values*)
15. What is your opinion on the language used in the videos?
16. Was the language used in the video/s easy to comprehend?
17. How do you like watching the video/s on the issue in local dialect?
18. How did you like or dislike the narrators/actors in the video?
19. What did you like the most in the video and why?
20. Can you tell how these videos (Videoshala videos) were different from other videos you have watched?
21. How this method of teaching (teaching by showing video/film) is different from other methods?
22. On what other issues would you like to watch videos?
23. What more information do you want to share about Videoshala project?

II   Guidelines for discussion with Local Coordinator

Name of the Coordinator_____

Name of the NGO Associated with_____

Educational Qualifications   _____

Social category: (1) SC/ST   (2) OBC (3) General   (4) Any other____(specify)

Monthly income (in Rs.) _____

1.   For how long have you been associated with Videoshala project?
2.   Kindly tell in brief about the background of your association with the project,
3.   Your role and responsibility as a coordinator.
4.   Can you give the details of the training you received from the day of your association with the project till now?

S. no.	Date of training Duration	Content of training	Trainer	Place of training

5.   What was the process to identify the hard spots?
6.   Please tell us about the process of making videos and screening (Videoshala project)?
7.   What kind of planning had been done before starting the production and during the production?
8.   What kind of planning was done for screening?
9.   How this video was different from other educational videos?
10. Rate the quality of the video produced by you on five point scale of

    (1) Excellent   (2) Very good   (3) Good   (4) Average   (5) Below average
11. Rate the relevance of the content of the video on three point scale:

    (1) Very relevant   (2) Quite relevant   (3) just relevant
12. What challenges did your team face in making videos and how did you tackle the challenges?
13. What was the response of the schools on the issues being tackled through videos? How receptive or critical were they?
14. Do you see any continuity or linkages in the videos developed in this project? What is your thought on the continuity of the videos developed and screened? Whether it is required and why?
15. How beneficial, if any, has been the videos for the teachers?
16. How beneficial, if any, has been the videos for the students?
17.   How was the coordination between CCU and your unit (ECVU) ?What support did you get from CCU. What additional support did you expect from them?

18. How was the coordination between the team (ECVU) members?

19. In your opinion what has been the impact of the project on the project members (involved in producing the video kit). What changes did you observe?

20. What changes you observed in the community?

21. What's your plan to expand and sustain this project?

22. What kind of support do you expect from other agencies including government in this endeavor?

23. What are the major challenges before you in expanding the idea of Videoshala and what have you planned to overcome them?

24. What other complex educational issues have been earmarked to be focused under Videoshala project?

25. What all have you to say about the project?

III   Guidelines for Classroom Facilitator

Name of the Facilitator:

Age:

Educational Qualification:

Social category: (1) SC/ST   (2) OBC (3) General   (4) Any Other _____(specify)

Profession:

Monthly Income (in Rs.):

1. Your experience in the field of education?
2. How did you come to know about the *Videoshala* Project?
3. What features of the project motivated you?
4. As classroom facilitator what was your role and responsibilities.
5. Did you receive any training for doing as a classroom facilitator? If yes, please give details.

S. no.	Date of training (Duration)	Content of training	Trainer	Place of training

6. How beneficial the training you received was for your job responsibility?
7. How these videos were different from other educational videos (probe on community involvement...)
8. Kindly tell us the process of screening of the videos in the classrooms?
9. What activities you were involved while screening the videos and how those activities were helpful?
10. What additional role you would like to play?
11. What is your thought on number of students viewing the videos at one time. Is it ok, more or less? What's your thought on carrying TV to screen videos.
12. In your opinion what is the optimum time required to complete one set of activities including screening videos, activities and filling activities sheet? And presently how much of time you are giving for one set of activity?
13. How the video screening on particular topic should be linked when teacher are actually teaching those topic?
14. How was it received by children?
    ⇒ Did they find it interesting or boring?
    ⇒ Were they attentive during the screening?
    ⇒ Did they raise questions during and post screening.
15. Do you feel that the videos helped in clarifying the concepts of the children and the teachers on hard spots? What is the basis of saying so?

16. Which video did they like most and why?
17. Rate the relevance of the content of the video on a three point scale of: 1) Very relevant; 2) Quite Relevant; 3) Just relevant
18. Could you recall any interesting incident during classroom screening of the vide/
19. How was the teachers' response during the screening of video/s? Did they actively participate? (probe: on their opinion on this approach of teaching, community involvement..., motivation to use the method)
20. What role school and teacher played during the screening?
21. What was their comment on the videos? (probe: can it be replicated at a higher level?)
22. What kind of problem, if any, did you face in screening the video?
23. If you look back at your involvement with the *Videoshala* project, what would you identify as significant change(s) in yourself?
24. What kind of changes, if any, did you notice in the attitudes of the family members/community members towards you after your association with the *Videoshala* project?
25. What changes did you observe in the:
   a) Children (probe: value, learning, regularity in classes, motivation to learn....)
   b) Teachers (their conduct in classroom, interaction with children,)
   c) Community members
26. Did you enjoy working as a facilitator in the classroom for the *Videoshala* kit? If yes, kindly share your experience.
27. Do you think that your association with Videoshala project made you a skilled person and it has opened earning avenues for you?
28. What challenges did you face?
29. What all have you to say about the *Videoshala* project?

IV Guidelines for Discussion with NGO Representatives

    A. Name of the NGO_____

    B. Name of the representative _____

    C. Gender   (1) Male   (2) Female

    D. Designation of the representative_____

1. Kindly tell in brief about the activities of the NGOs and work in the field of education

2. How did the idea of Videoshala originate?

3. How Videoshala videos are different from others educational videos

4. How do you think your ECVU is different from others. What role philosophy and objective of organization has played role in the Videoshala project (e.g. Identifying hard spot areas.)

5. Kindly tell about the entire process (from the inception of the idea to ultimately production and screening of videos).

6. What was your team for the project (on community involvement, can the model made sustainable….)?

7. What was the role and responsibility of each team members of the Videoshala project?

8. How frequently you used to meet to discuss the progress and solve the problem, if any, of the team?

9. Did everything work according to the plan or you faced challenges?

10. If faced challenges, what were those challenges and how did you tackle the challenges?

11. Do you think that the Videoshala project has been able to achieve its objectives? If yes, kindly elaborate. If no, what were the obstacles that came to the fore in achieving the intended targets?

12. What was the response of the schools on the videos? How receptive or critical were they? (…….possibility of replication …)

13. In your opinion how children liked it?

14. Do you see any continuity or linkages in the videos developed in this project? What is your thought on the continuity of the videos developed and screened? Whether it is required and why?

15. In your opinion what has been the impact of the project on the project members (involved in producing the video kit). What was the gain for them?

16. What changes did you observe with the community members?

17. What has the attrition rate of the producers and facilitators been? how has it affected the project?

18. Do you plan to expand the video project? If so, in what way?

19 Can the Videoshala model be used for higher grades and subject areas? (how ? why not?)

20. What kind of support do you expect from other agencies in this endeavor?

21. What role CCU plays and what are your other expectation from CCU?

22. What training provided by the resource organization and what additional training you felt is still required to enhance the team capacity?

23. Has your NGO ever approached the government authorities for the promotion of this concept of Videoshala? If yes, what has been their response and what is your expectation from them?

24. What are the major challenges before you in expanding the idea of Videoshala and what have you planned to overcome them?

25. What other hard spots have been earmarked to be focused under Videoshala project?

26. What is the budget you spend on an average for per video (cost effectiveness)?

27. What is your opinion on making animation videos in local language on hard spots?

28. What is your future plan of Videoshala project?

V   Guidelines for Discussion with Teachers

(To be asked with the teachers of Non- Videoshala school)

District: Block/Taluka:

1. Name of the School   _____

2. Name of the Teacher   _____

3.Gender   (1) Male   (2) Female

4.Years of experience   _____

5.Educational qualification   _____

6.Which subject(s) do you teach?
   (1) _____   (2) _____   (3) _____

7.   In your opinion what are hard spots area?

8.   How do you tackle hard sport at your level?

9.   Do you think that using video as a mode of teaching instead of explaining through textbooks is more effective on hard spots ? Reason for yes or no ?

10.   Have you seen any educational videos? On what issue/subject was it?

11.   Have you heard about the Videoshala Project? If yes, what you know about Videoshala project?

12.   What is your thought on local educational content developed by local community members?

13.   Do you find any demerit in the present system of teaching? If yes, what?

14.   What would you suggest to improve the present method of teaching?

VII   Guidelines for Community Video Producers

Name of the Community Video Producer_____

Age: _____

Educational Qualifications: _____

Profession: _____

Monthly Income: _____

Social Category:

(1) General   (2) SC/ST   (3) OBC   (4) Other (specify)

1. How did you come to know about the *Videoshala* Project?
2. What features of the project motivated you?
3. What has been your prior experience with technology (video making) and in the field of education?
4. As community video producer what was your role and responsibilities?
5. What was the role and responsibilities described by Videoshala prior to joining the Videoshala team?
6. Were you confident of fulfilling your role and responsibilities? If no, how did the Videoshala team support you in fulfilling your roles & responsibilities?
7. What has been the response of your family on your association with the project?
8. What was the response of the community when they came to know about your association/involvement with the project? (Have you to face any kind of resistance / comments of the community or they appreciated /encouraged you)
9. What kind of training did you undergo in order to produce the kit? Kindly give details of the same

S. no.	Date of training (Duration)	Content of training	Trainer	Place of training

10. How much confidence did your training give you?
11. What kind of planning had been done before starting the production and during the production?
12 Rate the quality of the video produced by you on five point scale of
   (1) Excellent   (2) Very good   (3) Good   (4) Average   (5) Below average
13. Kindly elaborate the process of selection of content of the video?
14. Please tell us the process of video production?
15. Rate the relevance of the content of the video on three point scale:

(1) Very relevant   (2) Quite relevant   (3) just relevant

16. How did the children, teachers like the new method of learning on the hard spots?

17. What new things did you learn (in the areas of technical, education ,film making)?

18. What change do you find in your behavior, thinking as result of working as a producer of Videoshala?

19. Do you think that your association with Videoshala project made you a skilled person and it has opened avenues for income generation?

20. Has this Videoshala project made you understand your community better? How?

21. How the Videoshala is contributing in education, community, society?

22. What role trainer played in this project? Do you need their involvement in future also?

23. What role the facilitator played in screening the videos and what role teachers played in it. Do you think any changes or improvement in their role to improve the impact of videos among children.

24. Do you see any continuity or linkages in the videos developed in this project? What is your thought on the continuity of the videos developed and screened? Whether it is required and why?

25. What changes did you observe in the children after viewing these videos. (Changes related to their knowledge on subjects and values as well)

26. What changes did you observe in the community members from this project?

27. Do you think that by producing video kit on education you have contributed something in the field of education to your society? Has it motivated you to do some more for your community?

28. What do you think the difference between the videos developed by you and other educational videos?

29. How was the coordination/atmosphere at pre and during production of video kit?

30. What opinion do you have on the existing team formation?

31. What were the major problems faced?

32. If you look back at your involvement with the *Videoshala* project, what kind of impact did it have on you in learning and attitudes? How is the Videoshala model impacting on work?

33. What would you identify as the limitation(s) of the *Videoshala* project?

34. What kind of support was available from the CCU? What additional support you are expecting from them?

35. Do you see any possibility to carry forward the project by local people without any external support?

36. How do you plan to take this project forward with respect to sustaining and scaling up?

37. What all have you to say about the project?

(To be asked with the teachers of Videoshala School)

District _____   Block/Taluka_____

1.Name of the School   _____

2.Name of the Teacher   _____

3.Gender
         (1) Male   (2) Female

4.Years of experience: _____

5.Educational qualification: _____

6.Which subject(s) do you teach?
         (1) _____   (2) _____   (3) _____

7.Are you aware of the Videoshala project?
   (1) Yes   (2) No   (3) DK/CS

8.   If yes then, how have you participated in the Videoshala project? What are   the different roles played by you in this project?

9.   In your opinion what is hard spots area?

10.   How do you tackle hard sport at your level?

11.   If you participated in identifying hard spot areas for Videoshala project, kindly elaborate how you contributed in the same *(probe the process of identifying hard spots, how did they arrive at a given concept for video content development, how values of citizenship and diversity incorporated into the curricular concept)*

12. Could you please recall the issues, which were identified as the hard spots?

 13. On what issue/s were the video kits shown in your school?

14.   Can you describe the process of screening of the videos?

15.   What was the role of the person (facilitator) who screened the video in the classroom?

16.   How were the facilitators' interactions with the children?

17.   What was your role in the screening?

18.   Would you like your involvement in the screening to be more?

19.   What would you say about the content, presentation, language, quality of the kit shown to the children?

Video	1	2	3	4	5
	Content	Presentation	Language	Quality of the kit	Duration
1					
2					
3					
4					

Code:
Content: (1) Very good/ relevant (2) Good and relevant (3) Average/not very relevant
(4) Poor relevant (5) Bad /Irrelevant (6) DK/CS

Presentation: (1) Very attractive (2) Attractive (3) Average (4) Poor (5) Bad (6) DK/CS

Language: (1) Local touch with easy to comprehend (2) Easy to comprehend but not local touch (3) Neither local touch nor easy to comprehend (4) DK/CS

Quality of the Kit: (1) Very good/attractive (2) Good/attractive (3) Average (4) Poor (5) Bad
(6) DK/CS
Duration : (1) Adequate (2) Somewhat Adequate (3) Inadequate (4) DK/CS

20. Do you think that using video as a mode of teaching instead of explaining through textbooks is more effective on hard spots ? Reason for yes or no ? *(probe on difference between using video vs traditional textbook based teaching: can it be replicated at higher level of education and on what subject areas)*

21. In your opinion what changes have you noticed in the children after watching the video on hard spots ? (*more than one response is possible*)

- (1) Now students have clarity on a particular issue shown in the video.
- (2) Children are able to answer/respond correctly
- (3) It helped the children to think and understand other difficult issues
- (4) It has changed their behavior and conduct
- (5) It had nothing special for the children
- (6) Don't know /can't say

22. What change has been observed in children (probe: participation in classroom, regular in class/school)?

23. What changes have you observed in the behavior of children after watching the videos (probe citizenship and diversity value)?

24. How it has impacted on teachers (probe: change in teaching approach, their conduct in classroom, interaction in classroom, motivation to learn and teach)

25. If you have seen any other videos on education or any other videos, how these videos (Videoshala videos) different from other?

26. What's your thought on local educational content developed by local people, helpful in (probe impact on learning on children)

27. How this video has been helpful for you?

28. What other issues do you feel should the Videoshala project take up in future for preparing the video for the children?

(1) _____ (2) _____ (3) _____

29. What do you think the video screening on particular topic should be linked when you are actually teaching those topics?

30. Challenges and issues in translating the concepts into videos?

31. What all have you to say about the project?

IX   Guidelines for discussion with Parents/villagers

1. Do you think that some of the subjects/issues are not easy to comprehend for the children? If yes, can you please tell what are they?
2. How do you tackle with the problem at your level? What kind of support school and teachers provide in understanding those concepts
3. Do you know that educational videos are shown in the school? What are those videos and how are these videos different from other videos.
4. How these videos are contributing in solving these problems?
5. When did the children last share about the videos and what did they share about the videos?
6. What changes, if any, have you noticed in the thinking and behavior of the children after watching the educational videos?
7. What are the changes you observed in your family and community with the intervention of Videoshala
8. (*Ask the questions if the parent has participated in the Videoshala project*) How have you been associated with Videoshala project?
9. What was your experience with the Videoshala project?
10. How was that experience helpful in life?
11. Has your child acted in a Videoshala video? What was your reaction before and after the video? Why?
12. Was there any change in your child?
13. Would you let your child act again? Why?
14. To those whose children have not been in the videos- Will you allow/encourage your child to act in the video? Why/why not?
15. What more would you like to share about the Videoshala project with us?

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