Evaluation Study of Lamp Pathways Project

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July 15th 2017

Chapter 1

Introduction

1.0 Context

The Learning and Migration Program (LAMP) Pathways represents step in an effort "to increase demand, access, retention and quality of secondary education in Kutch (Gujarat) with a special emphasis on girls"[1]. The evaluation, reported here, examined the process and progress of the program while also attempting to seek answers to the question of sustainability. The broad objective of the exercise was to contribute to the understanding of the secondary education intervention implemented by America India Foundation (AIF) and Cohesion Foundation Trust (CFT) from 2014 to 2016.

LAMP Pathways (LP) is an offshoot of AIF's earlier intervention in the Kutch in the area of primary education. The program focuses on the education of children specifically affected by distress seasonal migration and the lack of schools and related facilities like transportation, financial aid, hostels, basic infrastructure and, most importantly, quality teaching services among various others.

According to AIF reports, the primary education project seemed to have fared well in the region from 2003, especially, in raising learning levels by focusing mainly on Mathematics and Gujarati. However, it was subsequently recognized that in order to ensure that dropout rates remain low, learning levels stay satisfactory and a minimum desirable stage in education is reached (like a certification at the completion of 10^{th} class) the programneeds to be complemented with efforts to make secondary education a priority. This recognition was also enhanced by the shift in the focus of the discourse of education policy towards secondary education and the evidence based on the fact that "no country has reached even 90 per cent primary enrolments without attaining secondary enrolment of about 45%"[2]. Hence, there is a strong consensus that in order for the primary education scene to gain any momentum the secondary education must do noticeably well. This is what forms the "forward linkage" in the aspect of school education. But to keep a check on the dropout rates, ensure retention and transition to higher classes it is essential that the very basic facilities required to run a school are established in the first place. These include factors likes building the physical structure of the school in accessible distance from the students, making sure that the students themselves have the basic requirements academically to be attending that grade, making appropriate teaching facilities available. LAMP Pathways incorporated all these objectives within its implementation framework along with a special focus on gender sensitization and community engagement.

[1] Foxman, Drew, "Pathways of Light: A LAMP Approach to Secondary School Success (LAMP Pathways)", American India Foundation Trust, 2013

[2]Ramachandran, Vimala (2008): *EFA Case Study India 2003: Gender Equality in Education (India) Progress in the Last Decade*, Education for All-Mid Decade Assessment, New Delhi, NUEPA. Retrieved from https://www.researchgate.net/publication/23777822 on the 25 May, 2016

The program recognizes four critical issues as characterizing schooling in Kutch:

School Dropout – An outcome that is believed to result from multifactorial issues including factors extrinsic to educationsystem like poverty and migration and intrinsic ones such as low educational quality and a resulting poor development of literacy and numeracy skills at the primary level;

Cultural Barriers – Lack of family and community support to children in pursuing their education, as well as ingrained gender stereotypes leading to strong barriers for girls' education;

Challenges in Secondary School Access – Difficulty in accessing secondary schools, since few villages have secondary schools, costs increase, and first generation learners and their families find it difficult to meet the demands of secondary schooling; and

Poor Secondary School Retention & Learning – Under resourced, poorly functional secondary schools and inadequate academic foundations at the primary level combine to contribute to high dropout rates or low levels of learning. This also results in low confidence and self- efficacy with respect to students' future education and career aspirations.

1.1 Program Components

The LAMP Pathways program claims to be an 'innovation of simplicity'[3] and incorporates goals of learning, community engagement and transition to secondary schools. The program is divided in four phases and we study and report on Phase 2 and 3 here[4].

There are three overarching program components, which focus on:

(i) Enhancing Secondary School Achievement: working directly with students to improve their learning levels and school experiences
(ii) Community Engagement: engaging the communities that the students live in to address social and cultural influences on schooling
(iii) Basic Access Support: addressing contextual factors affecting educational access.

[3] Foxman, Drew, "Pathways of Light: A LAMP Approach to Secondary School Success (LAMP Pathways)", American India Foundation Trust, 2013

[4] In Phase 1, the program was supposed to conduct village selection and school identification activities. It also included events like conducting the baseline test for student selection and establishing foundational relationships with the schools, local governance bodies and communities. It was in Phase 2 that the classes began and the project was "fully launched". In Phase 3, the program was scaled up to more villages. In Phase 4, the program's aim was to withdraw and address the sustainability of the program in any form.

We explain each of these components below along with the implicit theories of change associated with each.

1.1.1 Enhancing Secondary Education

This component addresses both upper primary and secondary schools. In the upper primary schools (grades 7 and 8) 30 students with learning deficits (numeracy and literacy) are identified in Grades 7 and 8 each in every school. They are then given classes after school hours under a special Learning Enrichment Program (LEP) with a distinct curriculum.

The 1st stage of LEP focuses on addressing learning deficits. The program curriculum covers topics from Maths and Gujarati. The 2nd stage attempts to bring them to the grade appropriate levels of learning by covering topics from Maths and Science from the students' respective grades. In Phase 2(2014-15), the program ran in 25 elementary schools reaching 1566 students, of which 646 were girls. In Phase 3 (2015-16),the program expanded to 25 more schools covering a total of 2788 students.

As for the secondary schools, students from grades 9 and 10 are taught Maths and Science during school hours. There is emphasis on promoting study skills for better performance in exams. The program was run in 5 high schools in Phase 2 with 657 students(114 girls). In Phase 3, the program covered 5 more schools and covered 984 students(282 girls).

Under this main theme of the program, the nature of the interventions can be seen as scholastic and non-scholastic. The scholastic activities are conducted by tutors hired by Cohesion Foundation Trust (CFT) for the Upper Primary (7th and 8th grades), and Secondary (9th and 10th grades). The program strategy is different for both the sections. For Upper Primary, onlystudents with learning deficits are selected.

In contrast, all enrolled students are covered for the intervention targeting secondary school and what is selected aresubjects and topics that are particularly difficult and are important for students to understand properly. These classes are mostly meant to be remedial in nature where an effort to incorporate innovative learning techniques.

Under the non-scholastic activities the program targets the following outcomes: developing life skills of girls; changing attitude and enhancing information. The main activity is the creation of girl groups, which are meant to be venues for girls to develop "soft skills". The program hopes "to build confidence, self-esteem, and (act as an) agency for girls to break traditional gender roles"[5]. The tutor are the main facilitators here too with help from the program administrators. It is anticipated that these activities will discourage them from dropping out and boost enrolment and attendance.

This component of the program is mainly focussed on enhancing secondary school outcomes. The program, hence, works with students just about to enter this stage as well as those who are currently in it. The program design is summarized in Table 1.1.

[5] Foxman, Drew, "Pathways of Light: A LAMP Approach to Secondary School Success (LAMP Pathways)", American India Foundation Trust, 2013

Table 1.1 Enhancing Secondary Schooling: Design, Mechanisms and Desired Outcomes

Inputs	
Scholastic	**Non-scholastic**
Teaching Services (through hired Tutors)-Tutors who have at least a graduate degree and are trained by CFT to teach upper primary or secondary schools. They are also encouraged to participate in teacher workshops that inform them about new and innovative teaching techniques in classrooms. **TLMs**-Material inputs that CFT has acquired through their association with various educational organizations (Eklavya, JodoGyan, Avanti etc.)	**Program Facilitators**- Organize the meetings and facilitate discussions and activities that are aimed at increasing girls' self-esteem and confidence.
Activities	
Upper Primary (Grades 7 and 8)- Learning Enrichment Classes taken after school hours that are divided in two levels: 1. Level 1: Selected students taught to raise their basic literacy and numeracy levels. 2. Level 2: Students brought to the appropriate grade learning level. Secondary (Grades 9 and 10) – Classes taken after school hours for selected studentsin selected topics in Maths and Science.	Girl Empowerment activities- Creation of Girl Groups- Holding events that encourage girls to participate in activities like public speaking, book clubs and film screenings.
Desired Outcomes	
Percentage of students in higher learning levels increases. Clearer understanding of concepts in the respective subjects.	Girls get involved in activities that require them to step out of prescribed gender roles and get an opportunity that may not have been available to them in normal situations.
Higher levels of confidence in approaching school studies than before resulting in: >Regularity in classes >Better performance in school >Higher transition rate to the next level of education >Lowered dropout rates	Girl students are more optimistic about their prospects through education resulting in: >Better participation in schools resulting in better overall performance. >Lowered dropout rates, and, >Higher proportion of girls attaining secondary school level education.

More details about the structure of the classes and the specific inputs and organisation of the classes are provided later in the report.

1.1.2 Community Engagement

Community engagement was included as part of the program with the purpose of communicating the benefits of secondary education and also involving members of the community in achieving the goal of girl empowerment and education. Each of the 36 villages has been involved in this initiative throughout phases 2 and 3. 17 village communities as represented by School Management Committee members, Panchayat members and School Principals were to be engaged in Phase 2 whereas another 19 such community groups were engaged in Phase 3.

This component is seen as essential component to the larger aim of improving secondary education outcomes, working with the communities to change attitude and perception. As is evident from the name, the activities under this theme are done with the sole purpose of raising participation and interest amongst the local community members towards education and its allied activities. The activities held are mostly enrolment drives (*Praveshotsavs*), trainings for SMC members and creating volunteer groups in villages. Through the activities, the program sought to train the community members and hold various events where the stakeholders representing the communityhad an active role to play. AIF-CFT planned to conducts such activities through awareness coordinators and community mobilizers.

In Table 1.2, we describe the theme in terms of intended inputs through to the expected outcomes.

Table 1.2Community Engagement: Design, Mechanisms and Desired Outcomes

Inputs
Awareness Coordinators- Engaging the Community Mobilizers and ensuring that their work with the communities is consistent with the Community Engagement strategy
Activities
1.SMC meetings, gram sabhas, mohalla meetings, individual meetings, FGDs, etc. to create awareness about the benefits of completing secondary school education. 2.Creation of groups where functional groups like the ones mentioned above do not exist. 3. Events like enrolment drives, awareness campaigns, etc. where the community will be expected to play a very vital role.
Desired Outcomes

1. Increased awareness about the returns to investing in education.
2. Creation of groups that are formed of the community members that dedicatedly works for the betterment of education. "…attitudinal change and rising community aspirations."
3. Community is more involved in issues regarding education especially with regard to enrolment, infrastructure and, in general, motivating students to continue studies.
4. The community will also play a major role in promoting girls' education and empowerment.

1.1.3 Basic Access Services

Basic access services refer to interventions that are offered as part of a broad framework of activities, specifically to improve access to education. The component is meant to make available facilities like enrolment, transportation, learning materials, mentoring, information on government scholarships and other relevant government schemes to support secondary education. These activities were to be conducted in all the 36 villages that the program is active in across Phases 2 and 3.

The region that the program was piloted in (viz., Rapar and Bhachau) is one of the most under-endowed with respect to infrastructural facilities and rife with socio-economic discrimination which are major reasons for extremely low rates of literacy. Facilitating support services to school and educational facilities is consequentlya major concern of the program. The program does not necessarily "create" any facilities,instead it sought toidentify and offer solutions to existing information deficit and mobilizes support from community members and students. The activities depend greatly on the relationships established between communities and program facilitators and also very context specific.Hence, they are not uniform everywhere.

Table 1.3Basic Access Services: Design, Mechanisms and Desired Outcomes

Inputs
1.Information and support in school admissions and in availing government support in further education. 2.Mentoring and counselling- AIF planned to equip middle schools with selected materials to enrich the classroom resources. 3.Organise support from already available transport for students in case the schools are difficult to access.

Activities
1.Admissions support will be provided collectively for all children who need admission to a high school outside their village. 2.AIF will work together with SMCs and youth groups to work out collective and/or individualized solutions for children's daily commute to schools. Special efforts will be made to ensure safe commute for girls'. 3.Advocacy activities that will take up the process of upgradation of selected middle schools to the level of secondary schools. The AIF team will make a proposal to the village panchayats which are entitled to demand such facilities from the higher government agencies. 4.Making available infrastructural facilities like functional girls' toilets and addressing issues like teacher shortage.
Desired Outcomes
1. Improved infrastructural, transport and financial facilities. 2. Less insecurity as a result of facilities that ensure safe access. 3. Village level committees, SMCs and other community members can learn about steps they can take to ensure that schooling is within the reach of youngsters. 4. Improved access to education resulting in higher demand and retention. 5. Involvement of the local governing authority in the process of education.

1.2 Purpose of the Evaluation Study

The primary purpose of the evaluation was to provide independent feedback to AIFT about the implementation and the impact of the activities and their achievement of targeted objectives. In doing so, the study also hopes to contribute to what AIFT and other stakeholders, including Government agencies, knowabout strengthening girls' secondary education, and guide future work.

To this purpose, the evaluation exercise aimed to investigate structural, theoretical and practical foundations and implications of an intervention like LAMP Pathways. The evaluation specifically focussed on the time period July 2014 - July 2016, corresponding to Phase 2 and Phase 3 of the project.

The specific objectives were the following:

1. Evaluate and document the specific innovations created through the three specific endeavours under the program and assess their relevance in the context of Kutch.

2. Understand and assess the impact of different activities on participation, retention and transition of girls to secondary school education.The impact of important initiatives like *Praveshotsavs* (enrolment drives),

girl groups and community engagement in the specific context of girls' education were to be studied for this purpose.

3. Understand the influence of socio-economic factors on the demand and access of education in these regions. Although, not an explicit focus of the program, we wished to understand how other socio-economic factors affect schooling outcomes either directly or by interacting with gender.

4. Examine the sustainability of the program's impact. Considering that it is a donor-funded program, it's imperative to assess its future imprint. We hoped to draw an understanding of how strengthened the community and the local government are - for continued benefits after the external funding is scaled down or withdrawn.

In this study, weintended to carry out a "realistic evaluation" of performance and experiences of LAMP Pathways Program by looking at the activities under its different components, utilization of resources and relationships among stakeholders with a view to account for observable changes in the three program components.
Although, not an explicit focus of the program, we would like to understand how societal divisions other than gender play within the community. Given the assumption that each community has a stratified structure and within those layers members have some notions about education we attempted to inquire into the impact of socio-economic differences in the demand and access of education in these regions.

In an intervention of this nature the program implementers are the most resourceful. The sustainability of the program can be understood only when this particular stakeholder withdraws. The evaluation will seek to observe any extraordinary changes in stakeholder dynamics that may have the potential to maintain the momentum set by the intervention.

Chapter 2

Methodology

2.1 Design of the Study

As described in Chapter 1, LAMP Pathways combines a variety of components and elements within it expecting varying degrees of participation from different stakeholders. The initial phase of the evaluation study attempted to understand the proposed structure of the program and the conceptualisation of approaches towards issues it wishes to address. Alongside this we also tried to gain an understanding of the social context of the particular region of Kutch (Rapar and Bhachau) and identify peculiarities from available data and literature; an understanding that we would later add to with our own observations. This phase also helped, in familiarising us with the team and them with the purpose of the evaluation.

From the proposal and early interactions with the team we developed a theory of change and mapped the program inputs and activities to the expected outputs and outcomes (summarized earlier in Table 1). We recognize that a program such as LAMP Pathways, by virtue of operating in the region for the first time, can face situations resulting from the interaction among the socio-economical, historical, geographical and organisational contexts resulting in need to adjust of strategies. By extension, it could also have witnessed some unexpected successes that could not have been speculated during the inception and we remained open to finding such outcomes.

Given our objectives of being able to assess the program functioning and the outcomes that emerged from it, we adopted a "Realist Evaluation Framework" (Pawson and Tilley 2004). This approach to program evaluation, seeks to examine programs or policies in the form of working models or theories in action. The framework empowers the evaluators with the principles of the philosophy of realism to take into account the context in which a program operates and explains how the outcome was reached by recognising the underlying mechanism. The data (both qualitative and quantitative), observations and their subsequent analysis are all reviewed to reach a context-mechanism-outcome configuration or C-M-O configuration. Further description of the Realist Evaluation can be found in the next section.

2.2 Realist Framework

Drawing on the program's theory of change, we describe the methodology we propose to use for the evaluation. It is important to note that we are not attempting an "impact assessment" of the program. We plan to use mixed methods to conduct a "realistic evaluation". Realist(ic) evaluation is a means of obtaining a deeper appreciation of how complex programmes work; for whom they work, under what circumstances and in what respects, and why.

Some factors in the context in which the program operated might have enabled particular mechanisms to be triggered. Other aspects of the context might have prevented particular mechanisms from being triggered. Mechanisms represent how program resources are received, interpreted and acted upon by the

actors. Contexts are specific conditions under which the mechanisms operate. These conditions are broad ranging and can include characteristics of the social, political and economic structures, program participants, program staffing, organizational context and historical and geographical context. From a realist evaluation perspective, the same program can work in different ways for different participants, depending on context. This interaction between context (C) and mechanism (M) is what creates the program's impact or outcomes (O). The realistic approach assumes that there would be nuanced outcome patterns of successes and failures within and across interventions. The CMO configuration is used as the main structure for their analysis.

We have undertaken intra-program comparisons (i.e., comparisons across different groups identified on the basis of different outcomes involved in the program) by developing case studies. The identification of sub-groups for comparison happened over the course of collecting data. Once patterns of outcomes were identified, the mechanisms generating those outcomes were analysed, the contexts in which particular mechanisms did or did not work, determined. The analytic process has not been sequential, and resulted in a set of 'context-mechanism-outcome' (CMO) statements.

The intention of the evaluation has thus been to determine the inner workings which produce diverse effects with the aim of a better-focused and more effective program.

2.3 Sources of Data

Secondary Data

The evaluation has taken into account the data that the CFT team has collected over the course of the implementation of the program. The annual reports and reports based on the activities/workshops conducted by the other organizations like Anandi, VASCSC, etc. over the years for the tutors did also serve as important sources of qualitative and quantitative data.

Other sources of secondary data for the project included District Information System for Education (DISE), Annual Status of Education Report (ASER), official school records for the years 2013 to 2016 and Census data of 2001 and 2011 to know the population statistics of the region.

Primary Data

The nature of the study demanded insights that could be arguably delivered only by data that is primarily qualitative. The tools needed to capture factors like the attitudes and beliefs of the individual stakeholders, the response for the program, the perception about the program, etc. Data collection instruments were examined for their efficacy in delivering the desired information and reviewed against the capacities of the investigators. As already described the data collection happened in two stages separated by the sampling.

(1) *Stage 1*

The data collection in this stage needed to use methods and techniques that would allow respondents to share their experiences with LAMP Pathways. Since time posed a constraint in order to meet all the team members individually in their work environment, workshops were held where we could meet the tutors

and other team members. During these workshops we conducted Focus Group Discussions (FGDs) with tutors and team members and also administered a structured questionnaire to them. The FGDs were moderated with the help of a set of semi-structured guidelines. Participation of members was encouraged and observed. This exercise was helpful to identify the active and passive members. This was correlated with their responses in the questionnaire.

The questionnaire mainly contained questions about the personal background of the respondents like their educational qualification and job experience as also about their interaction with team members and redressal of any issues that they have faced. Also, specific questions about classes, including methodology, classroom environment and student performance/response were also asked. This was a partly guided exercise where each question was explained to the respondents to avoid confusion.

In order to break the monotony of FGDs and interviews we conducted two activities specially designed to draw responses relating to their routine activities which otherwise would not have been captured. In one of the activities- wire/ experience graph- a malleable wire was given to the participants to represent their highs and lows during the program. They explained their 'graphs' one-by-one in the order they were seated. In the second activity- seating arrangement- the participants were given a piece of thermocol, ice cream sticks and some colored clay. They were asked to assume that the thermocol was their classroom and the ice cream sticks their students to be marked as boy or girl by the color they choose from the clay. They were asked to arrange the apparatus to represent the seating arrangement in their daily classes. They were also given the option of choosing other colors to mark students with certain specific behaviors (like distracting, weak, studious, etc.) or belonging to certain communities or friend circles.

All four tools were used to interact with tutors (both LEP and high school), while for the rest of the team all except the last exercise was used.

(2) ***Stage 2***

In stage 2 special attention needed to be given for designing appropriate tools for students. Although we meant to ask them questions that are of an academic nature we decided to utilise a more moderate approach where we did not conduct the traditional pen and paper test, but engage with them personally and ask them certain pre-determined questions (Appendix 2.1for the list of questions and topics discussed). We asked the high school students to identify chapters that they have been taught by their tutors.

In LEP after asking a couple of questions on Mathematics (like basic operations and fractions) we asked them to act out a play for which the script was provided to them. It must be mentioned here that for any of these exercises a somewhat random selection of students was made; in that, we first chose from the attendance list and then asked for a second opinion from school teachers and tutors to see if the selection had a mix of so-called good and weak students. The numbers in each interaction did not exceed 12 (except in Ghanithal). Only special care was made to ensure that the girls and boys were in somewhat same proportions. We ended each exercise by asking each one of them a couple of non-academic questions like their school environment, future plans, etc.

To interact with the girls we used a semi-structured interview type focus group discussion. They were mainly asked about the kind of activities they did and what kind of response they found. We also tried to discuss their long term plan as a collective and what factors would allow or stop them from achieving it. A similar kind of interaction was used for youth groups. For community meetings and interaction, focus group discussions were conducted, where the questions mainly had to do with the responsibilities of stakeholders like the parents, other community members, schools and students themselves. We tried to understand their position on the program's support to the schools of their respective villages.

Analysis included reviewing questionnaires, interview transcripts, video footage and curating photographs taken during various activities during the investigation.

Next in the process came the task of data collection. For this we decided to interact with the on-field team members (that would cover two of all the categories of stakeholders) and record their experience with the program. We included tutors, supervisors, cluster coordinators and program managers (including the academic coordinator) in what will be referred to as Stage 1 of data collection. Stage 1 was followed by sampling.

We divided villages according to the kind of classes that the program ran there- only LEP or both LEP and high school. In these individual categories certain pre-determined objective and subjective parameters' scores were combined and the classes were ranked. The objective parameters were decided from the data from the first two years of implementation made available by the AIF-CFT team. The subjective parameters were decided from the information both provided and collected that came closest to have captured a general sense of satisfaction with the classes in the opinion of the team excluding the tutors.

The ranking resulted in selecting a set of villages that have had varying degrees of success with the program. We decided to maintain the geographical division of clusters made by the program while the process of selection. The objective of Stage 2 of data collection was to be able to build cases that would provide a cohesive picture of the villages with the factors that played out in the specific ways when the program was implemented. Visits to villages were conducted that would usually last a day (two, in few cases). Meetings were arranged by the team on request with the students, school staff and community members.
The investigation and the tools used or created were designed to capture the peculiarities of each village and their respective respondent categories. It was deemed fit to give control to the respondents too to some extent whenever it could be reasonably ascertained that the issues relevant to the investigation were being discussed even if they were not the expected topics of discussion or even directly asked. Essentially, the underlying idea here was that the most prominent issues would emerge if this was the nature of interaction.

2.4 Sampling

2.4.1 Objectives of Sampling

The aim of the sampling process was to identify cases that exemplify the process of the program. We took into account various objective parameters and subjective parameters. We also believe looking for a correlation between the two would be a useful exercise in determining the final sample.

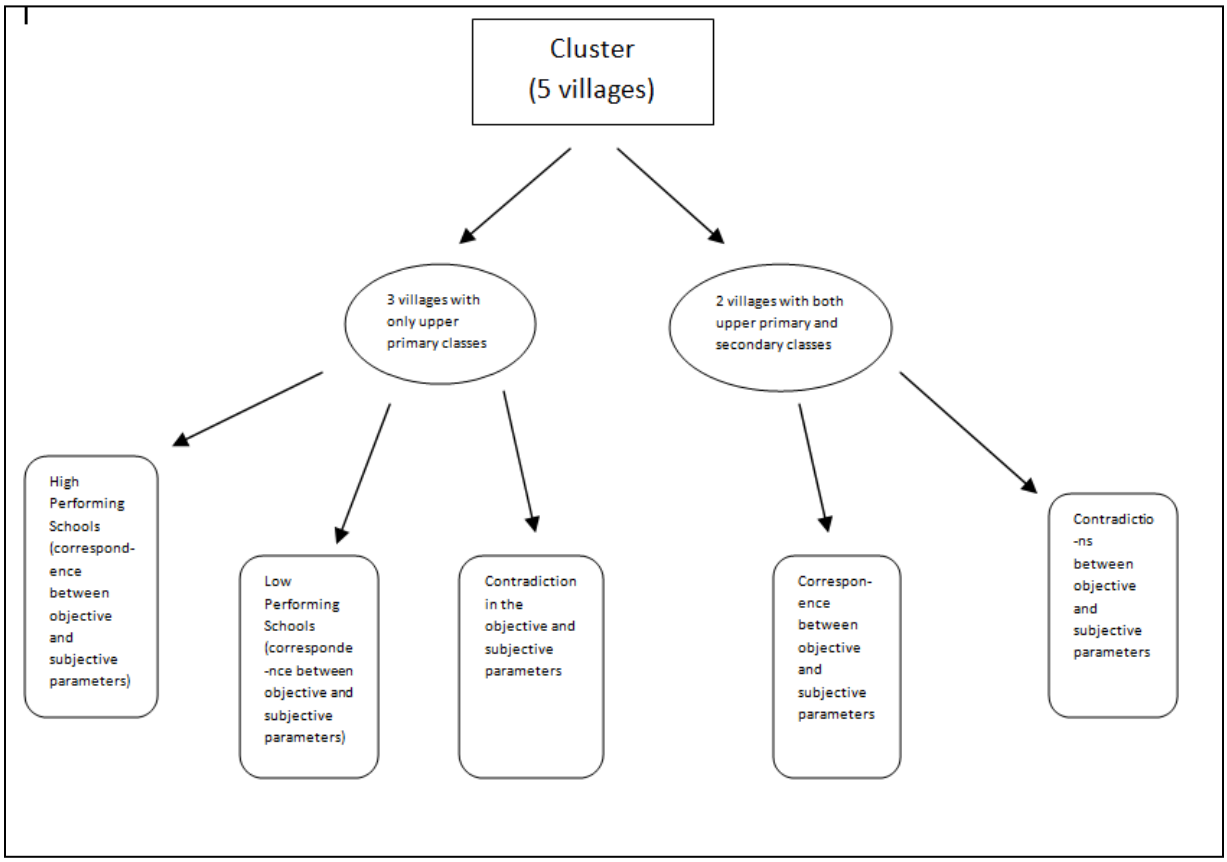
2.4.2 Process of Sampling

The sampling technique we have used is judgemental (or purposive). But, as already mentioned, we have not completely given into only our own perception of the program and have conducted the preliminary data collection drive. We are informing our decision to select the respective villages with data both quantitative and qualitative that are corresponding in entirety with each other and also where they seem to contradict. Contradictions are as important as correspondence since its existence is a good opportunity for us, as evaluators, to explore possible reasons for why they arise. Within the realist framework that we had proposed to work these contradictions are major pointers as to what works and what may have to be revised.

As per the Terms of Reference (ToR), we were to evaluate phases 2 and 3 of the program. Phase 2 ran from June 2014 to April 2015 and Phase 3 from June 2015 to March 2016. Phase 2 saw the implementation of the program in 17 villages that come under the Chitrod cluster and Phase 3 expanded the expansion of the program to 19 new villages (18 in Adesar cluster and 1 in Chitrod cluster). We are basing our evaluation framework on these two time periods. The sampling that has been done will prove insightful not only because of the comparison of schools where the program ran for two years with the schools where the program ran for one year but also in understanding differences that arise from regional factors since all schools added in Phase 3 except one are from a different cluster.

The objective of this process was to finally 5 select villages/cases from each phase where two are villages with high schools and 3 others that have only elementary schools making the entire sample 10 (see figure 1). This is because there are more villages with only elementary schools than villages with high schools under the program but the main focus is ultimately on secondary schooling. And although we chose to purposively sample the villages, we wanted to stay as close as possible to representing this structure. Furthermore, we are selecting villages as the sample unit and not schools. Village as a unit gives us more scope to understand the dynamics amongst different stakeholders and also because the program does not limit itself to a classroom based intervention. By taking villages with high schools we are also taking into consideration elementary schools in them where the program is run. The villages that were selected from Phase 2 hold additional significance since in these are villages that have been under the program for two years as opposed to those from Phase 3 where the program had completed one year at the end of the 2016.

Figure 1 Sampling Procedure and Criteria Considered



Chapter 3

Analysis of Findings

This chapter presents the findings of our field enquiry. The discussion in the chapter is organised in two sections. In the first section, we explain the physical, social and organisational context of LAMP Pathways. The role and functions of tutors and supervisors, cluster coordinators and managers, who are the main provider stakeholders, is part of this discussion. We present the analysis of our findings with respects to mechanisms and outcomes of program in the second section.

3.1 LAMP Pathways: The Context

3.1.1 School Infrastructure and Classroom Environment

In most of the villages we discovered that the infrastructure with regard to the school building and classrooms equipped with basic provisions like a board, cupboards, display area for charts and TLMs are present. The only difference we found was with regard to seating arrangements: in some primary schools the students had to sit on the floor on mats instead of on benches. There was also a common room that could serve the purpose of a laboratory in most elementary schools. This room had very basic instruments like geometry kits, science related charts and some books. However, it is unclear how often this facility was used.

The LEP class is not much different from a regular classroom unless they have a separate venue altogether to hold the classes. In most villages, the program has been successful in getting permission to have classes with the selected students and have been able to find space in the school premises itself[6]. However, there are villages where the classes are held in common community spaces like the panchayat office, or a common hall where there are chances of the class being interrupted due to events like an election like it reportedly did in Bhutakiya and Ambaliyara. In the case of Fatehgarh in Adesar cluster, the tutor did not have a place to have the classes in but then when eventually they got a class in the school the LEP students had a separate class assigned to them for during the school hours. The classes are not held like supplementary or remedial classes, as they were supposed to. Instead, the classes were being conducted as a regular school class exclusively meant for LEP students.However, the tutor reported being satisfied with the arrangement that the principal of the girls' elementary school asked for.

In high schools, the buildings are big enough to accommodate classes 9 and 10 and they usually are not higher than a single storey. Most schools had a common area in the centre like a verandah where the students assemble. The high school classrooms all have benches but they are not as endowed in other display material as their elementary counterparts. The severe shortage of teachers in high schools led to LAMP Pathways designed curriculum to be taught during school hours by the program appointed tutor. Here, although the issue of finding a place is sorted, difficulties arise in getting access to facilities (like

[6] "As part of the larger sustainability of this project, AIF will work closely with community leaders and government bodies to conduct classes in community contributed venues, as well as government school premises. Our goal is to move at least 25% of the classes in government school premises by end of the year."(Foxman, Ibid: 13)

the laboratory) after the permission to operate during class hours is granted by the school. The laboratories are usually locked and presumably in poor and dilapidated condition (we were unable to observe them). The high school students do not have practical examinations but this quite literally shuts the opportunity for them to be able to see a live demonstration of a science principle through experiments. In the case of Aadhoihigh school, the tutor had permissions to use the LED TV in the school but uninterrupted supply of electricity was usually the biggest constraint.

3.1.2 Role and Functions of Provider Stakeholders

3.1.2.1 Tutors

Tutors fall under two categories in the program- one the LEP tutors, who teach grades 7 and 8 (also known as Upper Primary), and two, the high school tutors, who teach in grades 9 and 10 (or the Secondary School). As is the design of the program, the LEP tutors are mostly there to provide a supplementary class to a select group of students that will ultimately make the students confident and help them catch up withtheir grade-level studies. A similar role was originally intended of the high school tutors as well before it had to be modified to adapt to the situation at the high schools which will be discussed in the section below.

(a) LEP tutors

The major responsibility of the LEP tutors is teaching. The 30 students who are selected on the basis of their learning deficits are included in each LEP classes. For the first half of the academic year the tutors teach content that is meant to address the basic literacy and numeracy skills that the students have been unable to acquire even by this stage in their education. The syllabus for this part of the course is almost entirely derived from that of LAMP, which was a program that ran in the same region for the grades 3, 4 and 5. The subjects taught in the first half, or Level 1 (L1), are Mathematics and Gujarati. The students are supposed to be taught basic Mathematics operations through the use of introductory stories, teaching learning materials (TLMs) and other participatory activities. Gujarati is to be taught by reading and writing, thus, gradually building the students' vocabulary and confidence in the language. Finally, in the second half of the year, referred to as Level 2 (L2), the tutors are supposed to cover selected lessons from Mathematics and Science that are part of the 7^{th} and 8^{th} grade school curriculum.

(b) High School Tutors

The high school tutors are supposed totake classes in specific topics in Math and Science during school hours all throughout the academic year. Candidates withat least an undergraduate degree are preferred for the responsibility of a high school tutor. The rationale behind this is that such candidates will be able to understand the significance of 9^{th} and 10^{th} grade and prepare the students accordingly.

Disconnect between design and practice

Contrary to the original proposal of the program that theses tutors only teach specific topics, in practice tutors are acting like substitutes to regular teachersbecause of teacher shortage in almost all schools, especially so in the case of subjects like Mathematics and Science. However, the syllabus to be followed

by these tutors has not changed from the original proposal and remains confined to those considered important and particularly difficult topics.

Ambiguities in identifying "participants"

Further, given that there is no selection process to identify the students with learning deficits in this part of the program,all enrolled students are considered as recipients of the program's intended benefits. The only condition the program has applied to label a high school student as a program participant is his/her regularity in attending school. If the student is regularly absent then s/he is not considered as part of the program. The students are part of the classes when they attend classes but they are not considered as participants of the program. This not only affects in the delivery of the program but also makes tracing its impact difficult.

Demands of Tutor training

To prepare for the classes the tutors are given a schedule to follow and there are regular weekly meetings that the tutor is expected to attend to discuss and understand better from his/her teammates how to teach topics of the upcoming week to their students. This is also the time they may discuss their difficulties in, say, dealing with students, community engagement or following the weekly plan.

In addition to these "in-house" training sessions the program invites other educational organizations to hold workshops that aid in developing the program's pedagogy. Avanti and VikramA Sarabhai Community Science Centre (VASCSC) have conducted workshops where tutors stay in for the length of the event usually lasting a couple of days. LEP tutors are expected to attend the workshop held by VASCSC which spans four days. They are taught to demonstrate mathematical and scientific principles using do-it-yourself models, charts and TLMs. The workshops conducted by Avanti are meant for high school tutors.

However, we found that the trainings often placed significant demands on the tutors. Attending weekly meetings on a regular basis wasnot always possible due to distances and differential learning pace.
One ex-tutor mentioned that on some occasions he felt they could skip some of the weekly meetings and focus on completing the syllabus instead. But attending the meetings remained an integral part of tutors' job requirements.

In Search for Appropriate Teachers

The program's criteria to employ candidates was those "are qualified enough to teach at this level"[7]. The highest educational qualifications of the tutors for the upper primary grades that we interacted with during the study are given in table. This table includes five tutors that have been retained from the previous form of the program (LAMP) that ran for classes in primary section lower than grade 7, as well as the newer recruits.

[7](Foxman, Ibid)

Table 3: Educational Qualification of LEP or Upper Primary Grades Tutors

Highest Education Qualification	
10th	1
12^{th}	2
Graduate (either pursuing or completed)	12
Post-Graduate (either pursuing or completed)	4
Total	**19**

In its purpose to involve local participants in the functioning of the LAMP Pathways, the program's first preference is always recruiting locally based candidates.

In a few cases like Devisar, Palasva and Chitrod the organisation was unable to find such a regular tutor for elementary and secondary classes. In Devisar, a small secluded village, the program could not find even any 10^{th} grade graduates. The program had to recruit a tutor from a neighbouring village.

Chitrod, a village where the program has a cluster resource centre, could not maintain its primary section classes because of lack of suitable candidates and low response from students in terms of attendance. There was a particular case of a recruited tutor who turned out to be an alcoholic and very irregular. Following such conditions the program was immediately discontinued before the first year of implementation was completed.

In Palasva, the high school itself hashad a serious deficit of government employed teachers (at the time of our study, there was just one teacher in the school). Therefore, it was not surprising that the program could not also find a candidate capable of teaching grades 9 and 10. A tutor from the neighbouring village of Gagodar was eventually hired who has been regular ever since.

Apart from these instances, there may be a conflict of expectations between the organisation and the hired tutor as experienced on ground.

For instance, the minimum required qualification and the expectation of remuneration poses challenges for the program to function smoothly. The team members mentioned challenges in scouting for new candidates and ensuring that they maintain a decent track record during the course of their employment. This is irrespective of how effective they really are in their work.

They did not seem to face many issues from tutors who have been associated with them since the previous programs; in fact, they would prefer them if they were available. It is the new candidates that bring great uncertainty for them. The team claims there are instances whereoverqualified candidates apply and are willing to be part of the program but their salary expectations often hinders their decision of joining. Such

candidates, no doubt an asset to the program, also bring innate uncertainty about their stability in the program since they leave as soon as they get a better opportunity better suited to their qualifications and expectations.

Of course, hiring the right candidates is just the initial step in the program implementation. The added challenge facing the program is the supervision and coordination of activities considering the fact that this rural context is as constrained by socio-economic conditions as it is by geographical factors. Candidates who get hired may or may not have any aspirations to continue in teaching for long. This job is in transit to a better one if they can. In such cases the monitoring of these classes needs to be done with greater care and supervisors and coordinators alike need to make sure that the tutors are on schedule and attend most training meetings.

On the other hand, there were also a few tutors who wanted to be part of the profession and either have already obtained or express a desire to continue towards obtaining a PTC (Primary Teacher Certificate) diploma.

3.1.2.2 Organisation Structure

The tutors are subject to supervision by their supervisors, who in turn report to cluster coordinators.
In in the beginning of Phase 2, there were 3 cluster coordinators who were responsible for five sub-clusters under them. Each sub-cluster had three to five villages and five to eight classes operational in them. There were five supervisors for each sub-cluster.

This structure changed in Phase 3 when 19 more villages were added and the program was consequently divided into two clusters- Chitrod and Adesar. Each cluster now had one cluster coordinator and four supervisors. The supervisors now had three to six villages under their supervision. The Chitrod cluster coordinator would have 17 villages and the Adesar cluster coordinator 19 villages to oversee the program in.

The supervisor is supposed to observe the classes, the tutor's conduct, methods and the students' response to it. The cluster coordinator visits a class less frequently than the supervisor since he is in-charge of the program's operation in an entire cluster which has close to 18 villages. They are also responsible for coordinating and conducting the weekly meetings and overseeing its proceedings. They are meant to counsel to tutors when made aware of difficulties both inside and outside the classroom.

The program has only had male supervisors and cluster coordinators with the exception of just one female team member who left after Phase 2 (AIF-CFT data).

3.1.3 Pedagogy and Class Proceedings

The main players in translating the intentions of the program into reality are the tutors who are the representatives of LAMP Pathways on the field. As discussed earlier,we primarily used qualitative tools like semi-structured questionnaires and focus group discussions with the tutors. Their responses helped understand the functioning of the program through their perspective. Many issues, challenges as well as

successful endeavours emerged in their stories. The discussions and interactions threw light on what could be stepping stones as well as challenges.

3.1.3.1 The Curriculum and its Delivery

(a) LEP

The syllabus for Level-1 is meant to make the students confident in the fundamental knowledge of mathematics and language that they should have acquired by now to grasp the concepts of their current classes, while that for Level-2 is grade-appropriate.

We observed that while the Level 2 syllabus detailed the chapters and the topics within them aspart of weekly plans, the syllabus was not as detailed as that of Level-1. For example, the plan for Week 10 in Level 1 is about fractions. The syllabus mentions the TLMs are expected to use for this purpose. In contrast, for topics such as 'Profit and Loss' in Mathematics or 'Air Pressure' in Science in Level 2, the teaching methods are not specified and the tutors lack guidance on the planning and execution of the classes.

Although tutors are meant to attend the weekly training sessions and learn ways to teach a topic in their class, those who are not trained teachers may face difficulties in doing. 7 out of the 19 tutors we spoke toshared that they had used or been able to use TLMs or certain teaching methods, because of lack of information available to them.

Keeping on Schedule

Half (10 out of 19) of the tutors also reported taking more time than stated in the schedule to completely cover topics. The other half were certain that they could keep up with the schedule.

This poses an interesting challenge for the team members responsible to keep the program on track. This particular situation demonstrates the difficulties that both the lack of information to the tutor and the optimum pace at which different students can learn.

The LEP students are most definitely the ones who need special attention and keeping to the plan is a requirement of the program. If the program rushes, the students might miss out and if the tutor slows down s/he will have to cope with the differential paces of the class and the weekly training sessions.

Some of the current as well as ex-tutors spoke about their inability to cover the topics of the weekly plan exactly according to the schedule given to them; the reason being, the tutor trying to adjust his/her pace to that of the students' learning. The tutors may have to miss their weekly meetings to take the extra class. Moreover, this can also result in the program forming a poor perception of the tutor's abilities overall. The tutors were aware that in the previous Phase, inability to keep up with the program schedule had resulted in some tutors scoring low in the section of 'Regularity of Facilitator in Trainings and meetings' and even result in the removal from the program altogether.

The plan is like an air-tight container sometimes where any spill-over to the next week can cause a problem, evidently more for the tutors.

(b) High school

The curriculum followed in the high school is laid out in a plan similar to the upper primary syllabus. The plan for the upcoming classes is also decided in the meetings that are held every two weeks. The tutors meet and take a demo class for a topic each to decide how to teach them. Presumably they are also trying to incorporate their learning from the trainings they receive from the workshops that are held for all of them by other organizations.

Several tutors raised concerns about being able to deliver the planned curriculum. These included:

The techniques are not always possible to use in places where, for example, electricity supply was irregular which made it difficult to play a CD. Since the high school tutors are working during school hours they have to seek permission to use resources available in the school like the laboratories. Although not all high schools seem to have them (no practical examinations are held for grades 9 and 10) the ones that do usually are unused. The tutors cannot always get access to them and so they cannot show experiments or even use the space.

For the ones who do get the materials the bigger problem is the class size. The average size of a high school class in the program is around 80. Tutors expressed this as the major reason stopping them from using the specific methodology that they learn from the trainings and workshops.

Another point raised about this during our interaction with the high school tutors is that all the external trainings are done in English and Hindi. Time is spent in translating the material to Gujarati not to mention the contents sometimes, they believe, are not all suited to the needs of the state syllabus. Therefore, they believe these inputs from the trainings and workshops then will not be adaptable in their classes.

In the particular case of high school grades, the larger issue is that the students very often struggle with basic concepts of the subjects that the program teaches- Maths and Science. The program was originally designed to be supplementary to the school classes. However, later to address the lack of high school teachers it operated as a “during school” program. This meant the tutors taught during the school hours just as any other school teacher. This also implied that the earlier design element that the program meant to work in would have had to be modified since it can no longer operate under the assumption that the students know or have been taught the rest. The topics identified as difficult naturally will be more difficult to grasp than as conceived before. And unlike the LEP classes, the high school tutor is handed the task of teaching a much larger group subjects that are already considered very hard and difficult to score in.

High schools are not very different from the upper primary grades in terms of the level of learning that most students possess. In Jangi, the principal remarked that many students struggle with basic skills like reading and writing even at this stage. The principal’s opinion about the program’s methods were,

“Achhahaiaisetoh”(It is good) and then paused for a while and then said that the students are very weak in the school. “Uska aur humaare sabka padhaane ka tareeka achha hai… lekin bachche bahot kamzor aate hain”. (We all use good methods for teaching... but the students are very weak).

In such cases the strategy to cover difficult topics from Maths and Science may not be sufficient since students need support in the basic, pre-requisite topics. The tutor was requested by the principal of the high school to switch his teaching style from that of a lecture to giving notes and some sort of writing exercises to the students. This is usually the way the other teachers teach and this is considered the most appropriate for the Board exams. The students we interacted with in Jangi had difficulty answering questions on Mathematics and Science either because they did not remember them or because those topics were never covered for them.

Maintaining interest and discipline

In some instances, the tutors of both upper primary and secondary classes, said that maintaining conducive environment in the class for the students was also a major concern. They need to ensure that the students are engaged and find the class interesting to avoid distractions.

The upper primary students attended class either before or after the school. Both the times they are vulnerable to lose focus. Although not mentioned as a pressing issue some tutors did say that they have to be alert in the class. This is also a reason taken into account when the decision to scale down the program had to be taken. The decision depends on a scoring system developed by the AIF-CFT team where the supervisors and cluster coordinators mark tutors on various parameters including ‘Classroom environment and Pedagogy (Use of TLM, grouping, activities, etc)’. In the case of Pragpar, where the program had two LEP classes (boys’ and the girls’ elementary school) the main reason the team cited to not include it in the 4th phase was that the respective tutors were not able to keep the class in control. This is also the case in high school classes where, as mentioned earlier, the large class sizes make it a difficult environment for tutors to maintain discipline and effectively deliver the curriculum.

A particular extreme of this situation was reported in Chitrod where the high school’s senior teacher and principal-in-charge had to intervene often in the LAMP Pathway’s tutor’s classes. The tutor was also highly irregular and was said to be ineffective by both teachers and students. The students in this school were also among the first we interacted with in the study and their preparedness for the Board exams was not satisfactory.

In the case of Palasva, on the other hand, the tutor showed greater regularity and his lessons were well-received. Among the all the high school students we had interacted with this group was perhaps the most confident and better prepared.

Learning outcomes

Observations were also made to measure the outcomes by interacting directly with students of all grades that the program targets. Although we started with the idea of doing an academically oriented assessment and following with a discussion with them about their tutor and other issues we decided against the former for two reasons.

We realized, especially, after the first interaction with the high school students at Chitrod village (the first village we conducted our activities and where the organization's resource centre is) that we might be expecting different things compared to the program. Imposing our expectations may not be fair in such a situation. But this was also an eye opener in two ways- we got a better sense of what these tutors are there to do and how different it is from a traditional government appointed high school teacher.

In Chitrod, we have set questions based on concepts from the syllabus. These had also been prepared directly from their text books, so as not to be over bearing on the students. However, the response was disappointing because it turned out that their tutor hadn't turned up for a long time which meant they hadn't learnt a lot of things they should have by now. It is important to mention here that this school is where the pass percentage has been the highest among all the program high school results. Yet hopes that the situation would be different with a high school where the tutor was regular (Jangi) were was not realized either.

In subsequent interactions with participants in other clusters, we did not insist on them answering questions. We first consulted with them about the chapters they had done and then ask a question or two from only from those chapters. If they seemed too perplexed, we would simply ask them to locate the chapter and concept in the textbook for us. Some participants could find the chapter but not the concept and others could not answer at all.

Only in Palasva, the 9th grade and 10th grade students had the confidence to try and answer one question each correctly, as opposed to no response at all. Even here, the concerned participants could not explain how they had gotten to the answer, even though they had the right one. The LAMP Pathways tutor here was regular and there was also mention of tuition classes in the village. Of course, not everybody could afford them. But in the rest of the villages, participants could not answer most of the questions barring maybe partly answering one or two questions from topics from their previous grades and semesters.

We have to be careful in how these interactions aimed at assessing learning outcomes are interpreted. The anxiety that often comes from being "tested" orally by unknown people in a foreign language (hindi) is likely to have affected their responses and therefore the disappointing responses we got need more probing.

More importantly, these results have to be interpreted in the context of the reality of the Indian schooling system that relies completely on rote learning in which students pass exams by memorizing questions and answers to them. In such a system, the fact that participants would struggle with questions that are not familiar to them is not surprising. However, this misalignment between "learning" and "passing" poses a challenge to an intervention like LAMP. Should the program focus on ensuring that the participants pass the exams or they learn the concepts? While the latter might be the ideal thing do, the kind of efforts it requires might be outside the ability of individual organisations and interventions.

3.2Social-Organisational Context and Program Outcome: Patterns of Interaction

(a) Enrolment and Attendance

LAMP Pathways operates in moreupper primary classes than it does in secondary level classes and, consequently, has more students in the former stage of education (Tables 3.1 and 3.2). The classroom intervention component of the program focuses on working with academically weaker students in these grades to reduce the extent to which children might be under-prepared and loose interest in further schooling.

The program maintained records of its students' attendance in the two Phases. Due to the decision made in the middle of Phase 2 to excludeGrade 6 in the program and instead focus only on Grades 7 and 8 in the upper primary section the attendance record for the latter grades are available from December2014 to April 2015. In Phase 3, attendance was recorded from August, 2015 to April, 2016.

Enrolment numbers and attendance rates trends across the program are given in Table 3.1.

Table 3.1 LEP Students Enrolled in Phase 2 and Phase 3

		No. of Students				Total
Grades		7		8		
		Boys	Girls	Boys	Girls	
Phase 2 (Cluster- Chitrod)		323	270	384	259	1277
Phase 3	(Cluster- Chitrod)	409	286	465	261	1421
	(Cluster- Adesar)	392	302	380	293	1367

Source: AIF-CFT records.

Table 3.2 Enrolment Figures of Phase2

Grade 9 (Phase 2)	**Enrolment**	**Grade 10 (Phase 2)**	**Enrolment**
All	204	All	150
G	60	G	49
B	144	B	101

Source: AIF-CFT records.

The attendance rates in Phase 2 and 3 have been calculated on a monthly basis.

In Chitrod cluster, where the program ran for two consecutive years, three classes in two villages- Amaliyara and Jangi- maintained high attendance rates in grade 7 and 8[8] (Table 3.3 and 3.4).In Adesar, at the end of one year's implementation the Khandek, Shivgadh and Lakhagadh showed the highest average attendance[9]. Gagodar and JunaGamtal were among the villages that recorded the lowest attendance in the two Phases[10]. In Adesar Cluster, classes in the villages of Bhimasar, Pragpar and Bhutakiya recorded the lowest average attendance[11].

[8]One class in Jangi, Jangi-2, was discontinued in Phase 4.

[9]Both Khandek and Shivgadh were discontinued in Phase 4.

Table 3.3Attendance Percentages in Grades 7 and 8, Phase 2 (Cluster-Chitrod)

Phase 2 (Cluster-Chitrod)							
Grade 7				Grade 8			
	Highest		Lowest		Highest		Lowest
Villages	Attendance Rates	Villages	Attendance	Villages		Villages	
Kanmer	91%	Gagodar	61%	Kumbharia	91%	Shikarpur	59%
Amaliyara	90%	Samakhiyali-Boys	57%	Jangi-2	91%	Ghanithar	55%
Jangi-2	90%	Ghanithar	56%	Amaliyara	89%	Juna-Gamtal	55%
Kumbharia	90%	Juna-Gamtal	53%	Kanmer	88%	Samakhiyali-Girls	54%
Jangi-1	85%	Samakhiyali-Girls	52%	Aadhoi-Boys	88%	Samakhiyali-Boys	51%

Source: Same as Table 3.1.

Table 3.4 Attendance Percentages in Grades 7 and 8, Phase 3 (Cluster- Chitrod and Adesar)

Phase 3 (Cluster- Chitrod)							
Grade 7				Grade 8			
	Highest		Lowest		Highest		Lowest
Villages	Attendance Rates	Villages	Attendance Rates	Villages	Attendance Rates	Villages	Attendance Rates
Amaliyara	92%	Gagodar Girls	71%	Amaliyara	92%	Shikarpur	67%
Jangi-1	89%	Gharana-Boys	68%	Jangi-2	89%	Aadhoi-Girls	67%
Shivlakha	86%	Aadhoi-Girls	67%	Jangi-1	89%	Juna-Gamtal	60%
Jangi-2	86%	Juna-Gamtal	60%	Shivlakha	85%	Gharana-Boys	60%
Aadhoi-Boys	86%	Gharana-Girls	59%	Lakhamsari	84%	Gharana-Girls	58%
Phase 3 (Cluster- Adesar)							
Grade 7				Grade 8			
	Highest		Lowest		Highest		Lowest
Villages	Attendance Rates	Villages	Attendance Rates	Villages	Attendance Rates	Villages	Attendance Rates
Khandek Girls	90%	Sanva Old	68%	Fategadh Boys	90%	Pragpar Boys	64%
Khandek Boys	90%	Bhimasar Girls	62%	Shivgadh	87%	Bhutakiya	62%
Shivgadh	87%	Bhutakiya	61%	Lakhagadh	86%	Bhimasar Girls	62%
Manjuvas	86%	Bhimasar Boys	59%	Plasava Girls	85%	Bhimasar Boys	59%
Lakhagadh	86%	Pragpar Boys	56%	Khandek Girls	85%	Devishar	50%

Source: Same as Table 3.1.

[10]Gagodar and Juna Gamtal continued onto Phase 4.

[11]Pragpar was discontinued in Phase 4 whereas Bhimasar and Bhutakiya continued.

The attendance records for classes 9 and 10 have not been recorded the way it had been for the Upper Primary classes. The program team justified it saying that that the schools took the attendance and therefore it was not deemed necessary to keep track of the rates separately. The program does keep an enrolment record where students are identified as LAMP Pathways beneficiaries based on their regularity in school (as explained in the Program Description). Records of the secondary section attendance accessed later for the study showed discrepancies when compared to the enrolment data of the program[12]. Hence, a quantitative analysis of the same was avoided.

Causes of Lack of Attendance and Motivation to further in Education

Given the high variance in attendance rates, we tried to understand factors affecting themby talking to LEP tutors, school staff and the students themselves. The most vulnerable group is obviously the girls who have reached adolescence and whose responsibilities only increase than before. They remain absent (for both LEP and school classes) when they have to take care of the house and siblings when parents are out to work or are themselves taken along with their parents to work in the fields. The principal of the girls' elementary school in Palasva even gives some students the permission to go home after attending part of the sessions. The principal justified it by arguing that going strictly by the rules would result in even lower the attendance.

Tutors and staff also described the relationship between the harvest or migration season and attendance in general, a relation that was corroborated in the data. In Figure 3.1, average attendance reaches a rate three months into the academic year after which it dips in November. But the data also seems to suggest that it picks up almost immediately in the next month. November is also usually the month the exams are conducted and it also happens to be the time there are festivals like Diwali and Navratri.

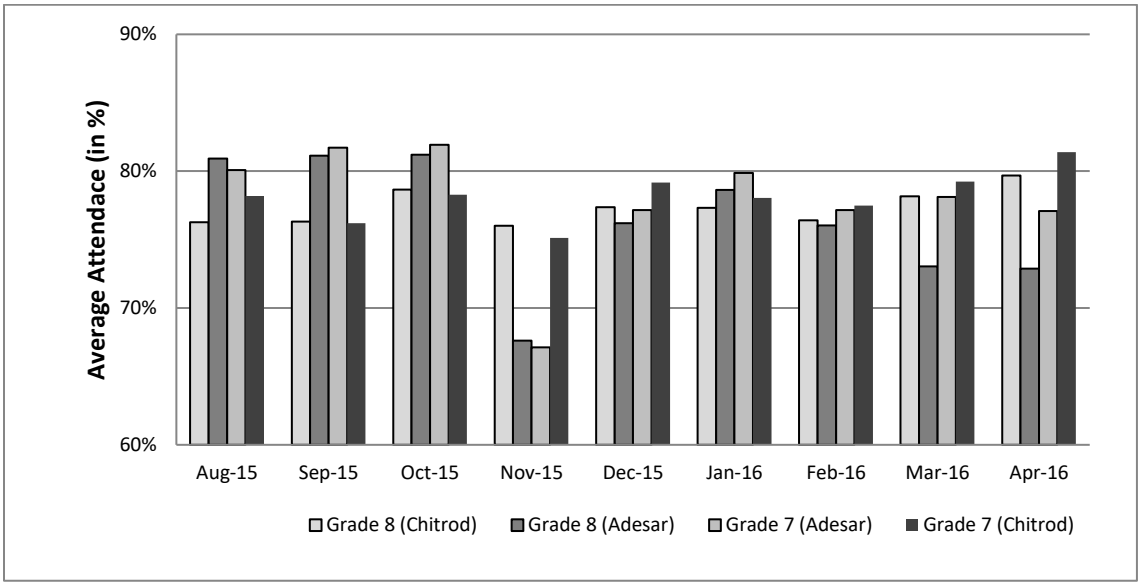
This pattern it should be noted, apparently applies to *both* girls and boys. In fact our conversations suggest that there is not much reason to believe that boys completely bereft of all responsibilities. More often it is the nature of the job assigned to them that is different, usually manual work. The difference between the kinds of chores becomes much clearer when comparing different castes. Boys from upper castes do not seem to engage much in household related work; certainly not anything too demanding to miss school. And so, their attendance as a whole may not show significant fluctuations as that of girls, an observations made by both school teachers and program tutors.

While there are several factors outside the control of the participant that leads to absenteeism, we should not ignore those that lie within the participant. For a program targeting secondary schooling and adolescents it should not be surprising that teachers and parents often believe that students were just bunking classes. Tutors in particular complained that once the child is out of the house, parents do not keep track of whether s/he made it to school. Children miss classes after leaving home either for the sake of it or, as it came up in Chitrod when there is test or some homework to be shown. They get punished

[12]The number of students in the list maintained by the program did not match the figures listed as average number of students in a month attendance numbers that were accessed for the study. This when equated to the percentage also given gave a much higher class size than has been reported by the study records. There were no separate attendance records maintained for the students considered as beneficiaries of the program. This made it difficult to include the accessed attendance data for the study.

sometimes the next time they show up in school, but that apparently does not serve as enough of a deterrent.

Figure 3.1 Monthly Attendance Trends in Phase 3



Participation of Girls

As Table 3.2 indicates, girls enrolment is markedly lower than that of boys in high school(with girls constituting 29.4 percent and 32.7 percent of the total enrolled children in Grades 9 & 10 respectively)(see Table 3.2). While the factors that inhibit girls enrolment in earlier stages only intensify at higher stages, the girls who do make the transition to this stage stay in a state of some uncertainty. Girls express disappointment about the lack of support at home and sometimes a very straightforward "No" at the suggestion of studying further.

For instance, a participant in Chitrod, despite being considered a good and enthusiastic student, was extremely unsure of her prospects for studying further because her parents did not see the idea of her higher education as being in line with the norms of their community (identified as "Patel").

There is a general sense of futility of the whole endeavour in the case of education for girls in certain communities where they fail to see a future for their daughters shaped by the school education. It came out very strongly in the case of the village of Devisar which was part of the Adesar cluster in Phase 3. The Koli community of the village migrates for the major part of the year effectively depriving all their children of school education for the duration. But even among the communities that do not migrate like the Brahmins of the village (who are also placed highest in the caste hierarchy) hesitate to send their girls to school beyond 8th class. While the stated reason is concern for safety, tradition and the sense of prestige that they have clearly appear to be factors in this decision. To encourage education is to disrespect and

deviate from the social norms. For instance, a mother of two teenage girls in Devisar was very set in her ways for not sending her daughters beyond elementary school.
Despite the strong mitigating factors, we also found some encouraging instances in the villages of Lakadiya and Palasva. In Lakadiya, the girl group formed by the program consists mostly of college students or high school graduates, which indicatesboth,that the village has been more progressive with regard to female education as well as has more role models for younger girls to emulate.

Even though the girls group in Palasva is mostly constituted of elementary and high school students, we found it to be active.The girl group meetings provide an avenue to speak out, talk about their future plans and listen to those of their peers. Regardless of the environment is at home they are aware and know of the ways in which education could help them.

The Role of Grandparents: The Unexpected Enablers of Education

While talking about education and that of girls, in particular, it was very interesting to see the older generation of the community (often the grandparents of school going children) talk about their ideas and notions about what could be their grandchildren's future. In Jangi, an old female member of the Rabari community very animatedly spoke of sending her grandchildren to school on time and thinking about whether she should send them for tuition classes. She believed that going to school was definitely going to positively impact the lives of her grandchildren.

In Devisar, two elderly women commented that the mothers who cite safety issues to not send their daughters to high school in the nearby village, but did not mind sending their sons there when in need of provisions or other items. "They send their sons to Fatehgarh. What if three or four girls get together and cycle to Fathegarh? That is possible, isn't it? But they say, "Why should they go all the way?" and don't send their daughters under any circumstance. "They studied till class 8. That is enough." they say."

In Shivgadh, a Harijan family (comprising of members from grandparents to grandchildren) expressed keennessin their children receiving education, to move out of the village, have a better life somewhere else, preferably not engaged in farming. But they complained of the students' lack of interest and seriousness as the impediments in their academic progress. They were of the opinion that children were just whiling away their time and being unproductive not realising what they are losing in the process. From the information gathered, one of their sons was attending a higher secondary school in a village some 30 km away and three other daughters were attending the nearest Kasturba Gandhi BalikaVidyalaya (KGBV). Another elder daughter had completed 10^{th} grade in Rapar. She was now back home couple of years later helping out at home (but not the farm).

The extent to which we can generalize from these interactions is not clear, but never the less theybring out the complexities in ascribing poor educational outcomes to just "traditions" and historical practices. Further, they point to the fact that resources or constituencies in support of better schooling outcomes can also be found in unexpected places. In trying to improve educational outcomes among a future generation of women, programs and interventionsshould consider mobilizing the support of the earlier generations that have been deprived of schooling and experienced the consequences of doing so.

Caste Expectations of Gender and How can it Affect Girls Education

It is not surprising that caste plays a key role in defining gender roles and also distinct understanding of what education can actually help in achieving. Adding to the examples alluded to earlier, there are resemblance in this regard between the Brahmins of Devisar and the Darbars of Ghanithal, both "upper" castes. They are extremely protective of the female members of their family and restrict their physical movements. For example, the male members of the Darbar caste, fetch the water themselves which is in contrast to the common practice of it being done by women. They find nothing wrong with this and claim that the women are happy this way too.

While some of the male patriarchs are opening up to the idea of education for their daughters till the 12th grade and maybe even beyond, the traditional boundaries at home remain. While adolescents might have studied more, at home they continue to be "women of the Darbar community who cannot be bereft of male protection at any cost".

In contrast, the lower caste communities very often do not have the means or awareness to see their wards go that far. But, again, in villages like Lakadiya that are not as isolated as Devisar and Ghanithal, we found several examples of girls attaining higher levels of education. Lakadiya, discernibly more developed than other villages in its vicinity, has five elementary schools and a private secondary and higher secondary school. Here we found that girls from different communities have the opportunity to attend college even if not all take up a job at the end of it.

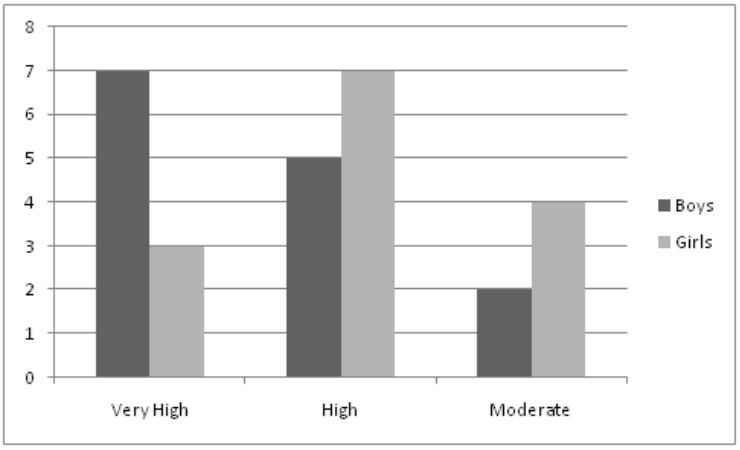
In fact, Chitrod, which like Lakadiya is a comparatively larger and well-connected village with more resources than its neighbouring ones, has seen girls be the top-scorers in 10th grade for the most part in the past ten years. As reported by the school staff, most of them studied further; one girl who was the top-scoring student in 2015 did not enrol for further studies because "she is from the Patel community" (being a member of the community was in itself offered as the reason to not advance). The principal too could not succeed in persuading her. However, the other girls in this position who progressed were in the Scheduled Caste category.

Recalling the case of the Harijan family in Shivgadh mentioned above, their belief was that only education was their saviour. The elder sister who was not able to study beyond class 10 could not do so not because of lack of support at home but due to lack access to resources. Unlike the three girls enrolled in KGBV, she did not have that opportunity to attend a school of that kind due to the absence of such a facility. While their relatives in the Army and in urban locations like Ahmedabad, have made them aware that there is a larger world outside, they themselves do not find the necessary socio-economic and political means to get to that position.

Teachers Perception of Students Performance

About their perception of academic progress made by students in their classes, tutors from Adesar are less satisfied than the tutors in Chitrod. They are comparatively more impressed by the boys than girls in the same regard too (Figure 3.5).

Figure 3.2 Perception of Tutor of Students' Academic Progress



Tutors were asked their perception of academic progress made by their students in their classes. Figure 3.2 the results based on the response of LEP tutors. In this regard, between the two clusters, tutors from Adesar were less satisfied by the students' performance than those in Chitrod. They are also more satisfied by the performance of boys than girls (Figure 3.5). Girls are mostly considered as making 'High' progress compared to the 'Very High' progress made by boys. Although the option of 'Low' and 'Very Low' was provided none marked them.

Prospects of further studies and beyond

There is also the question of what the students can do after they pass the stage of secondary level education. Schooling after grade 10 is a great challenge since very often the villages don't have schools upto 12^{th} grade; even if they did the condition of shortage of teachers continues. Not everyone can afford to send their children to private schools due to financial concerns, safety issues (for girls, especially) or even simply because it may not agree with their traditional set of values.

Another observation worth noting is also that this region is not richly endowed with any great career opportunities. The traditional occupations of agriculture and animal rearing is not lucrative enough for them because of the harsh weather conditions and also, in part, the rigid social structure. In this particular region of Kutch where lives are bound by physical and socio-cultural constraints, challenges on the way to achieving secondary schooling are not just posed by the lack of awareness among the larger community but also the by the lack of opportunities that can promise the people of a better, brighter future for their children and themselves.

(b) Transition rates to higher levels of education

One of the indicators of efficiency used while assessing school education performance is the **transition rate** that it is able to achieve for its students. The rate is, simply put, "the number of pupils (or students) admitted to the first grade of a higher level of education in a given year, expressed as a percentage of the number of pupils (or students) enrolled in the final grade of the lower level of education in the previous year"[13].

These rates of Grade 8 to Grade 9 are most significant for the program. As is the division in the school system in India, elementary school is till Grade 8, whileGrades 9 and 10 are considered as secondary level. Since LAMP Pathways is focussed on encouraging movement of students towards secondary level once they have completed elementary schooling, recording and tracking the transition rate in the 8th grade becomes very consequential. The program conducts events like Praveshotsav in villages to make the process visible and underline the importance of the step that the students of elementary schools are about to take.

After the first year of implementation in Chitrod cluster recorded rates saw a shift in the rates. The lowest overall rate was of just 52% in Shivlakha (39% among boys and 88% among girls). But in the coming years the minimum has risen to 59% in 2015 and 58% in 2016 (ignoring Kanmer). The majority of villages have shown a shift to better retention rates.

The transition rate for boys in particular has improved remarkably and consistently with more than one village recording 100% transition to the 9th grade by 2016 (Gharana, Jangi, Kidiyanagar, Laliyana, Samakhiyali, Shikarpur and Vandhiya). The figures looked equally encouraging for girls in five villages (Jangi, Kumbhariya, Lakadiya, Laliyana and Samkhiyali). The medians of the variable have also shifting for both boys and girl (Figures 3.2 and 3.3; Table 3.6). After the second year of implementation (2016) the range of the overall transition rates did not differ much from 2015; although the first quartile starts from a lower limit in 2016 than 2015.

[13] http://www.ncert.nic.in/programmes/education_survey/msise/Educational%20Indicators%20-%20Final%20-%201.pdf (Accessed on 23 February, 2017)

Figure 3.3 Retention rates (Boys) in Chitrod Cluster

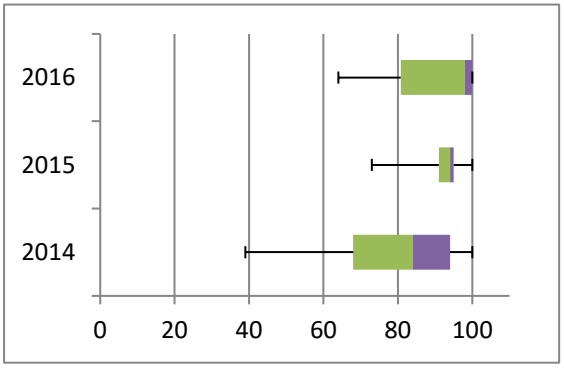


Figure 3.4 Retention Rates (Girls) in Chitrod Cluster

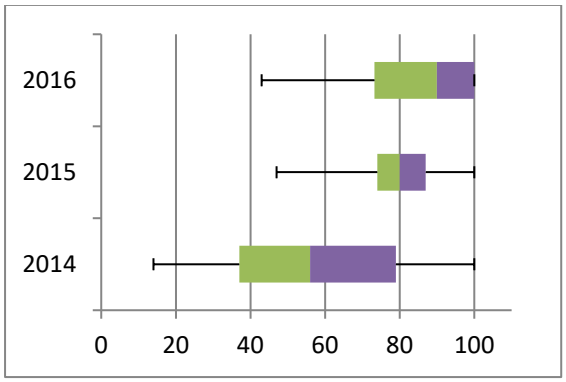


Figure 3.5 Retention Rates (Overall) in Chitrod Cluster

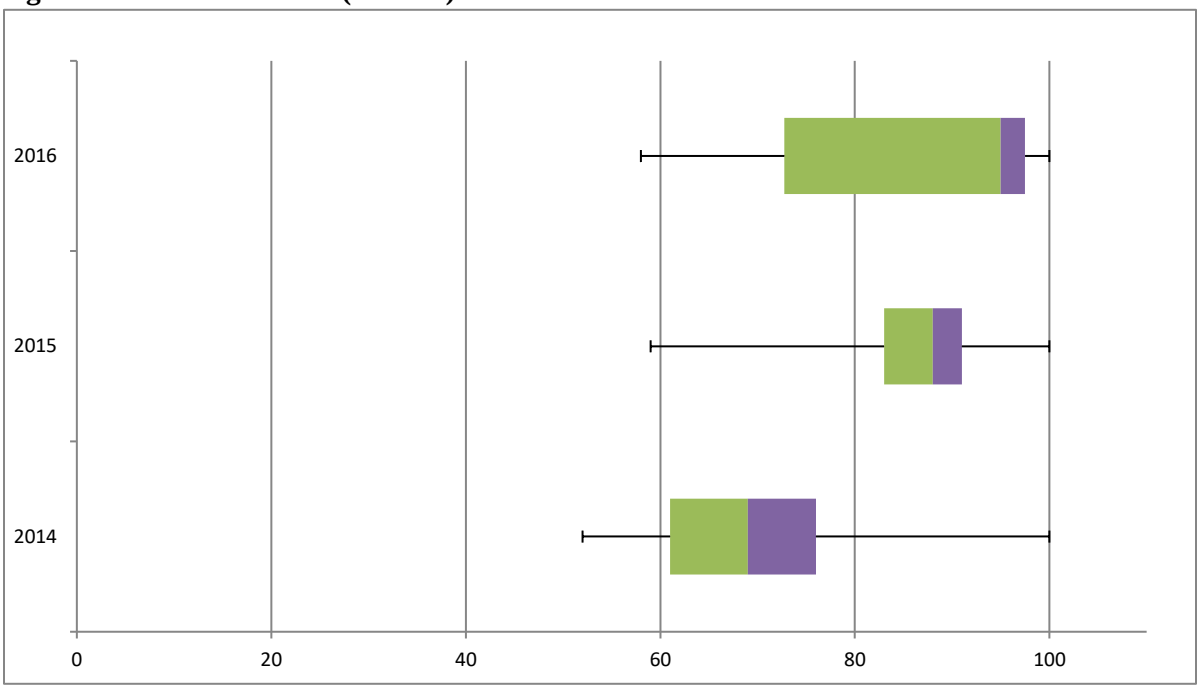


Table 3.6Chitrod Transition Rates-Boys, Girls and Overall (2014 to 2016)

Village	Boys	Girls	Overall	Village	Boys	Girls	Overall
Adhoi				**Lakadiya**			
2014	89%	37%	69%	**2014**	92%	21%	63%
2015	94%	80%	88%	**2015**	91%	74%	83%
2016	98%	95%	97%	**2016**	98%	100%	99%
Amaliyara				**Laliyana**			
2014	69%	36%	53%	**2014**	97%	100%	98%
2015	86%	80%	84%	**2015**	100%	83%	93%
2016	77%	79%	78%	**2016**	100%	100%	100%
Chitrod				**Sai**			
2014	86%	58%	74%	**2014**	77%	71%	76%
2015	81%	66%	74%	**2015**	93%	84%	89%
2016	64%	50%	59%	**2016**	80%	56%	72%
Gagodar				**Samkhiyali**			
2014	100%	100%	100%	**2014**	100%	56%	76%

2015	95%	88%	93%	**2015**	91%	84%	87%
2016	67%	85%	73%	**2016**	100%	100%	100%
Ghanithar				**Shikarpur**			
2014	68%	50%	63%	**2014**	94%	86%	91%
2015	100%	50%	83%	**2015**	92%	79%	88%
2016	81%	55%	66%	**2016**	100%	89%	94%
Gharana				**Shivlakha**			
2014	95%	35%	75%	**2014**	39%	88%	52%
2015	73%	47%	59%	**2015**	94%	88%	91%
2016	100%	83%	92%	**2016**	85%	43%	58%
Jangi				**Vandhiya**			
2014	53%	72%	61%	**2014**	61%	79%	68%
2015	97%	100%	98%	**2015**	96%	92%	94%
2016	100%	100%	100%	**2016**	100%	92%	97%
Kidiyanagar				**Kumbhariya**			
2014	84%	46%	70%	**2014**	68%	14%	56%
2015	95%	79%	88%	**2015**	94%	87%	90%
2016	100%	91%	96%	**2016**	95%	100%	97%

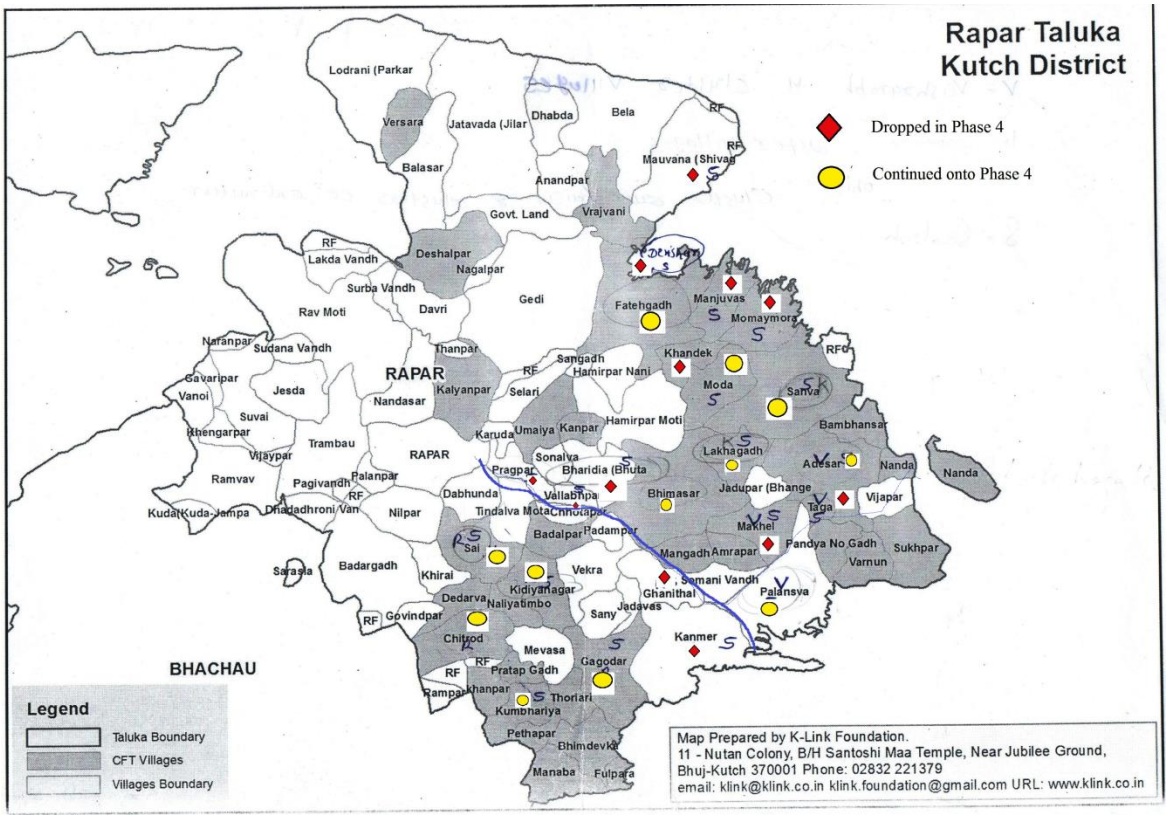
3.3 Trainings: In-house and External

Distances

The weekly and fortnightly meetings for the LEP and high school tutors, are usually held in the cluster offices of the program, viz., Chitrod and Adesar. The villages covered under the Adesar cluster are particularly farther and sparse than the villages in Chitrod. TheAdesar landscape is also more barren in terms of both the endowed resources and amenities in the Adesar cluster than it is in Chitrod. Most of the villages in Chitrod cluster are also better connected to the highways and can be considered much more "mainstreamed" than the villages in Adesar cluster.

At the beginning of Phase 4, selected villages were dropped from the program based on the scoring that the supervisors and coordinator did at the end of Phase 3. Among others some of the parameters considered in this scoring were the regularity in the meetings and behaviour with fellow team mates. The Adesar cluster tutors scored lower than their counterparts in Chitrod in this regard and many of them were dropped. One significant factor for the teachers for attending meetings is the distance. Hence, disinterest was not the only reason for irregularity. Some tutors who had left the program said that they could not navigate the distances given that there is great stress on the trainings and attendance in them. Most villages that were on the fringes of Rapar taluka got invariably dropped into the last phase (Phase 4) of the program as a result of this issue (see Figure 5).

Figure 3.6 Map of Rapar taluka with LAMP Pathways villages



Use of TLMs and Appropriate Teaching Methods

The use of TLMs and innovative teaching methods is an important component of the program as it sought to intervene in a clearly under-resourced area. While we found many tutors receptive of these efforts, we also found several expressing their discomfort in being able to use them. The reason given by many was that either they did not have the sufficient information to use itor were not able to comprehend what had been provided to them completely. Although a smaller number, there were also tutors whofelt that their students were not capable of handling the TLMs and/or doubted their efficacy in being able to help understand the appropriate topic.

While we are not in a position to comment on the overall impact of using the specific TLMs and teaching methods the program tried, the interactions with the tutors does suggest that the program pay more attention to ensuring that the tutors are on board with the program choices. Further, the program should closely monitor the tutors ability to comprehend the training and comfort in using the TLMs appropriately.

Although the tutors selected in the program undoubtedly have the minimum required qualification, the tutors themselvesare unlikely to have studied using the TLMs or with the methodologies they are being asked to use while teaching. Therefore, it is likely that they would take time to internalize the changes that

the program is trying to introduce. If they are not fully comfortable with the changes, they are likely to regress back to conventional methods they are more familiar with than appear to not be fully in control of the classroom.

3.3.1 Tutor Grading and Program Downsizing

The program had to be downsized in its operations at the end of phase 3. The villages were selected to continue onto Phase 4 on the basis of the score they receive and the grade bracket they fall into. But the grading was of the tutors and not exactly of the village or its overall response to the program.

Table 3.7: Evaluation Parameters for Tutors

Parameter	**Nature of Parameter**	**Stakeholders it could comment on**
Regularity of Facilitator & Students in the LEP Class	Input and Outcome	Regularity of the facilitator is an input of the program but that of the students is a response which is not only dependent on the tutor's consistency
Behaviour with other team members	Behavioural (subjective)	This is important, but this is also a very personal trait which is something that is ideally to be figured out during the recruitment phase perhaps. To numerically score on a range similar to the other more professionally oriented parameters may not be rational
Regularity of Facilitator in Trainings and meetings	Behavioural	This parameter is important to note. But this is hardly a matter of opinion since there will be attendance records. The program can also benefit in the future by noting the reasons for irregularity like distance, duration of the training, tutor's perception of its relevance, etc.
Participation in the various program organized at village level	Behavioural and Outcome	This seems to separate the organization of events from the tutor's responsibilities when though out the program it this has been a vital role of the tutor.
Participation of Youth groups and Girls groups	Outcome/Not-related to the tutor/comment on the village community	This is a community related outcome
Classroom environment and Pedagogy (Use of TLM, grouping, activities, etc)	Teaching (Also reflects training & TLM efficacy)	Related to tutor's performance
Improvement in learning levels (Baseline, Midline, Endline, Participation in other extracurricular activities)	Teaching outcomes	
Record keeping & updating the registers	Responsibilities	
Rapport with community (Participation of SMC, Parents & village community)	Behavioural and outcome	Important aspect to keep in mind

Readiness shown in taking up additional / new responsibilities	Behavioural	Is ambiguous about the nature of responsibilities

In Table 3.7 we have categorised the grading parameters on two major properties- one, what of the program are they grading and two, who are they grading. We find that all parameters speak of the tutor's ability to function and carry out the program. Yet some parameters are also the kind that the tutor cannot wholly take responsibility for. For instance, "participation of the youth groups and girl groups", is an outcome based indicator that is not exclusively indicative of the tutor's ability to mobilise support or even interact with potential or current members of the said groups. The way the groups respond will also greatly rely on the specific communities that are being addressed and the overall existing social order. In fact, the more isolated communities are likely to be more reticent towards engagement.

Taking into account only the cases we followed up with visits on the field, we observed the following ways (Table 3.8) in which they were scored by their team coordinators and supervisors.[14]

Table 3.8Scoring of Tutors in the Sample Villages

	Chitord Cluster					**Adesar Cluster**				
	Jangi -1	**Jangi-2**	**Shivlakha**	**Lakadia Boys**	**Ghanithar**	**Palasva Boys**	**Palasva Girls**	**New Sanva**	**Devisar**	**Shivgadh**
Supervisor	92	60	80	70	N/A	95	96	N/A	67	87
Supervisor Rating Rank	3	7	5	6		2	1			4
Coordinator	81	31	63	68	56	79	82	90	42	69
Coordinator Rating Rank	2	7	6	5		3	1			4
Differences in the scoring(Supervisor -Coordinator)	11	29	17	2	N/A	16	14	N/A	25	18

While the attitudes and behaviour of tutors definitely influences the program efficacy, program decision makers should exercise caution in interpreting parameters like -'Behaviour with other team members'- that can be construed as a comment on someone's character. Further, we suggest that decision makers not use these scores mechanically as the outcomes are likely to extremely context specific.

The method of scoring the tutors on the basis of the parameters needs to be perhaps refined, making a clear distinction between those measuring processes and those measuring outcomes. It would also be

[14]The absolute values seem to be arbitrary as to our knowledge there is no reference scale like in a Likert scale where a score corresponds to an opinion or perception, in words. The differences in the scores can be taken as the differences in opinion between the coordinator and the supervisor but we were not able to get any justification as to why the numerical scores differ by such a wide margin as is observed in Table 3.8 in some cases.

helpful to include context based measures that are always presented alongside measures of individuals, to ensure that individual scores are not interpreted without context.

3.4 Community Engagement

One of the program assumptions is that if the community involves itself in education related activities, then the possibilities for the students to attend school and transition to the next level increase. As described earlier, there are several activities that have been included in the program design to do so. We believe the program has had mixed success in doing so.

For instance, in Palasva, the high school, was in a particularly difficult situation. Despite having classes up till the 12th grade, it had no more than one government appointed teacher. Here, interestingly the SMDC based on the teacher's account was quite active. When appointed teachers left the school after two to three months into the academic year the SMDC had made efforts to communicate the shortage of teachers in the school to the education department in Bhuj. In contrast in Jangi and Chitrod, such community driven initiatives did not come to light even though they too face similar issues in their high schools. While the SDMCs were aware of the teacher shortages and reportedly attended the meetings if they were called upon but they did not act beyond speaking about the problem with the understaffed schools.

3.4.1 LEP tutors: Representing LAMP Pathways to the Community

Apart from teaching classes to upper primary students, the LEP tutors are also supposed to actively engage with the community. When asked about challenges they faced, engaging with the community was the one that was most cited by them. In further conversations, they mentioned the challenge in talking,convincing and mobilizing people, even if they are their fellow villagers. The challenge they admitted lay both in their own initial nervousness to approach the larger community of the village as well as the lack of response from the community.

From our observations, the communities can largely be thought as being in a state of inertia that the tutors are trying to push them out of. Some seemed to acknowledge the fact that with repeated efforts participation has improved whereas some others expressed disappointment in this regard. For instance, the tutor from Vandhiya, said, "They don't come and I know I have not been able to bring them... as much as I try."

In the cases where "transformation" was reported, tutors said that it happened since the community had slowly come to realise the importance of education. In other cases where the so-called inertia seemed to maintain itself the tutors mentioned their inability and the parents' lack of appreciation by virtue of being bound by the societal norms.

It is important to note here again that these tutors are themselves products of this sort of conditioning. There are different factors that motivate the tutors to believe that the traditions they have been observing and subject to are no longer relevant or are not worth following anymore. For some the fact that they come from very backward castes or regions and through acquiring education they have been able to get a

job is the motivation; whereas, for others the job itself is the eye-opener. Yet again there are some for whom this job is a temporary engagement either till they get another permanent job or till they get married as per the tradition in their caste.

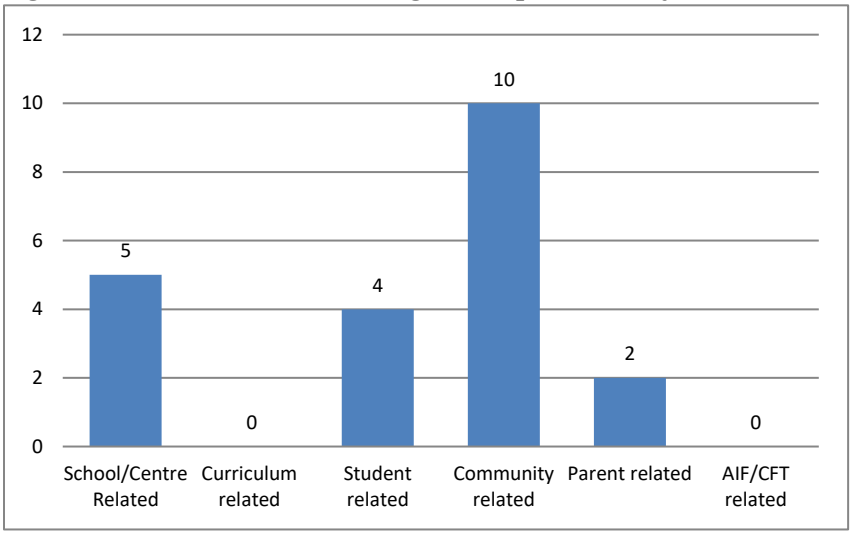
These attitudes can affect conduct in their conduct in the class with the students. Their own experiences with their education may dictate their expectations from their students and the enthusiasm with which they pay attention to them.

Challenges of Migrant Communities

Among other factors discussed was the issue of migration. The tutors mentioned that children whose parents belong to migration-prone communities and castes are the most irregular. There is great concern and perhaps even helplessness on these occasions from the tutors. The tutors remarked how they try to communicate the importance of attending school to parents but due to lack of awareness the situation remains desperate. These are also the kinds of communities that have (rightly) found significant representation in this program in the classroom composition of a typical LEP class. This process invariably seems to select students who are irregular and who mostly belong to backward castes and communities. Like the case of Devisar where most children were from the Koli community. The program could not continue there because all children migrated along with their parents later in the year and only three to four students came to attend the classes. In some cases, like Lakadiya, the principal of the school also gets involved. And irrespective of the result from the baseline test the principal suggests who to include and who not to.

This meant that apart from addressing a student's academic achievements the tutor has to also keep in mind the socio-economic background of that child and the perception of education that stands in the specific community that s/he belongs to.

Figure 3.7 Nature of challenges as experienced by LEP tutors



3.5 Caste: The Silent Player

The astounding part about interacting with communities in these parts is getting to know their expectation from their lives and, obviously, their children. Education, at this point of time, seems to be only of instrumental purpose and that essentially means getting a job. It is not unusual to see parents as well as community members who are ready to take a chance with schooling if there is the certainty that they would be in a better position later. Hence, if they are asked to break away from their tradition it will only be to seek the promise of a better future. But sometimes even this is difficult for them.

Our observations and interactions suggest that caste continues to play a dominant role in the identity of community members the program interacts with. Challenging the extent to which it is entrenched is too big a task for a single program or intervention. It appears that all aspects of their lives, from the work they do to where they live is decided by their caste. This implies that different castes have different histories and different aspirations for the future. They also have their own set of barriers that are very particular to them.We got a sense of these challenges from our own efforts to interact with community members as part of the evaluation.

In Ghanithal, for example, where the Darbars are at the top of the societal ladder, most of the positions in the local panchayat were also held by them. This must set a tone to the village politics. Also this is just a natural progression of the age-old system in the newer one. Other communities are there but they occupy a secondary position in this framework of things. In every village we visited this hierarchy was visible- Patels in Chitrod and New Sanva, Rajputs in Palasva, Brahmins in Devisar, and Darbars in Ghanithal. Moreover, this was visible not only because of the interactions but through the village mapping exercise it was evident again and again that the village communities were physically divided within the village boundaries on the basis of their caste with the Kolis, Harijans and Muslims usually being on the outskirts. The ways in which caste relations and positions work in the implementation of the program are obviously not very overt but to rule out its presence is also an improbable stance.

In several villages, we found it challenging to gather people of different castes in one place. Most of our focus group discussions were with groups of people (community members, girls groups and youth groups) who belong to the same or similar castes. In Jangi, for instance, we could speak to members of mostly the Rabari group; in Shivgadh, to Harijans; in Palasva, the Rajputs; in Devisar, the Brahmins. We visited Ghanithal, Shivgadh and Devisar such that community meetings that would have been held sometime in the evening had to be scheduled for the afternoons because of distance issues.

In slightly larger villages like Chitrod and Lakadiya we were able to speak with people who belonged to different social groups. In Lakadiya, due to time constraints and unavailability of a representative group of people of the local community discussion about the program was held with some members of the School Management Committee (SMC) instead. There was almost no participation from members of lower social class. This could be because they usually stay far away and the times that we visited the village was the day time, which is their time to work.

In Chitrod, while we were more successful in being able to speak with people belonging to different social groups, we found the SMDC (School Management and Development Committee) members almost exclusively belonging to the more privileged caste groups. While the principal justified citing the need to have parents who were somewhat literate, “parents would attend the meetings and could talk to people

like you (investigators)". This is also implied that parents who do not fit this criteria, usually lower caste members and socially marginalised, are unlikely to be represented on this platform.

When LAMP Pathways is introduced to change the level of participation of the communities involved it must simultaneously also realise that the entire community is a heterogeneous entity. This is also an environment where a very strong system of power is at play. Higher caste communities will find a way to dominate by claiming resources directly or playing the protective guardian to the other lower castes. When an initiative tries to enter this dynamics it has to be careful of the specific entry points. Taking the patronage of the most visible and influential group of people is definitely one way to gain recognition. Yet, arguably, sustainability of the program can be achieved only when ownership from all sections of that local society is achieved. Every person should be able to see the point of the objective of the program.

The program's most observable strategy right now in places it has been functioning for relatively longer periods, is to build its association with the most influential persons in the village. These very often are men of high caste. Issues like migration or low attendance from the marginalised groups may not be a problem for them of even if they are, the highest priority for them. We fear that wide-spread transformation without adjusting the strategy for different social groups is likely to be very difficult.

Chapter 4

Linking Outcomes with Contexts and Mechanisms

Realist evaluation identifies the outcome patterns as "resulting from the activation of different mechanisms in different contexts."[15] The findings of this evaluation study are presented in context-mechanism-outcome configurations to elicit the workings of the program in the separate contextual settings. The C-M-O configurations are presented for each village that were selected and visited during the course of the evaluation study. A definition of the three concepts is mentioned in Box 1.

Box 1: Definitions of Context, Mechanism and Outcome as explained by Pawson and Tilley, 2004

"**Context** describes those features of the conditions in which programmes are introduced that are relevant to the operation the programme mechanisms. Realism utilises contextual thinking to address the issues of 'for whom' and 'in what circumstances' a programme will work."

"This process of how subjectsinterpret and act upon the intervention stratagem is known as the programme'**mechanism**' and it is the pivot around which realist research revolves."

"**Outcome-patterns** comprise the intended and unintended consequences ofprogrammes, resulting from the activation of different mechanisms in differentcontexts."

[1]

Individual Case Conclusions

Chitrod cluster villages (except one) were included for two phases of the program. The region demarcated as the region of the cluster was fairly well connected with roadways. Villages have access to non-agricultural forms of livelihoods as well as traditional occupations. It can be concluded based on the observations that villages that were closer to the mainstream, i.e., closer to the main highways and, hence, access to this infrastructure seemed to also have better conditions within the villages with regard to basic education infrastructure.

In contrast, Adesar cluster was not as well-endowed and the physical isolation of the villages covered in the program was more pronounced compared to those in Chitrod. Although the caste hierarchy remained the same the way they translated in the local dynamics was different in individual cases. The region under Adesar cluster was reportedly more difficult to monitor. However, the level of enthusiasm shown by students did not seem qualitatively different from their counterparts in Chitrod cluster.

Cluster Chitrod

Jangi

The village is large and has multiple communities (C1). Parents from Rabari community and somewhat higher castes are willing to send their children to schools (C2). The attendance rates of LEP classes were found to be the highest in the cluster (O1). There are three schools, one each of primary, middle and high school (C3).

School Management Committee (SMC) is formed albeit as a formality. Their awareness about their roles and responsibilities was found to be low and, so was their involvement in the functioning of the schools (M1). Although the schools are co-operating with the program's intervention, it is difficult to say whether academic needs of the students have been completely matched by the support provided, especially in high school (M2).

Gender division of labour is highly prevalent among inhabitants (C4). There is lack of opportunities in livelihoods beyond agriculture (C5).The members in the youth group consistmainly of unemployed graduates, which bring to question the function they are expected to perform as "role models" for young students (M3). The girl group members were found to be shy.These groups have not yet reached the stage of functioning as an independent body that can significantly influence the decisions of households or the local government regarding education(O2).

Students enter secondary school with weaknesses and need continued support in academics as they do not receive the same in their domestic environments where they are also expected to fulfil certain domestic responsibilities (C6).Students in grades 7 and 8 we interacted with had developed basic literacy and numeracy skills whereas students of grades 9 and 10 were unable to identify basic concepts from their textbooks (O3). The pass percentage in Grade 10 in 2016 was 75% among LAMP Pathways students (O4).

Chitrod

The village of Chitrod is a cluster resource centre of the program (C1). The program worked here in the high school for the Phases 2 and 3. Chitrod is well-connected and inhabits multiple communities (C2). The high school here has a teacher shortage although the school has performed satisfactorily in the Board exams despite these odds (C3). There are private tuition classes in the village that are attended by students who can afford the same (C4). The village has a favourable attitude towards the education of boys mostly across castes (C5). But with regard to girls' education the opinions have differed. Lower castes seem to be more permissive of girls' education compared to the higher castes. Girls from lower castes who have fared well in examinations have studied further whereas those who performed similarly well but from higher castes were stopped from furthering in studies (C6). The program's input of the high school tutor had been irregular in the months previous to our study. The school authorities expressed their disapproval and the tutor's employment was immediately terminated after this fact. The school did not contact the program team as they were also not happy with the tutor's competence (M1). The students here, owing to the fact that they had not been taught regularly, could not answer questions of the syllabus that they should have been taught by then (O1). The school management and development committee and other non-member parents had approached the school about the teacher shortage but they were unable to resolve the issue (O2).

Shivlakha

The village is small and has one elementary school (C1). The community has members who are involved in occupations other than agriculture (like in nearby private company's plant) but the majority of the villagers are involved in traditional caste occupations like agriculture and animal husbandry (C2). The caste divisions are clear here as well (C3).

The students are enthusiastic about learning (M1). The boys were more expressive and ready to participate than the girls who were very reserved and hardly spoke up (O1). A girls group is formed with the membership mostly made of female students of the school (O2). They seemed young to be able to take any initiative regarding education related issues in the village (M2). They had participated in a cleanliness drive, they recalled. From the discussions with the school staff and other community members (all male) we understand that the program is perceived as a tuition class (M3) where innovative teaching methods are used. They appreciate the effort but may not see it as directly related to school studies (O3). The number of students left out from the LEP classes was only close to five or six. They were not selected because the program caps the strength of each LEP class at 30 (M4).

Ghanithal

This village has a very strong presence of the Darbar community and they are the most powerful here. They are also part of the local governance structures and evidently affect the lives of the residents (C1). The village is removed from the main roadways and, hence, access to the outside world is not immediate (C2). The village has one elementary school and the nearest high school is 5 kms away in a village called Gagodar (C3). Women and girls are very clearly and openly subjected to restrictions on their mobility especially those belonging to the Darbar community (C4).

The students here were very enthusiastic about the activities we asked their participation in (M1). They were able to answer and discuss simple Math questions that we posed to them. The girls group formed the year before had not met after the program withdrew from it (O2). The youth group too had a similar situation (O3).

The community appreciates the efforts of the program but does not have the functional mechanism yet to sustain some of the changes that the program would wish to bring about like the sustenance of a girls group. The severe restrictions on young women pose a serious challenge to such initiatives. Representation from other communities was almost absent. Since the tutor here was from the Darbar community all the members of the group were also from the same community. This may point to the restrictions on to what extent interactions and communications are allowed in the village. Hence, such conditions would need to be addressed before any radical shift in perceptions and attitudes can be expected. The students, as mentioned, are enthusiastic but they too have to negotiate with the reality that the nearest high school is far for them and, hence, some may dropout despite having a desire to continue. The students also do not have great examples in older students who have not exactly changed their lives around the sub-par quality of education they have received.

Lakadiya

This is a large, well-connected and well-endowed village that is not novice to the process of education (C1). The village has five schools for the different stages of education and even attracts students from the nearby villages for the same (C2). The principal of the boys' school here is very involved in the workings of the program and keeps abreast about the progress of the classes and its students (M1). The principal was involved in the selection at the beginning of the classes too making suggestions as to which students should be part of the classes irrespective of the performance in the baseline test (M2). The SMC here is active and seems to be constituted mostly of parents who may be considered to be well-off (C3). The SMC did not seem to have representation from parents from economically weaker sections (C4).

The students were responsive to the questions we asked (O1). Their involvement in the program's other extra-curricular activities seemed low (O2). There is a girls groups and youth group formed in this village (O3). They are mostly constituted by college and school graduates. They seemed to be more confident in their interactions than most of others people of similar age in other villages (M3). This could be a result of being in a village that gives them access to much more enhanced opportunities than most others in the same region.

Adesar Cluster

Palasva

The village is large and has multiple communities in it (C1). The major influential community among these is the Rajput community. The members of this community occupy the most important positions in the village *panchayat* (C2). The high school is supposed to have classes till grade 12 (C3). But there is a severe teacher shortage (C4). The only available teacher was very appreciative of the SMDC and parents initiative to communicate this to the concerned officials in Bhuj although the situation had not been resolved even then. The community was perhaps one of the most enterprising with regard to education among all the cases studied (M1).

The students here in the high school were comparatively more responsive than the other students we had interacted with in other villages (O1). They were able to recall most concepts and discuss them with us. The high school tutor here was regular and one of the well-rated tutors in the program (C5). Girls group formed here was active and was being coordinated by the female LEP tutor of the girls' elementary school (M2). The students in the elementary school satisfactorily participated in our exercises. The LEP tutors here have been appreciated for their competence by the elementary school staff.

The students here do not obviously have the ordeal of having to search for a high school outside their village. This definitely provides a sense of security to the students and their parents. What they may rather worry about is the quality of the education provided there since it faced severe staff shortage. This village very evidently showed a conducive environment towards education and they had accepted the efforts of the program. There maybe also some concerns of who in the larger village community gets access to education infrastructure. The village though very supportive of education for its children had very visible caste based divisions and the negligible representation of the lower castes may be deterrent to the full-fledged ownership of a program of this nature.

Devisar

This is a hamlet in the Adesar cluster. The village is extremely remote and has a rigid caste based societal structure (C1). The higher castes do not interact with the lower castes at all (C2). The Kolis (low caste community) undertake yearly familial migration (C3). Their children seldom attend school regularly (C4). The school has an enterprising principal who has been able to raise funds occasionally for the school (C5).

The program could not find suitable candidates and hired a tutor from a nearby village instead. But irregular attendance by the students (M1) and low response by the community towards the program (M2) eventually led to the discontinuation of the classes (O1).

The village has deep-seated prejudices with regard to girls' position and education (C6). Higher caste families almost never allow girls to progress in studies. They are very mindful of the society's norms and how their conduct affects their prestige. These conditions have handicapped the impact of even the existing state functionary body (the school).The contextual factors have been the most overbearing disadvantage to the program's design.

Shivgadh

The village is remote and has one elementary school (C1). The village has multiple communities but all seem to be mostly with the same socio-economic standing (C2). Lower caste families are relatively more aware and expectant of the impact that education can have on their lives (C3). They were aware of the program (M1). The attendance rates of this centre were also considerably high meaning it received good response from the students (M2). The students were responsive and were active participants in the exercise we conducted (O1). Its distance from Adesar was one of the main reasons for withdrawal of the program from here (O2). The school has its own remedial classes now.

Girls group was formed but the members were mostly of the same community as the tutor (M3). They were high school graduates and have been inactive as group after the program withdrew (O3).

New Sanva

The village has some access to the main resource centre of Adesar (C1). It has multiple communities of varied social standing (C2). It does not have many communities of extremely low castes (they reside in the old part of the village called Old Sanva). The school has the patronage of a local leader who was a former educator. The program has also his patronage (C3). A new high school has enabled students to continue onto secondary education without facing any great difficulties (C4).

Gender roles are clearly defined especially for high caste girls (C5). Girls and boys stop interacting once they reach adolescence in fear of breaking norms (C5). The girls group is formed by the LEP tutor here who has acquired the membership of young girls and women (M1). They have conducted activities together and have also found support in each other's education. For example, the LEP tutor helped a member who has not attended school beyond the primary grades to appear for 10^{th} grade exams as an independent candidate (O1). Most of these members are also her friends and close neighbours.

The students were able to answer most questions but the boys were more responsive than the girls (O2). The attendance rates here have been around average but this centre has been constantly rated as among the best ones presumably because of the teacher's competence (O3).

Chapter 5

Conclusion and Recommendations

The Learning and Migration Program (LAMP) Pathways program is situated in one of the most challenging regions and context for encouraging secondary education in India. The intervention by AIF-CFT to improve educational outcomes in such a context is an ambitious one and the evidence of its efforts are visible in several different ways. As indicated earlier, in this evaluation we have not tried to assess the "impact" of the program and have made no attempts to estimate a counterfactual. Therefore, reaching judgements about program impact remains outside the scope of our work. Further, although we have tried to refer to them at several places, we have tried not to duplicate the extensive internal monitoring and evaluation efforts of the program partners. Instead, we have tried to focus our attention on the context in which the program was located, how the program design came to be interpreted and implemented, and places where the program can be improved. We believe that there is plenty that can be learnt from the efforts made as part of the program. We also believe that looking forward, the program needs to make certain decisions that would be crucial to the program's success. In this last section, we point to some of these.

Despite the overall disadvantaged nature of the region, there is sufficient heterogeneity within it. The heterogeneity needs to be recognized and the program should decide where its priorities lie. We believe different communities are at different levels of preparedness to respond to a program like LAMP. Therefore, an immediate choice that the program faces is whether it should work in communities where it believes it is most capable of moving outcomes or it work in more challenging villages, even though the investments needed might be greater and of a differing nature.

- Focus on fewer issues and at fewer places to achieve effectiveness

Unfortunately, we do not believe there is a straightforward algorithm to predict which communities are likely to be more responsive to the intervention. In large part, this would depend on the strategy and objectives of the program. We try to lay out some of the choices below.

Socio-economic and geographical connectedness

A key attribute that affects the program experience is the extent to which the communities are socially and geographically connected to more formalized institutional environment. Villages that are more "mainstream" are typically more aware about the need for education. They have better access to school infrastructure (particularly high school) but the quality of schools proved a deterrent. The longer engagement with formal schooling in these communities also creates a more conducive "culture" to schooling and they are more attuned to the idea of external interventions. While this might make the actual implementation of the program easier, mobilizing change via external interventions can be a challenge. In contrast, communities might be more responsive in smaller, otherwise isolated villages. However, the ability to find capable human staff and engage with them through meetings and trainings can be a challenge. Further, limited information and the absence of role models might also inhibit the extent to which families might be willing to break out of tradition.

Despite the implementation challenges, the need for a program like LAMP is also likely to be greater in the more isolated communities. However doing so, would imply a different program orientation, longer time horizons and investments than one that includes villages with differing geographical and socio-economic contexts.

- Invest in communities

Once these choices are made and invested in, it would also be prudent to stick to communities. There were quite a few villages in Adesar cluster where the intervention happened only for a year. The program started in Phase 3 in these villages and was withdrawn in Phase 4 mainly because of geographical constraints. When development interventions do not work the way they were intended, it is often no one's fault, rather due to events beyond any individual or organisation's control. But people's lives are affected. Therefore, it is important for programs working in vulnerable areas to be extra cautious in the choice of communities it enters into.

Standardizing and Alignment

The extent of context heterogeneity also has implications on the extent to which it can standardize its processes. We believe that the standardization evident in the LEP intervention (Grades 7 & 8) is quite beneficial and undoubtedly has come from the experience of implementing the program over many years. The relatively codified structure means that the tutor has the information available to pace himself or herself.

In contrast, the manner in which the intervention tries to govern the secondary school intervention, through weekly meetings, implies that tutors need to keep pace on a weekly basis. If a tutor falls behind, the weekly meetings become irrelevant as they are not synchronized with what the tutor needs to cover in class. Further, tutors who wish to hold extra classes on Saturdays to help students who have fallen behind, might also have to miss the weekly meetings where discussions on topics to be covered in the following week are to be discussed.

There is a compelling need to ensure that the secondary school intervention is also aligned with what the school needs. From our understanding, although the program was designed to cover specific topics, in most schools, the classes have become the only Maths and Science classes. Therefore, the assumptions that that the program might make regarding what the students already know (or have covered elsewhere) might not be correct.

- Reconsider the secondary school intervention and align it with the needs and constraints of the schools.

However, there are downsides to standardization when not adapted to apparent needs as well. The program selects 30 students each in grade 7 and 8 per school on the basis of learning deficiencies from earlier classes. In some cases like Shivlakha the number of students left out from the LEP was just close to five or six. This could mean that few more who too could have gained from the classes are left out for purely administrative concerns which could have been altered in cases where the number of students left

after selection through baseline is not very high. It is also difficult to ascertain how better off these left out students are. It was observed during the interaction that splitting up students based on their ability leads to distinct feeling of segregation and may even create a kind of hierarchy among students in the regular school classes.Other students realise that these LEP students are the so-called weaker students among them, creating an unnecessary hierarchy. But the reality was in all three high schools that were visited during the study that all students, whether bright or not, struggled very visibly with basic concepts they should have acquired by secondary stage. This evidence only tends to strengthen the position that interventions of this kind cannot perhaps afford to leave out students in such difficult areas based simply on abilities assessed by a single baseline test.

Investing in program staff

An obvious constraint that programs like LAMP face is that the on field team members are themselves the product of the system that the program is trying to affect. They have themselves gone through the same, if not worse, conditions in schools where there was the issue of lack of teachers and personal attention. Trying to fill that gap is a very noble and ambitious objective but it still may not serve the purpose of providing the kind of inputs that a trained professional can. Also, presumably, not everyone in the team may have the aptitude or interest to teach in order to ensure that all the desirable knowledge is transferred to the students.

We believe that more experienced program staff had begun to imbibe the values and practices of the program better. However, we also ran into instances where program staff who seemed to be doing their job well were discontinued because of a tutor rating system that seemed to be loaded against them.
While investing in program staff, we would also suggest that the impact of external training be closely studied. These undoubtedly place a burden on the program staff's time and we also found attendance, in the ones we observed, to be quite irregular. Similarly the effort required and burden implied of weekly meetings depends on how distant the concerned centre is from the cluster office is. While this might be an unavoidable constraint, it only reinforces the need to constantly ensure that tutors and other staff are deriving value from the trainings and meetings.

- Align TLMs with the capacity and motivations of the tutors
- Recognize the infrastructural constraints (e.g., access to labs) that might inhibit usage of TLMs and lesson plans
- Re-examine template for tutor ratings
    - Make them less susceptible to interpersonal dynamics
    - More sensitive to diversity in contexts in which tutors work

Address social and political context of education

As described in the report, there were several places where the social context of education permeates into the classroom. The most stark being gender and caste based attitudes and beliefs about schooling and mobility in general as well barriers in the interaction between caste groups.

- Strengthen gender oriented initiatives and broad base them

There is a visible desire among students (both boys and girls) to continue studies. The remarkable increase in transition rates from elementary to high schools reaffirm the same. Girl group meetings and events like Praveshotsav and Baalmela have generally increased awareness, among students and community alike, about the accessibility and necessity of secondary education**.**

The dilemma the girls perhaps face is that of abiding by the rules of the community they belong to while also accommodating their academic goals. Girls of certain communities (mostly the higher castes) find it difficult to convince their family to let them attend higher classes. Nevertheless, there is considerable impact of the female role models who help female students seek reason in their own goals and persuading their families. This is the role that the girl groups have tried to play; formed by the program these groups have the scope to create much positive impact on young girls. Such gatherings give a platform to students to exhibit their talent through dance, drama, art and music. This serves as a symbol of empowerment providing them exposure and confidence.

To strengthen these efforts we believe the approaches can be more creative, curbing the propensity of program staff to be excessively prescriptive to students on what and how to execute activities. Further, we suggest that efforts be made to include boys in these platforms as well. Exposure to these activities and the ideas they generate are essential for boys who will have to be a part of the social change that the program is trying to engender.

Even within the relatively small geographical context in which the program is being implemented, the social systems differ in different villages. Across the cases, the higher castes seemed to pose the most difficult challenges to the program but their patronage was also the most necessary for the program to gain recognition in the village. Higher caste communities across cases almost uniformly can be seen as the most challenging sub-group because despite being the most resourceful, they appeared to hold the most prejudices against the social mobility of girls. Lower caste girls appeared to have more freedom than their higher caste counterparts, however they often lacked the opportunities. These paradoxes and contradictions in all likelihood have presented some difficulties in the smooth implementation of the program.

Finding representative voices for historically marginalized groups was a challenge for the evaluation and likely for the program. Efforts to create girl groups and strengthen SMCs are recognition of the influence of social factors. However, we believe the program needs to further strengthen its initiatives. Some steps could include:

- Engaging with an older generation of women, who are perhaps more at liberty to speak up on the domineering influence of patriarchy and the importance of challenging it for the future of their daughters and granddaughters

- Ensuring there is engagement with representatives from historically disadvantaged groups at the point of entry into the village. While it might be more logistically easier to work within the existing social and political structures, it is also harder to challenge these after entry. The

assumption that the program will become more inclusive after it has been implemented might not be a viable one

To conclude, we believe that the program has made some significant inroads into a very complex and marginalized environment. We hope the program would treat these initial years of investment as a time for learning and would work to build on the tremendous efforts it has made.

Appendix 2.1

2.5.3 Criteria Considered for Sampling

In both the phases we have considered some objective and subjective parameters. See Table 2.1 for a list of the parameters we have taken into account for sampling and reasons for which we deem them most appropriate.

Table 2.1: Objective Parameters and Rationale for Selection

Objective Parameters	Definition	Reason for choosing the Parameter	Phase 2	Phase 3
Attendance Percentage	Average of attendance percentage across the months that the program was operational in the year. Here the attendance was averaged over all schools for villages that had more than one school.	Attendance is a quantified indicator of the response that the program has achieved amongst the students.	The program operated classes exclusively for 7^{th} and 8^{th} from December 2014 to April 2015. Whereas classes for 9^{th} and 10^{th} ran from September 2014 to March 2015.	Classes for 7^{th} and 8^{th} began in June 2015 ended in April 2016. Classes for 9^{th} and 10^{th} ran from June 2015 to March 2016.
Transition rates	Taken separately for boys and girls. Transition rates are taken for the entire village	Transition rates are the result of the program's efforts to ensure students progress from primary to secondary levels (8^{th} to 9^{th}) and continue (9^{th} to 10^{th}). Hence, they are an almost direct success rate of the program in this regard.	Transition from 8^{th} to 9^{th} and from 9^{th} to 10^{th}.	Similar to Phase 2
Change in Baseline to Endline Scores	Difference in normalized scores of baseline and endline tests.	This is the result of the classroom intervention that is part of the program. This enables us to see the impact that the classroom strategies and pedagogy that the program has had on individual schools.	Taken for 7^{th} and 8^{th} grade separately.	Similar to Phase 2
Board Exam Results	Pass Percentage of students availing LEP in the individual schools	This too serves the purpose of the above parameter as in it gives an understanding of the impact of the classroom program amongst high	Taken for 10^{th} grade only	Similar to Phase 2 (Students who give the Board Exams from Chitrod cluster

Objective Parameters	Definition	Reason for choosing the Parameter	Phase 2	Phase 3
		school students.		in 2016 have been part of the program for two years. Whereas students from Adesar cluster who give Board Exams, were part only for the one year. Hence, both were taken separately.)
Appeared vs Enrolled Ratio	Ratio of number of students who appeared for board exams to total number of students enrolled	As potential measure of program success	This is taken only for students who have been marked as having availed the LEP classes in high school only	For high school only

2.5.4 Few Reconsiderations

Initially we considered taking into account a ratio of the number of girls to boys but that did not seem appropriate where schools were for only girls or only boys. Also, it was removed from consideration since we seemed to agree that the ratio will not contribute much to the overall picture of progress since enrolment in schools is not something that the program has any control over in the primary schools. In high school we have taken the ratio of number of students who appeared in the final board exam to the total enrolment. No variation was found when this ratio taken separately for girls and boys. Hence, the option was ruled out and total appeared versus total enrolment was taken.

We also considered data of community events and girl group meetings to see if a pattern emerges where we can track the communities' involvement in various events especially by taking into account their attendance. We planned to compare inferences from this data with that sourced from the Census. In the Census data itself there is no significant variation between literacy rates and sex ratios across villages. In addition, since no pattern emerged due to the lack of the kind of data we would have required to draw parallels we rejected this option as well.

We also wanted to consider perception amongst the team about the villages and schools they work in. During the first phase of our data collection completed in October we asked team members (supervisors, coordinators, academic coordinator, program manager (AIF) and program manager (CFT)) to rank up to three schools as "Well-performing schools" and "Schools that need maximum support" in the following categories:

1. Community Support
2. Academic Progress
3. School Administration Support

4. Tutor Competency
5. Enthusiasm among the students to progress to the next class
6. Overall

These criteria are oriented to represent outcomes. But this was an important exercise to conduct to understand the correspondence between the objective results and the larger belief-system of the team about performance.

Along with this ranking we also included the grading given to tutors by supervisors and coordinators. Looking at tutor grading was important since this was a more formalised representation of program implementer's perception of tutor performance. The grading was based on marks given to tutors by their supervisors and cluster coordinators on various parameters that include work ethic, improvement in students' scores and engagement with the community. What was particularly interesting was that few tutors who scored higher than others were graded lower than them. For instance, Adhoi Girls Elementary School tutor has average of 84 and A grade whereas Ambaliyara Elementary School tutor has an average score of 86 and B grade. They have two different supervisors but the same coordinators. We found a few contradictions between their subjective (which were scoring and ranking) and our subjective (which included ranking schools) results too. Since all schools were not mentioned in the ranking by the team members we took the frequency of schools' occurrence in the data.

2.5.5 Final Ranking and Selection

For Phase 2, we ranked the villages on the basis of the values of their parameters in Phase 2 and Phase 3. For Phase 3, we ranked the villages on the basis of the values of parameters only in Phase 3.
Within these villages there is one further classification that was considered which was to rank villages with high schools as separate exercise. These are villages where the program runs in both high schools and Elementary Schools. Hence, for Phase 2 only high schools were ranked for objective and subjective parameters for two years. Then only their elementary schools were ranked amongst themselves. For Phase 3, the same process was followed.

Hence, in brief, we ranked the villages on the basis of individual parameters and then scored them. Then added all the scores in each individual parameter and ranked again on the basis of the overall score.

At the end of our own scoring and ranking we have selected the following villages for the study are presented below (Table 2.2):

Table 2.2: Selected Villages

Villages	Ranking in Objective Parameters	Mentions in Subjective Parameters	Ranking in Tutor Grading	Reasons why the village was selected
Phase 2 (2014-16)				
Shivlakha	1st in 12	Mentioned the most as in need of support in Phase 2	8th out of 12	Although Shivlakha stood out on the top objective parameters it was consistently mentioned as a school that needed support. It was not at all mentioned in schools that were doing well. This contradiction seemed as something worth investigating further into. The villages falls in Chitrod cluster and is still continued in Phase 4.
Ghanitar	11th in 12	Mentioned once in the in need of support in 'community engagement'	12th in 12	There seems to be correspondence between the objective and tutor grading. But we would like to understand why it was not perceived as a school that needed support in factors other than in 'community engagement'
Lakadiya	7th in 12	Mentioned the most in outstanding villages	10th in 12	This is an interesting case since the village had three LEP classes running in it. One that had to be discontinued. This was an averagely performing school. But our main reason for picking this village is to see why the program could not manage to run in a third school although they had managed to get permission for two others in the same place.
Jangi	1st in 4	Mentioned second most in outstanding villages	4th in 4 in high schools 2nd in 3 in elementary schools	Jangi is a village where the program runs in the high school and elementary school (two batches). This is also a village where the high school has low enrolment compared to the other villages in the program and does well in exams. Even between the elementary schools one consistently outperforms the other.
Chitrod	3rd in 4	Mentioned once in outstanding villages	1st in 4 in high school	Chitrod is particularly interesting because it is one of the two main resource centres of the program and here the high school is part of LAMP

Villages	Ranking in Objective Parameters	Mentions in Subjective Parameters	Ranking in Tutor Grading	Reasons why the village was selected
				Pathways but has never run in any Elementary school in the village.
Phase 3 (2015-16)				
Shivgadh	3rd in 14	Mentioned second most in need of maximum support	3rd in 14	Shivgadh scored very well in the objective parameters but scored low in the subjective ones. This contradiction, hence, seems like an important one for us to explore this case further.
Devisar	11th in 14	Mentioned most in need of maximum support	2nd in 14	This school was placed at the bottom consistently during the ranking and, hence, this looks like a case to consider.
New Sanva	3rd in 14	Mentioned most in outstanding villages	1st in 14	New Sanva ranked high consistently in all parameters.
Adesar	(In high school) 4th in 6	Mentioned most in Outstanding Schools	Not graded	This is the other resource centre in the program. The two elementary schools (only boys and only girls) in the village have ranked well but the high school has not. Also, we believed that it would be interesting to see how the proximity to the resource centre affects the performance of its schools and awareness of the community in the village.
	(In Elementary School) 1st in 6	Mentioned most in Outstanding Schools	1st in 6	
Palasva	(In high school) 6th in 6	Mentioned second most as Outstanding School	1st in 6	Palasva has a high school and a two elementary schools (only boys and only girls) under the program. The school emerged as a well-performing school in the subjective parameters but lowest in objective parameters. High school was a little curious because the tutor grading was highest but in objective parameters it did not fare as well.
	(In Elementary School) 5th in 6	Mentioned second most as Outstanding School	2nd in 6	

Shivlakha from Phase 2 and Shivgadh from Phase 3 are two cases where an assessment based on an objective score obtained from attendance percentage and test scores put them on the top but are deemed weak from the team's point of view. Shivgadh is even more so because the subjective results seem to contradict each other as well. Ghanithar from Phase 2 and Devisar from Phase 3 are similar cases where they are opined as weak in addition to scoring low in objective parameters. These are straightforward cases where the perception is backed by some reason. What we intend to do in these cases is look for the specific reasons for program's low impact here. The reasons to consider the rest of the villages is as mentioned in Table 2.2.

Note: The village of Adesar could not be visited for the study due to time constraints.

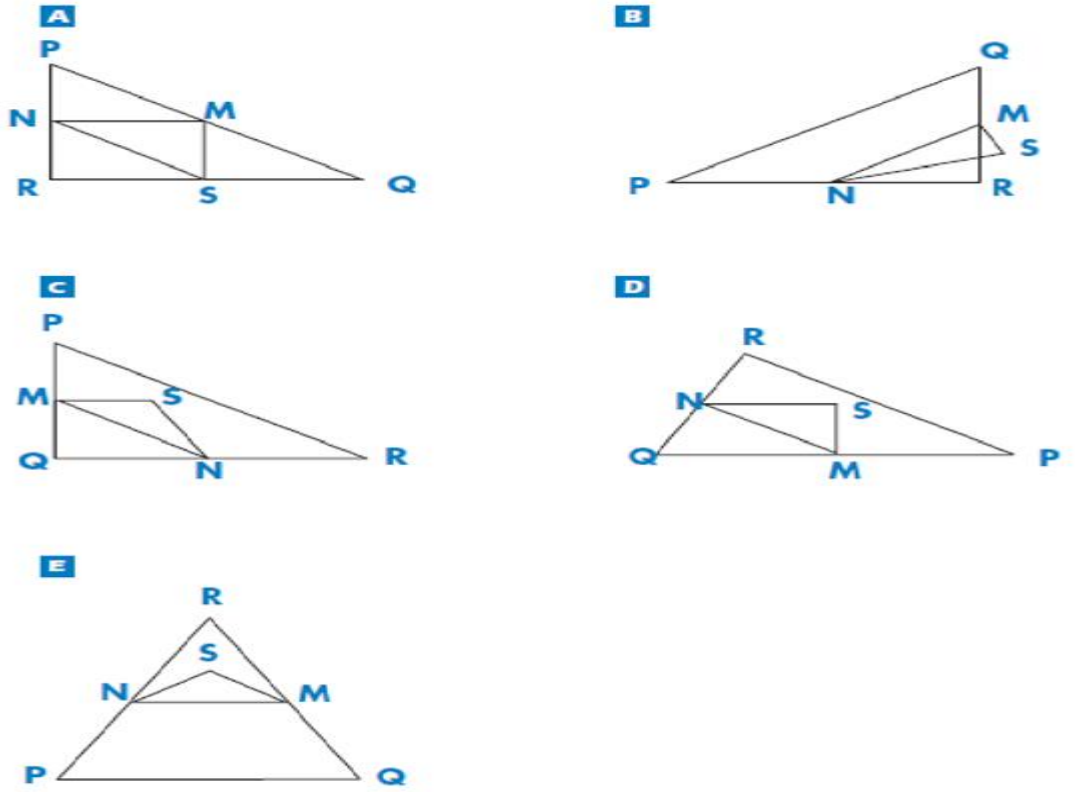
Questions asked to Secondary School Students

Few questions from a few chapters in the textbooks were prepared. We also planned to do some simple experiments to see if they could explain or even understand some basic concepts of 'Gravitation'. Following are some questions and activities we planned on doing with the students of class 10:

1. Probability- We had a bag of some fruits and we planned to asked them questions like which fruit given its numbers had the maximum chance to be picked and which had the least.
2. Gravitation- Drop two objects of varying weights and see which one reaches the ground first. We also were interested to see if they could explain the activity.
3. Refraction- Put a pen or pencil in a glass of water and see if anyone could explain the image formed by refraction.
4. Coordinate geometry- If they knew how to plot a given point relative to the given axes.
5. Triangles- We asked a sample mathematics question from the PISA assessment on triangles that covered concepts like right angle, midpoint of a line segment and longer and shorter sides.

Circle the one figure below that fits the following description.

Triangle PQR is a right triangle with right angle at R. The line RQ is less than the line PR. M is the midpoint of the line PQ and N is the midpoint of the line QR. S is a point inside the triangle. The line MN is greater than the line MS.



Questionnaire given to Upper Primary and High School tutors

Name:
Village:
No. of Students: Girls
Boys

1. Educational Background

   Qualification

   (a) Passed 10th grade
   (b) Passed 12th grade
   (c) Undergraduate degree
   (d) Post-graduate degree
   (e) Any other additional courses taken: Like a vocational course either in addition instead of a high school or college degree(please specify)

2. Previous Employment

   I. Employer

   (a) Government
   (b) Semi-Government
   (c) Private
   (d) First employer was AIF

   II. If employed previously, please describe your responsibilities in the last employment

   III. Duration of the previous employment
   (a) Less than 1 year
   (b) Between 1 and 5 years
   (c) More than 5 years

   IV. Outside AIF do you have any other occupational activity

   V. Salary at the last job: (Approx.)

3. How did you come to know of AIF's program?
   (a) AIF has worked in my village earlier
   (b) I know someone who works in the AIF/CFT
   (c) AIF announced in the village through the gram *panchayat*
   (d) Please specify if any other way

4. (a) Did you attend training prior to joining (arranged by AIF-CFT)? For how long? (year and month)
   (b) How long have you been a part of the program? (In years and months)

5. How far is the school / center away from your home?

6. How do you reach there?

7. What do you usually notify your supervisors and coordinators about? How do you communicate to them (e.g. texting, calling, in person, etc)? How do they respond (means of communication as well as nature of response)?
8. Have you experienced any problem(s) or challenges while working with LAMP Pathways? What were they related to?

   (You can choose more than one option in the options given below)

   (a) Regarding school or center
   (b) Regarding study
   (c) Student related
   (d) Community related
   (e) Elders related
   (f) AIF-CFT related (organizational / administration related)

   Please describe elaborate on the option(s) you have selected

9. What is the success of LAMP Pathways in your eyes or what is seen?

   (You can choose more than one option in the options given below)

   (a) Regarding school or center
   (b) Regarding study
   (c) Student related
   (d) Community related
   (e) Elders related
   (f) AIF-CFT related (organizational / administration related)

   Please describe briefly about the option(s) you have selected

10. Where are your classes held?

11. What are your class timings?

12. How long do you take for the tasks given below:

Maintaining decorum
Administrative related work
Teaching

13. What has been put up on the walls of the classroom? When was it changed last?

14. How do you prepare for the class?

15. How much time do you spend before preparing for classes?

    (a) Less than 1 hour
    (b) Between 1 to 2 hours,
    (c) More than 2 hours

16. How does the weekly plan help?

    (a) The lessons are fulfilled according to the plan
    (b) The lesson goes before the plan given in the plan
    (c) Less than the sample given in the lesson plan

17. Do you also plan your own lesson plan?
    (Yes / No)

18. Is the method or methodology specified for each lesson?
    (Yes / no)

19. Do you use the specified method or methodology for each lesson?
    (Yes / No)

20. What is the reason for the use of the given method? (Can choose more than one option)

    (a) Information for TLM is not available
    (b) Information is there but unclear how to use it/the purpose
    (c) It cannot be handed to a child. They do not know how to use it properly/ They wouldn't understand if taught by this

    You can write briefly elaborate on the chosen option or add to any other reason not listed.

21. Mention the last two community campaigns organised in the village via LAMP Pathways. What was your role or responsibility in this?

22. What do you expect from your students you have taught in LAMP Pathways program? What impact has the program had?

23. Do you know what students are doing after having undergone the classes at LAMP Pathways?

24. Please rate the following on the basis of your own opinion of these parameters in your schools. We are not asking for any proof in the form of data. We want to try to understand your experience about the following parameters:

	Rating					
(a) Attendance (What do you think of the average attendance throughout the year?)	***Boys***	Very high	High	Moderate	Low	Very Low
	Girls	Very high	High	Moderate	Low	Very Low
(b)Participation	***Boys***	Very high	High	Moderate	Low	Very Low
	Girls	Very high	High	Moderate	Low	Very Low
(c)Transition	***Boys***	Very high	High	Moderate	Low	Very Low
	Girls	Very high	High	Moderate	Low	Very Low
(d)Academic Performance	***Boys***	Very high	High	Moderate	Low	Very Low
	Girls	Very high	High	Moderate	Low	Very Low
(e)Enthusiasm towards transition to next grade	***Boys***	Very high	High	Moderate	Low	Very Low
	Girls	Very high	High	Moderate	Low	Very Low
(f)Parents Involvement	***Boys***	Very high	High	Moderate	Low	Very Low
	Girls	Very high	High	Moderate	Low	Very Low
(g)School Administration's Support	**NA**	Very high	High	Moderate	Low	Very Low
(h)Community Support	**NA**	Very high	High	Moderate	Low	Very Low
(i)Relationship with students	**NA**	Always formal	Mostly formal	Sometimes formal/informal	Mostly informal	Always informal

25. What do you plan to do after LAMP Pathways?
    Or, if not currently with LAMP Pathways, where are you working?

26. How have you benefited from working with LAMP Pathways?

Questions numbered 21 to 26 (excluding 24) were not replied to in writing, owing to the paucity of time. They were discussed during the FGD.

Questionnaire given to Supervisors, Coordinators and Program Managers

Name:
Village:
No. of Students: Girls
Boys

27. Educational Background

Qualification

(f) Passed 10^{th} grade
(g) Passed 12^{th} grade
(h) Undergraduate degree
(i) Post-graduate degree
(j) Any other additional courses taken: Like a vocational course either in addition instead of a high school or college degree(please specify)

28. Previous Employment

VI. Employer

(e) Government
(f) Semi-Government
(g) Private
(h) First employer was AIF

VII. If employed previously, please describe your responsibilities in the last employment

VIII. Duration of the previous employment
(d) Less than 1 year
(e) Between 1 and 5 years

(f) More than 5 years

IX. Outside AIF do you have any other occupational activity

X. Salary at the last job: (Approx.)

29. How did you come to know of AIF's program?
    (e) AIF has worked in my village earlier
    (f) I know someone who works in the AIF/CFT
    (g) AIF announced in the village through the gram *panchayat*
    (h) Please specify if any other way

30. (a) Did you attend training prior to joining (arranged by AIF-CFT)? For how long? (year and month)
    (b) How long have you been a part of the program? (In years and months)

31. Please rate the following on the basis of your own opinion of these parameters in schools you supervise. We are not asking for any proof in the form of data. We want to try to understand your experience about the following parameters:

Parameters	**Outstanding Schools**	**Schools in need of maximum support**
Community Involvement		
Academic Performance		
Support from School Administration		
Tutor Competency		
Enthusiasm of students towards transition to next grade		
Overall		

Schedule of Questions for Focus Group Discussions

To LEP Tutors

Classroom Transaction

1. Relationship with students
    (1) How would you describe your relationship with students?
    (2) How was it when you first started out?
    (3) Are students courteous towards you?
2. Do you face any time restrictions while operating classes in centres?
3. How do you manage to create a positive environment in your classroom?
4. How are the students faring in their regular classes? Any sort of differences that have been observed?
5. Have you encountered any difficulties while working in the program with children or school administration or communities?
    - What kind of difficulties do you most face most often?
    - When you encounter a problem (like covering the syllabus, or a particularly difficult to control classroom perhaps) how do you try to solve it? Do you try to inform and involve any other AIF personnel?
    - How do the supervisors and cluster coordinators respond usually?

Community Engagement

1. How do you do community engagement?
2. What has been the most positive thing out of the process?
3. How many of them do you think you may have been a part of?
4. Please describe the most significant role you in any one or few of them.
5. Has there been any time that you have faced difficulty with convincing parents or community members about school or related activities?

High School Tutors

1. How did you establish ties with school where you teach? How was it when you started off? How is it now? Who are the persons you usually communicate with in the school administration? Are they responsive? Do they acknowledge LAMP Pathways work?
2. How do you manage to engage students in large classes?
3. How do you plan your lessons?

Supervisors and Cluster Coordinators

1. How did you establish ties with schools where you need to supervise the classes? How was it when you started off? How is it now? Who are the persons you usually communicate with in the school administration? Are they responsive? Do they acknowledge LAMP Pathways work?
2. How do you coordinate community events? How do you assign roles to tutors or the youth group volunteers for an event?

3. Have you had to take classes in the villages you supervise? What are the subjects you find you have to help out with?