

Draft report

Evaluation Report of Accelerated Reading Program (ARP)

Submitted to DSERT & SSA Bangalore

**Program Implemented
By
Akshara Foundation during 2005-2006**

DIET, Bangalore, Urban, Rajarajeshwari Nagar, Bangalore

June-2006

Acknowledgements

Evaluation team sincerely acknowledges its thanks to children from experimental and control schools and the teachers who cooperated extensively in implementing the program and while collecting the data. The D.Ed students, who collected required data by enduring to all the odds that were eternally changing over a period of time, were rally marvelous in collecting the bench mark information in consultation with the teachers. The DIET faculty, Bangalore, urban, in the subsequent stages of data collection, played a crucial role and the evaluation team sincerely thanks them for the interest shown in the study. When the program was encircling beyond 45 day – duration, it was the Akshara Foundation functionaries who extended complete and whole hearted support to mitigate with numerous problems surfaced. The team thus records it sincere thanks to the staff members and the functionaries of Akshara Foundation. The principal, DIET Bangalore, Urban, Mr. Shantharaj provided all the required support to accomplish the tasks in time and the team sincerely proposes it's thanks to him.

SSA gave an opportunity to DSERT & PPU to take up the concurrent evaluation and understand the program in all its ramifications. This indicates pro-active agenda of SSA to universalize elementary education. Our sincere thanks are due to SSA and its functionaries. The DSERT guided the team at every stage, especially the then Director of DSERT, Mr.Jaganath Rao who is to be credited all appreciation for his excellent guidance at every stage of evaluation. APF, in due course of time, extended its expert advice and helped the evaluation team through out. The present Director Mr.Chidre Sankaraiah Swamy took keen interest on the findings of the study and drove it to a meaningful end. PPU and the nodal officer from DIET, Bangalore urban deserve a word of appreciation in accomplishing the task. The team recognizes the contributions of those who directly or indirectly helped in completing the study.

Evaluation Team

Accelerated Reading Program (ARP) 2005-2006

Table of contents

Para No.	Content	Page No.
0.1	<i>Objectives of Reading</i>	7
0.2	<i>Components of Reading</i>	7
0.3	<i>Types of Reading</i>	8
0.3.1	Oral reading	8
0.3.2	<i>Features of Oral Reading</i>	8
0.3.3	Silent reading	8
0.3.4	<i>Features of Silent Reading</i>	8
Section – 1		
1.1	Importance of Reading	9
1.2	Why Reading Alone?	9
1.3	Context for Evaluation	10
1.4	Nature of the Program	10
1.5	Identified Reading Levels	11
1.6	Program Strategy	11
1.7	Evaluation Committee	12
Section – 2		
2.1	<i>Methodology of the study</i>	13
	(i) Sample size	13
	(ii) Method of selecting the sample	13
	(iii) Objectives of Evaluation	14
	(iv) Final Size of the Sample	14
	(v) Limitations	15
	(vi) Stakeholders	15
	<i>Role of Akshara Foundation</i>	15
	<i>Role of DIET (Bangalore Urban)</i>	16
	<i>Role of Policy Planning Unit (PPU)</i>	16
	<i>Role of SSA</i>	17
	<i>Role of DSERT</i>	17
	<i>Role of APF</i>	17
	(vii) Indicators for Analysis	17
	(viii) Problems faced during the process of Evaluation	18
	(ix) Training to the investigators	19
	(x) Report Layout	20

	Section – 3	
3.1	Framework for Analysis	22
3.2	Internal Impact Assessment	22
3.3	Impact over and above the Control Schools	22
3.4	Gross Impact	22
3.5	Net Impact	22
3.6	Other Dimensions of Analysis	23
	Section – 4	
4.1	Internal Impact Assessment	24
4.2	Progress Levels on 31 st Day	24
4.3	Progress Levels on the 46 th Day	25
	Section-5	
5.1	Impact in Control Schools	27
5.2	Progress levels in control schools	28
	Section – 6	
6.1	Other Dimensions of Analysis	30
6.2	Block-Wise Analysis	30
6.3	Program Impact based on Mother Tongue of Children	31
6.4	Gender-wise Impact of the Program	32
	Section-7	
7.1	Conclusions	34
7.2	Recommendations	35
Annexure-1	Data Tables	

List of Tables

Table No.	Name of table	Page Number
Table-1	Progress between Experimental and Control Schools over Benchmark levels on the 31st and 46th Day.	24
Table-2	Progress in Experimental Schools over Benchmark levels on the 46th day and the number of children who moved to other Higher Levels.	25
Table-3	Progress in Control Schools over benchmark levels on the 46th day and the number of Children who moved to other higher levels.	27
Table-4	Reading Abilities of Children in Experimental and Control Schools from the 31st to the 46th day.	29
Table – 5	Net Impact Over and Above the Basic Levels (In Percentage)	30
Table-6	Block-wise analysis of the impact between the Control and the Experimental Schools.	31
Table – 7	Analysis of the impact between the Control and Experimental Schools according to the Mother Tongue of Children.	31
Table-8	Gender-wise distribution of Progress levels (in %) in Control and Experimental schools.	32
Table-9	Gender-wise Progress levels of Children from Control & Experimental Schools.	33

List of graphs

Graph No.	Name of the Graph	Page No.
Graph-1	Percentage Growth in Progress Levels	26
Graph-2	Progress Levels in Experimental Schools	26
Graph-3	Progress in reading levels of children from control schools.	28
Graph-4	Gross & Net impact of the program	29
Graph-5	Gender-wise progress levels from control & experimental schools.	32

Evaluation Team

Data collection:

D.Ed Students & Faculty of DIET, Bagalore, Urban

Data Analysis & Report Preparation:

Dr. G. Nagendra Prasad, Member- PPU, Project Coordinator
Ms. Vinutha, Nodal Officer & Faculty, DIET Bangalore, Urban.
Dr.S.N.Unachagi, Rtd member of PPU
Ms. Indu Prasad, Member APF

Support

Director, DSERT, Bangalore
Azimpremji Foundation, Bangalore. (APF)
Principal, DIET, Urban Bangalore
Akshara Foundation
SSA, Bangalore Rural
State Project Director's office, Sarva Sikhana Abhiyan, Bangalore

Accelerated Reading Program (ARP) 2005-2006

The word 'Reading', as per the dictionary, means 'looking and understanding the meaning of written or printed words/symbols'. It is an act or practice and an oral recital. It has been described as '*Thinking under the stimulus of written or printed pages*'.

William S Gray defined reading as " *a process of recognizing printed or written symbols by involving such habits as accuracy in recognizing the words that make up a passage, span of recognition, rate at which words and phrases are recognized, rhythmical process of perception along the lines and accurate return sweep of the eye from end of one line to the beginning of the next*".

Learning a language includes four main skills namely ***Listening, Speaking, Reading and Writing***. Among them listening and reading are receptive skills whereas speaking and writing are productive skills. Listening and Reading are generally given priority compared to speaking and writing. Listening and reading skills are essential in learning a language and the skills of speaking and writing follow next in the order.

0.1 Objectives of Reading

In general, the following are the objectives of reading:

- To enable learners to understand language and gain experience in learning a language.
- To be able to communicate with sufficient fluency.
- To help improve oral and silent reading
- To recognize words and understand their meaning
- To cultivate good reading habits
- To help acquire the necessary skills of reading and to enjoy reading

0.2 Components of Reading

The skill of reading has the following components and sub components

- Reading and interpretation of printed symbols
- Reading with fluency
- Decoding and interpreting the message / text.
- Reading for meaning
- Span of attention
- Speed of reading
- Paraphrasing
- Locate significant /key thoughts and facts
- Reading for appreciation
- Reading with emotions and feelings
- Recitations

0.3 Types of Reading

0.3.1 Oral reading

This implies reading aloud with understanding. The advantage of oral reading is that the other person listening to the reading of the text also understands the spirit and the meaning of the text. This provides scope to assess whether the reading is understandable to the reader and to the listener. Any reading takes its own path of pronunciation. Phonetics with pauses can also be understood if one reads aloud. The following are the important characteristic features of oral reading.

0.3.2 Features of Oral Reading

- It forms the basis for correct reading.
- It then becomes the basis for silent reading.
- It involves pronunciation. When mistakes are committed, they can be detected and corrected then and there. Hence, oral reading allows understanding of the reader over the text read.
- Like any other art, reading is an expressive dramatic and re-creative act.
- It enables one to recognize quickly the oral counterparts of the printed symbols.
- It provides practice in acquiring correct stress, intonation and rhythm
- It helps to recognize meaningful units.
- It develops the art of reading with feeling and expression.
- It enables one to become a good reader and a speaker.

0.3.3 Silent reading

This is a practice normally acquired after a level of understanding of phonetics and pauses. This is useful for a person to understand the meaning of a text, its depth and to enjoy the language, its usage and meaning. The following are the features of silent reading.

0.3.4 Features of Silent Reading

- It helps to acquire mastery over language.
- It enables to read with ease, fluency and understanding.
- It improves recognition of words
- It helps to learn and grasp more.
- Its main aim is to gain pleasure of understanding.
- It saves time and energy, as it is quicker than oral reading.
- It prepares for independent reading.
- It develops taste for reading.

As stated earlier, reading is a practice and if it is developed as a habit it provides pleasure of understanding a text and gradually provides scope to master over the language. However, reading is an important competency to be acquired while learning a language. There are six methods of facilitating the habit of reading among the beginners. They are used according to the needs and requirements of the learners. These methods are broadly the following:

Alphabetic method	Word method
Phrase method	Phonic method
Sentence method	Syllabic method

Section – 1

Akshara Foundation has been associated with educational processes for children and endeavors to provide qualitatively better education. The Foundation has focused on reading skills more than on any other skill of language learning. Reading is a basic skill for any child. Unless interest and skill in reading is inculcated early, further progress is a struggle for any child.

Estimates indicate that nearly forty-five per cent of children in Government primary schools in the age group of 7 – 10 years are not able to read simple words with fluency while sixty per cent cannot write a simple dictated sentence. Over the years, though the government has tried to improve enrolment through various programs like Chinnara Angala, Coolie Inda Shalege and Ba Marali Shalege, learning achievement inside the classroom continues to be disappointing.

Set up as a public charitable trust in March 2000, Akshara Foundation has been continuously engaged in efforts to universalize elementary education in Karnataka. Envisioning Karnataka as a reading state, Akshara Foundation advocates strong partnerships with different stakeholders like the government, civil society organizations, communities and the corporate sector. Evolving a workable model to energize the existing education system, Akshara believes that a public-private partnership holds the key to provide the required impetus to change mindsets and make available quality elementary education to every child.

1.1 Importance of Reading

Akshara Foundation has made interventions to augment reading skills among school-going children solely with the purpose of providing them opportunities to read and enjoy reading. This in turn would become the basis for the attainment of subsequent competencies. Reading means the recognition of sounds, letters and the association of sounds with symbols (letters). As a strategy Akshara Foundation decided to augment reading skills among children in an accelerated manner by creating an enjoyable learning atmosphere.

Akshara Foundation conceived the Accelerated Reading Program (ARP) against this backdrop. The program aims to enable children to *'learn to read'*. Since reading is intrinsically linked to the learning process, the program focuses on developing reading levels among children. The ultimate goal is of ensuring that every child is in school and, most importantly, attains quality learning by acquiring competencies of reading, writing and speaking a language. At a time when complete quality education at elementary level is the goal, this is critical.

The critical competency recognized by Akshara Foundation is reading. Writing acquires importance in subsequent stages. Reading is critical to learning.

1.2 Why Reading Alone?

Reading is critical but alone is not sufficient - one should be able to write and speak to communicate and understand the essential meaning of a text. Reading goes with recognition of letters, writing goes with recognition and practice, speaking requires knowledge of sentence structure, grammar and ability to use and articulate ideas precisely and convincingly.

Among the competencies like reading, writing and speaking a language, it is through reading that one can understand a text and remember it, if it has been read correctly.

Reading alone cannot be segregated from other competencies like writing and speaking. Reading with comprehension ensures complete understanding of reading matter in the story cards. Therefore, comprehension has also been included in the strategy of the Accelerated Reading Program. Studies/surveys have shown that reading abilities among school going children have to be developed to make learning more effective.

1.3 Context for Evaluation

Akshara Foundation, as per the guidelines provided by Sarva Shiksha Abhiyan (SSA), started the Accelerated Reading Program with the financial assistance of SSA.

The program was implemented in some schools in two educational blocks of Bangalore city during 2004 - 2005. 117 schools in South - 2 and North - 2 blocks of Bangalore City were selected and 4,500 children were covered. This demonstrated proactive commitment by the state and stood as a unique example of private and public partnership to enhance quality learning.

After its initial success in 117 schools, Akshara Foundation, in 2005-06, started the Accelerated Reading Program in four educational blocks of Bangalore (N1, N3, S1 and S4) by selecting 250 schools. Out of these 250 schools, Accelerated Reading Program could be completely implemented in 92 schools by the end of March 2006.

Akshara Foundation implemented the Accelerated Reading Program, gained experience and intended to scale up the program with revised guidelines for effective implementation. The Foundation submitted a report (self-evaluation) to SSA and sought to upscale the program by selecting some more schools from the educational blocks of Bangalore city.

While approving the up-scale of the program, SSA felt that an **external concurrent evaluation** while the program was being implemented by the Foundation could be taken up and a report submitted keeping in view the ground realities and the problems encountered while implementing the program.

The task of concurrent evaluation was assigned to the DSERT during 2005-06 which in turn selected the DIET (Bangalore Urban) to collect data and co-ordinate field activities. A nodal officer from the DIET was appointed who took the help of the Policy Planning Unit for evaluation and submission of the report to DSERT/SSA. D.Ed students collected data for evaluation and the study was coordinated by the DIET. The Policy Planning Unit extended guidance and support in analyzing the data and in preparing the report.

1.4 Nature of the Program

The Accelerated Reading Program aims to improve a child's reading level by integrating activity-based learning methods through stories, printed attractively on laminated cards.

The package contains a total of forty-five story cards. These story cards have reading material on them (with pictures) that are graded according to an increasing level of difficulty. During the program, one card is given to a child each day and the entire set is given over a forty-five day period. The teacher facilitates the child's learning to read this material over the forty-five day period.

Before the story cards were introduced, each child's reading levels were evaluated and they were placed in categories. These categories were based on reading levels.

Children who could not identify letters were placed at 'O' Level, those who could only identify letters at the 'L' Level and those who could identify words at the 'W' Level. Only children identified to be at these levels were chosen for intervention. Those who could read sentences and paragraphs were not selected for the program.

Thus, the following groups were formed :

1.5 Identified Reading Levels

- Group of children who could not identify even 30 per cent of Kannada letters were categorized as Ordinary level (O level) which is referred to as 'O' (Zero) Level
- Group of children who could identify Kannada letters - letter level (L)
- Group of children who could identify and read Kannada words - Word level (W)
- Group of children who could identify and read Kannada sentences - Sentence level (S)
- Group of children who could identify and read paragraphs in Kannada - Paragraph level (P)

1.6 Program Strategy

- Children were grouped based on their initial reading levels by administering the specified tools designed by Akshara Foundation for pre-course assessment (also referred to as Benchmark Assessment)
- Learning centers were located within the school and one of the school teachers were selected to implement the program after required training by Akshara Foundation. These teachers assessed pre-course reading levels of children along with investigators.
- D.Ed students from the DIET (Bangalore Urban) were selected as the investigators.
- One nodal officer from DIET (Bangalore Urban) is identified to coordinate the field activity.
- DSERT/PPU extended required support at every stage of the evaluation process.

- Once the assessment process was complete, children with ‘0’, ‘L’ and ‘W’ levels were selected.
- The program was implemented by Government school teachers selected and trained for this purpose within forty-five working days.
- Training for the selected teachers was conducted which covered all aspects of facilitation of children to read the story cards effectively. Once the child acquires the competence to read a specified story card, the teacher provides the next story card which entails the next higher level of reading. Thus, forty-five story cards designed on a continuum of required reading competencies provide children basic reading abilities.
- The story cards were supplied by Akshara Foundation and once reading a story card was mastered by a child, it was returned to the teacher and the subsequent story card provided to the child.
- It was expected that forty-five story cards over a period of forty-five working days would be provided to the children and they were expected to acquire the required competencies within forty-five working days.
- Levels of difficulty in acquiring the required competencies also vary on a time line of forty-five days. Strictly, the program was envisaged to be completed within forty-five working days of the school. However, if the child was unable to read the story card with required levels of reading competencies, there was a possibility that the same story card remained with the child till she/he acquired mastery over reading that story card.
- In practice, the schools covered under the program could not complete the intervention in forty-five days and the program did not start or stop on a common date in all schools.
- The evaluation team thus waited for the administration all forty-five cards and intended to record the progress of children on the thirtieth and on the forty-sixth day to compare the levels of progress with the assessed reading levels.
- Thus, the methodology adopted for the evaluation was unique in the sense that it proposed to compare the progress of each child's pre-program reading levels with those attained on the thirtieth and forty-sixth days. It also aimed to compare progress levels between the children of the control and experimental schools.

1.7 Evaluation Committee

In order to evaluate the program, to seek advice and guidance, a committee was constituted, under the chairmanship of Director, DSERT with the following members:

1. Director DSERT, Chairperson
2. Sri Thirumala Rao, Joint Director (Retired), Member
3. Colonel Murthy Rajan, Akshara Foundation, Member

4. Mr. Ravi Kumar, Co-ordinator, Akshara Foundation, Member
5. Smt. Rajeshwari, DyPC, SSA, Bangalore Urban, Member
6. Dr. G. Nagendra Prasad, Policy Planning Unit, Convener and Co-ordinator
7. Dr. S.N. Unachagi, Policy Planning Unit, Member
8. Smt. B.S. Vinutha, Lecturer, Urban DIET, Bangalore, Nodal officer and Member
9. Ms. Indu Prasad, APF, Member

Section - 2

2.1 Methodology of the study

(i) Sample size

The members of the Evaluation Committee met twice and deliberated upon the required methodology to execute the study. It was decided that out of 250 schools selected for the program by Akshara foundation, 10 per cent (25 schools) of the schools would be selected for the study. In order to make comparisons between the schools included under the program and those not included in the program, another 25 schools were selected as control schools. Thus, a total of 50 schools were planned to be selected for the sample in which 25 were experimental schools and 25 were control schools. (Finally a total of 38 schools from both the categories rested in the sample)

(ii) Method of selecting the sample

A stratified random sampling method was adopted to select 25 experimental schools to accommodate distinctive characteristic features of the schools. The 250 schools envisaged to be covered under the program also included Urdu, Telugu and Tamil medium schools. While the majority of schools are Kannada medium schools, another subset of the sample is Urdu medium schools. The sample proposed to cover 80 per cent Kannada medium schools and another 20 per cent Urdu medium schools. Out of 25 experimental schools, 20 Kannada medium schools (i.e. 80 per cent of the sample) and another 5 Urdu medium schools (i.e. 20 per cent of the sample) are selected.

Accelerated Reading Program covered children from Class II to Class V. In each center, children were selected homogeneously from one class. If a reading center was opened in a school, it covered at least twenty children from a specified class. Each center consisted of children coming from one homogeneous class / grade. Thus, the sample accommodated class-wise balance.

Control schools located within a radius of one kilometer of the experimental schools were selected for comparison. Selection of control schools was based on convenience and the same criterion as provided for the experimental schools was followed to select control schools.

Data relating to reading levels of children from control and experimental schools was collected by field investigators on the thirtieth and forty-sixth days. The same tools used for the experimental schools were used for the control schools to collect data on the reading levels of children. Thus, the

scope for cross comparisons between experimental and control schools provided scope to measure divergence in progress levels of children.

(iii) Objectives of Evaluation

1. To evaluate and assess the impact of the Accelerated Reading Program in terms of progress levels achieved by the children from base line levels.
2. To understand and assess gross and net impact of the program and the variations in reading levels among children from experimental and control schools.
3. To understand initial reading levels of children and to compare them across blocks, gender and as per mother tongue of children.
4. The evaluation study intends to provide objective feedback on implementation of the program and to suggest the ways and means for effective implementation.
5. To compare the net impact and outcome of the program over and above the reading practices adopted in classrooms where the program is not under implementation.

(iv) Final Size of the Sample

Initially 50 Government Schools were selected for the Accelerated Reading Program i.e. 25 experimental schools and 25 control schools. Baseline / Pre-Test assessment was conducted in all 50 Government schools. But the number of schools in the sample changed due to transfer of trained teachers, absence of a few teachers from experimental schools from the training programs etc. Out of 25 schools initially selected for the sample, six schools could not be included in the Program. Thereby the number of experimental schools came down to 19. Accordingly, the number of control schools was also reduced to 19. Among 19 experimental schools, 17 were Kannada medium schools and 2 were Urdu medium schools. As a result, the total number of schools in the sample got reduced to 38 from 50.

(v) Limitations

- The study is conducted based on the sample. Hence, the findings will invariably reflect patterns rather than exactly projecting the direct and indirect benefits from the program. Very often, in the long run, the exact benefits come from within the individual child who participated in the program. As such, the numbers may not speak much about the intrinsic benefits.
- The same parameters selected to assess the impact of the program were applied to control schools where the program was not implemented and hence whatever progress achieved in these schools logically should become a reference point to compare the impact of the program on the forty-sixth day. The impact over and above the progress in reading levels of children from control schools on the forty-sixth day is the net impact of the program. But the

number of children who participated in the program on the first day varied from that of it on forty-sixth day.

- Since ARP was implemented only in urban areas, it cannot be concluded that the findings are universally applicable. Also the number of schools selected was not large to precisely come to final conclusions about the reading levels of children in urban areas.
- Another important limitation comes from the fact that the ARP covers only the reading levels of children. It does not emphasize on other related competencies like writing and speaking a language. Inferences drawn from the study are based on the sample and are applicable only to the competency of reading. Hence, it cannot be concluded that all the other competencies of children are evaluated.
- There is a possibility that children may have read quickly and correctly without comprehending content. The evaluators were also not sure of complete comprehension of content while reading of the stories by the children. This is because of continuous practice of reading the same story cards very often without understanding the content of reading material.
- Real progress in reading levels pre-supposes that children would be in a position to read the same level of reading material with different versions. But one of the limitations is that they were asked to read the same reader provided or the same story card given to them. This may not have provided a complete understanding about the overall reading levels of children.

(vi) Stakeholders

Evaluation was carried out with the co-ordination of the following Government and Non-Government organizations :

- Sarva Shikshana Abhiyan (SSA), Karnataka, Bangalore
- Azim Premji Foundation (APF), Bangalore
- Selected Government School Teachers
- Akshara Foundation
- District Institute of Education and Training (DIET), Bangalore Urban
- Department of State Education Research and Training (DSERT), Bangalore
- Policy planning unit (PPU), Bangalore

Role of Akshara Foundation

- Akshara Foundation believes that children in government schools with below-grade reading levels would directly benefit from the program.
- The organization provided reading material to children to rouse interest among them and to augment their reading levels which would sustain among them over a period of time.

- As a next step, the organisation intends to establish libraries by creating avenues for community participation. The children who acquired better reading levels would continuously practice reading by visiting libraries.
- Akshara Foundation is one of the important stakeholders in the whole process of evaluation. Since the evaluation is a concurrent one, at every stage the personnel from Akshara foundation co-operated, helped and provided guidance for required logistics to collect the data from selected schools.

Role of DIET (Bangalore Urban)

- When DSERT was asked by SSA to evaluate the program, PPU was entrusted with the task of coordinating the process of evaluation by selecting one Nodal Officer from the DIET (Bangalore Urban) who in turn deployed D.Ed students for data collection.
- The appointed nodal officer acted as a key person in coordinating the work of evaluation and interfaced with Akshara Foundation, Government school teachers, PPU and the D.Ed students. DIET (Bangalore Urban) was involved in the process and gained experience from the process of evaluation. Another objective was to involve D.Ed students was to equip them with practical work experience which would be beneficial for them as teachers. The Nodal officer was also entrusted the job of data analysis with the help of PPU.
- The Nodal Officer conducted two workshops after collecting the data from the schools. One workshop was to evolve the framework for analysis and the other was to analyze the data, structure the report and to complete the whole process by the end of April 2006.

Role of Policy Planning Unit (PPU)

- PPU extended support to the process of evaluation from the beginning and guided the Nodal officer at every stage. A small proposal describing the process of evaluation was developed by the Nodal officer in consultation with PPU and DSERT formally approved DIET (Bangalore Urban) taking up the project. One member in PPU completely took charge and facilitated the process of evaluation.
- While selecting the sample for the study, the process was facilitated by the PPU and the Nodal officer continued to work with the sample after it was finalized.
- PPU actively coordinated the process of evaluation and organized workshops, facilitated the process and helped the Nodal officer for the smooth conduct of evaluation.
- PPU also helped in analyzing the data and in preparing the evaluation report.

Role of SSA

- During the year 2004-05 when Akshara Foundation implemented the program, SSA provided funds for the program. The Foundation submitted a self-evaluation report to SSA and requested for its upscale.
- During 2005-06, when Akshara Foundation decided to implement the second phase of the program, SSA provided funds and requested that a concurrent evaluation by an external organisation may be organized and a report may be submitted. Accordingly, DSERT was requested to take up the process of concurrent evaluation and check the validity of the program and its impact. Thus, SSA is one of the important stakeholders of the study.

Role of DSERT

- One of the important stakeholders of the study is the DSERT. A committee to facilitate the process of evaluation under the chairmanship of the Director, DSERT was constituted who monitored the process at every stage and extended complete support, guidance and co-ordination.
- As per the guidelines evolved by the committee, the PPU was involved by the Director, DSERT, to co-ordinate the process of evaluation by taking help of the nodal officer from DIET, Bangalore Urban.
- The finalized report was to be submitted to the Director, DSERT, who in turn would present it to the Director, SSA and Akshara Foundation.

Role of APF

- Along with the support from the PPU, APF also extended its support and participated in the process of evaluation. One member of the Academics and Pedagogy wing of APF actively participated in the field programs and extended support to the Nodal officer of the study.
- Members from APF also participated in the workshops to evolve the framework for analysis which were conducted to bring qualitatively better evaluation report.

(vii) Indicators for Analysis

Any impact evaluation is based on the analysis of a set of indicators to understand performance / outcome of the project interventions. For the present study, reading is the focus competency but it is one broad competency among other required competencies. Levels of reading progress from pre-test performance to post-test performance have been observed and the differentials were analyzed to understand effectiveness of the program. Pre-test reading assessment levels were compared with those on the thirty-first and forty-sixth-day achievement levels across blocks, gender and mother tongue. The dimensions were compared between experimental and control schools.

The following table indicates the verifiable indicators and the dimensions:

Sl No.	Pre-test assessment Levels	Post test assessment levels		Dimensions for analysis
		31 st day	46 th Day	
1	'O' - Ordinary level	'O' - Ordinary level	'O' - Ordinary level	Gender
2	'L'- Letter level	'L'- Letter level	'L'- Letter level	Block
3	'W' Word level	'W' Word level	'W' Word level	Control Schools
4		'S'- Sentence level	'S'- Sentence level	Experimental Schools
5		'P' - Paragraph level	'P' - Paragraph level	Mother tongue

All the schools selected for the sample were Government Schools. Children from Class II to Class V were covered under the program. Each of the selected schools carried on with the designed program for students of a particular class. From each class, twenty children were selected based on their performance in the pre-test. Five reading levels have been identified based on the reading ability of Children - namely 'O', 'L', 'W', 'S' and 'P'. The description of the levels is given below :

'O' – Ordinary level, referred to as '0' (Zero) Level.

'L' -Letter level

'W' – Word level

'S' – Sentence level

'P' – Paragraph level

Children selected for the program were in the levels of 'O', 'L', and 'W'. In the same way, even in Control Schools, where ARP has not been in existence, students were selected on the same basis with same initial reading levels. Reading levels of these children were based on regular teaching learning processes in the classrooms.

(viii) Problems faced during the process of Evaluation

When the program was taken up for evaluation, it was thought that the whole process would get completed within three or four months. The program was expected to be implemented strictly for forty-five working days. However, unanticipated and unforeseen contingencies along with certain other external factors caused delays in the process of evaluation. The following are the potential reasons for the delay of completing the process of evaluation.

1. Since the program was implemented in Government schools with the help of Government school teachers, any additional tasks or training programs for the teachers resulted in delay. Pre-occupations of the teachers coupled with routine academic work like organizing unit tests and examinations for children at specified time intervals also forced delays in implementation.
2. As per the Accelerated Reading Program, forty-five story cards were to be provided to students on forty-five working days at the rate of one card per day. As per the Committee's

direction, Baseline Assessment at both experimental and control schools was completed by the end of June 2005. But Akshara Foundation could not start the program with the distribution of story cards immediately after the Baseline Assessment. There was a gap between the base line assessment and the date of starting the program with the distribution of story cards. There were variations in starting dates across 4 educational blocks, selected for the Program. Therefore evaluation and submission of the report was delayed.

3. Delays in the supply of story cards by Akshara Foundation caused a time-lag in implementing the program. When one set of story cards was completed, the teachers expected another set of story cards. Time gaps in the supply of story cards caused the program to be implemented over a much longer period than the specified timelines.
4. After selecting the schools for the program, teachers were trained on how to implement the program and how to co-ordinate with Akshara Foundation. Some of the teachers who had been initially trained could not involve themselves in the program and a reading center in their school could not be opened. The Foundation tried to address these lacunae by training additional teachers from other schools. The readjustment process thus took sometime and in certain cases, reading centers could not be opened even after training the teachers.
5. After a set of schools were selected as sample for baseline assessment (pre-test), there was a large time gap between conducting the benchmark survey and commencement of the program due to change of teachers.
6. The KSQAO examination work in January 2006 and the Departmental training programmes for teachers delayed program implementation. All these issues ended up ensuring that implementation of the forty-five day package took close to one year to complete.
7. After all the above adjustments, only thirty-eight sample schools remained out of fifty sample schools intended to be selected for the sample. Six schools which could not continue the program could not be studied any further due to the reasons stated above.

(ix) Training to the investigators

Before collecting the data required for the study, investigators were trained to provide orientation about the purpose for which the data was collected and the norms to be followed while collecting the required information for the study. D.Ed students from DIET (Bangalore Urban) collected the data. A one- day training program was held for them where they were oriented about the following issues:

1. Filling up of prescribed evaluation formats
2. Selection of controlled schools near the experimental schools
3. Five reading levels (namely 'O','L','W','S' and 'P') were described and the progress achieved by the students thereon was asked to be recorded. This meant the identification of baseline reading levels with the help of readers both in experimental as well as control schools.

4. There are three readers referred to as Reader 1, 2 and 3. Reader 1 covered 'O' and 'L' levels, Reader 2 covered 'W' and 'S' levels and Reader 3 covered 'P' levels. Some orientation about them was provided to the investigators.
5. They were oriented about reading levels and were asked to conduct baseline assessment to compare progress levels with those on thirty-first and forty-sixth day.
6. They were instructed to visit the control schools when they visited the experimental schools on the thirty-first and forty-sixth days to facilitate an understanding on the net and gross progress achieved in control and experimental schools.
7. A Pre-test was to be administered to all the students of a particular class and their reading levels were to be noted.
8. Only twenty students per class who were at O, L, and W levels in the ratio of 7:7:6 were to be chosen for the program after conducting the pre-test
9. Pre-test was required to be administered in control schools in the same way as it was done for experimental schools.
10. ARP trained teachers identified the reading levels of students by following the same method as mentioned above in experimental schools.

Selected students from each experimental school, under the guidance of the ARP trained teachers were provided with story cards everyday in the afternoon session. After collecting the information on children's reading levels from experimental schools, information from control schools was collected and compared to understand the impact of the program.

(x) Report Layout

The whole analysis has been provided under different sections. Background information on reading, types of reading, importance of reading as a prime competency for children are briefly mentioned to set the problem and provide basis for a comprehensive understanding on reading.

Section – I deals with the context for evaluation and reason why reading is an important competency identified reading levels and the program strategy.

Section – II provides information on methodology adopted for the study, including the problems faced while executing the study.

Section – III provides information on the framework for analysis and the adopted definitions of the concepts used in the context of analyzing the data.

Section-IV gives information on progress levels in experimental schools and compares the net impact created in experimental schools by the program over and above that of the control schools.

Section-V furnishes information on progress levels achieved in controlled schools and its comparison with experimental schools.

Section-VI includes the information on other dimensions of the study to have operational insights on program implementation.

In **Section-VII** conclusions and recommendations are presented for effective implementation of the program.

To have a comprehensive view on program implementation, data tables are annexured at the end of the report.

Section - 3

3.1 Framework for Analysis

There were 690 children in the sample. Out of this, 380 children were from schools where the program was implemented (Experimental Schools) and 310 children from the schools where the program was not under implementation (Control Schools). Reading abilities of all children have been assessed and compared to understand the differences in performance from pre-assessment (on the first day) through interim assessment (on the thirty-first day) and the final assessment (on the forty-sixth day). By the time interim assessment was undertaken, the child had completed the thirtieth reading card and on the forty-sixth day the child had completed the forty-fifth story card. This provided insights to broadly understand the variations in the levels of progress.

3.2 Internal Impact Assessment

As stated earlier, analysis was carried out to understand impact of the program at various levels of implementation. Reading levels of children assessed through pre-assessment organized on the first day of the program (referred to as Bench Mark assessment) were compared with interim levels of progress (thirty-first day Assessment) and finally with terminal assessment (forty-sixth day assessment). Differentials in progress at various levels of implementation have become the basis to understand the impact of the program.

3.3 Impact over and above the Control Schools

Another way of comparison was to understand difference between achievement levels of children in experimental and control schools. As per the methodology, positive differentials in impact over and above the control schools would be the net impact created by the program.

3.4 Gross Impact

In order to understand the total impact (Gross Impact) of the program, upward movement of children from 'O' to 'L' and 'W' levels were considered and summated with the number of children who moved to higher levels of progress over and above the bench mark levels ('O' to 'L' and 'W' levels).

Thus, it can be noted that gross impact includes upward movements within the assessed bench mark levels and those above them. The upward movements of children, over and above the bench mark levels were considered to understand the net impact of the program. The same methodology for both the experimental and control schools was followed.

3.5 Net Impact

Net Impact is defined as movement of children to relatively higher progress levels. After assessing the reading levels of children through the pre-test, only those children whose reading abilities were in 'O', 'L' and 'W' levels were selected for the program.

At the time of assessment, the number of children who moved from basic levels ('0', 'L' and 'W') to the higher levels namely, 'S' and 'P' were considered for assessment of net program impact. Thus, net program impact is measured by adding the number of children in 'S' and 'P' levels, excluding absentees. Their percentages have been calculated to understand the patterns of progress in real numbers.

Gross Impact = Upward movement within Bench Mark Levels (BML) + Upward movement over Bench Mark Levels (Over '0', 'L' & 'W' levels)

Net Impact = Upward movement over Bench Mark Levels ('S' & 'P' levels), excluding absentees.

3.6 Other Dimensions of Analysis

While analyzing the data, it was interesting to compare the progress of reading levels across Blocks, Gender and Mother Tongue. This helped us to understand differences in achievement levels and provide us feedback about the areas to be addressed, especially when the program is scaled up in the subsequent phases. Keeping the above analytical framework in view, an attempt has been made to depict empirical evidence for achievement levels through program interventions.

Section – 4

4.1 Internal Impact Assessment

Under Internal Impact Assessment, focus was more on scaling the impact in terms of movement of children to higher levels of reading.

Table - 1 indicates broad patterns of progress across experimental and control schools. It can be seen from Table - 1 that the program could create a visible impact. Reading levels of children after program interventions were identified on a relatively higher scale than the bench mark levels.

There were 380 children from experimental schools and 310 from control schools. All children both from experimental and control schools at the time of pre-test assessment were at ‘O’, ‘L’ and ‘W’ levels. Distribution of children from experimental schools and their progress levels on the forty-sixth day over bench mark levels is furnished in Table-2 in order to understand the gross impact.

Table-1

Progress between Experimental and Control Schools over Benchmark levels on the 31st and 46th Day

Progress Levels	Bench Mark Level (On 1 st day)			Progress on the 31 st day			Progress on the 46 th day		
	Experimental	Control	Total	Experimental	Controlled	Total	Experimental	Controlled	Total
‘O’ Level	104 (27.4)	80 (25.8)	184 (26.7)	21 (5.5)	24 (7.7)	45 (6.5)	17 (4.5)	14 (4.5)	31 (4.5)
‘L’ Level	160 (42.1)	104 (33.5)	264 (38.3)	75 (19.7)	67 (21.6)	142 (20.6)	44 (11.6)	31 (10.0)	75 (10.9)
‘W’ Level	116 (30.5)	126 (40.6)	242 (35.1)	133 (35.0)	92 (29.7)	225 (32.6)	87 (22.9)	82 (26.5)	169 (24.5)
‘S’ Level	-	-	-	48 (12.6)	46 (14.8)	94 (13.6)	98 (25.8)	76 (24.5)	174 (25.2)
‘P’ Level	-	-	-	26 (6.8)	32 (10.3)	58 (8.4)	63 (16.6)	67 (21.6)	130 (18.8)
Absentees	-	-	-	77 (20.2)	49 (15.8)	126 (18.2)	71 (18.7)	40 (12.9)	111 (16.1)
Total	380	310	690	380	310	690	380	310	690

Note: ‘O’ Level – Ordinary or 0 Level, ‘L’ Letter Level, ‘W’ Word Level ‘S’ sentence Level ‘P’ Paragraph Level

4.2 Progress Levels on 31st Day

It is interesting to note that in the experimental schools, nearly 80 per cent of children moved from ‘O’ level to other higher levels on the 31st day of the program and 53 per cent moved from ‘L’ level

to other higher levels. By the 31st day all children assessed at ‘W’ level (at the time of Benchmark Assessment) remained in the same category and another 17 children who moved from ‘0’ and ‘L’ levels also got added to ‘W’ level and their percentage was 35 in the total. On the whole, by the 31st day 74 (19.4 per cent) children out of 380 children could read sentences and paragraphs.

Table-2

Progress in Experimental Schools over Benchmark levels on the 46th day and the number of Children who moved to other Higher Levels

Levels	Bench Mark Level	Progress on 31st day	Progress on 46th day	No. of Children moved upwards on 46th day over bench mark levels
0	104 (27.4)	21 (5.5)	17 (4.5)	87 (83.6)
L	160 (42.1)	75 (19.7)	44 (11.6)	116 (73.5)
W	116 (30.5)	133 (35.0)	87 (22.9)	29 (25.0)
S	-	48 (12.6)	98 (25.8)	-
P	-	26 (6.8)	63 (16.6)	-
Absentees	-	77 (20.2)	71 (18.7)	-
Total	380 (100.0)	380 (100.0)	380 (100.0)	232 (61.0)

Note: Figures in Brackets indicate percentages

Thus, the net impact created by 31st day was nearly 20 per cent over the benchmark assessment. However, 77 (20.2 per cent) children were absent for assessment on the 31st day.

4.3 Progress Levels on the 46th Day

Progress levels on the 46th day were compared with those of the benchmark levels. It can be seen from Table - 2 that out of 104 children assessed at ‘0’ level on the first day of the program 87 (83.6 per cent) children moved to higher levels.

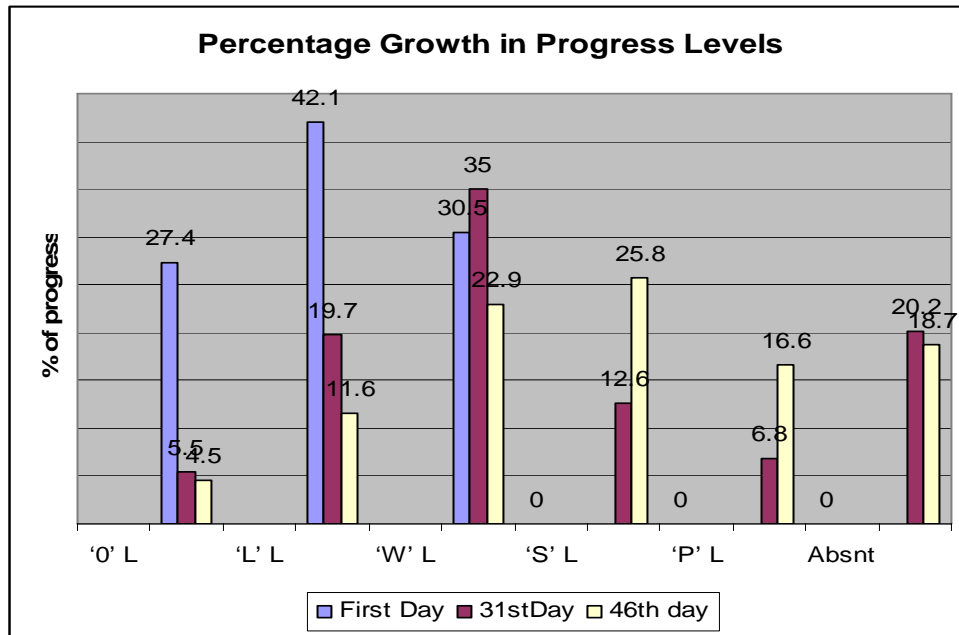
Similarly, out of 160 children assessed at ‘L’ level, 116 (73.5 per cent) moved to higher levels. Out of 116 children assessed at ‘W’ level on first day, 29 (25.0 per cent) children moved to higher levels. Thus, gross impact created by the program is 61 per cent (vide Table-2).

About 84 per cent children moved from ‘0’ level to ‘L’ level, 73.5 per cent moved from ‘L’ level to ‘W’ level, 25 per cent of children moved from ‘W’ level to other higher levels.

Out of 380 children from experimental schools, nearly 39 per cent children could not move from bench mark levels to other higher levels namely ‘S’ and ‘P’ levels on the 46th day. It can be understood from Table-1 that 42 per cent children could read sentences and paragraphs by the 46th day. This means that 161 children could progress to relatively higher levels of reading.

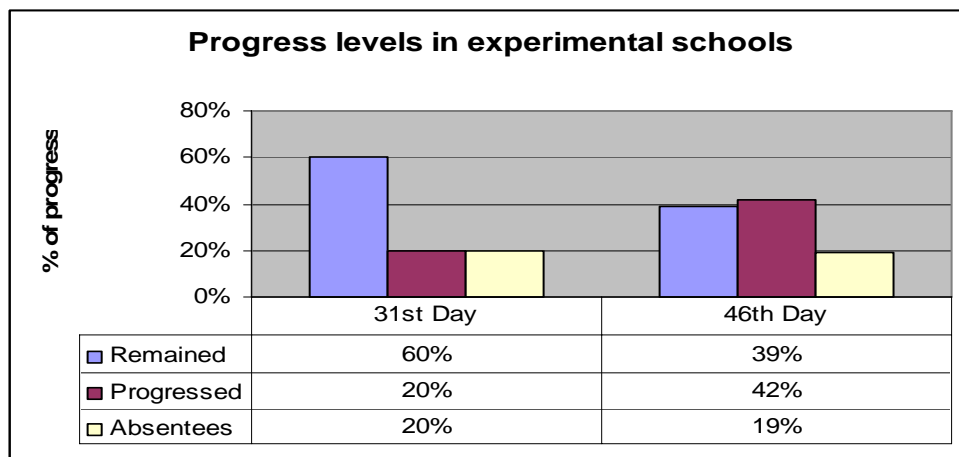
Another 71 (18.7 per cent) children were absent and hence could not be assessed on the 46th day. The overall progress of the program on the 31st and 46th day is depicted through Graph-1.

Graph-1



It can be seen from Graph-2 that the net impact of the program in the experimental schools was to the tune of 42 per cent and it progressed from 20 per cent on the 31st day to 42 per cent on the 46th day. Thus 22 per cent growth was discernable on the 46th day over the 31st day's progress in the experimental schools. On the whole, 160 children out of 380 children moved to the other higher levels over the assessed bench mark levels and could read sentences and paragraphs. Thus, the net internal impact generated by the program was 42 per cent.

Graph-2



Graph-2 indicates percentage growth in progress levels at various stages of program implementation in experimental schools (First day, 31st day and 46th day).

Section-5

5.1 Impact in Control Schools

Control schools were randomly selected keeping in view the cannon of convenience. These schools were located within 1 km radius of the experimental schools. The same tools used in the experimental schools were administered in the control schools on the same dates. This was basically to ensure uniformity and timeliness. The inferences drawn were thus based on normal reading practices adopted in classrooms by teachers without making any additional effort through any program.

Progress in reading levels attained in these schools was considered “normal” to understand the net impact of the ARP. Impact created in experimental schools was compared and progress over and above the performance levels of children from control schools was considered net impact due to program interventions.

310 children were selected from control schools and their reading levels were assessed on the first day.

Table-3 provides distribution of children across various reading levels in control schools on the 31st and 46th days. A little more than 82 per cent (66) children from control schools moved from ‘0’ level to higher levels, 70.1 per cent (73) children moved from ‘L’ level to other higher levels and 35 per cent (44) children from ‘W’ level moved to higher levels of learning.

Thus, the gross impact created in control schools was 59 per cent (vide Table - 2) whereas the net impact over and above the bench mark levels was 46 per cent which was more by 4 per cent age scores than the impact created by the program in the experimental schools.

Table-3
Progress in Control Schools over benchmark levels on the 46th day and the number of Children who moved to other higher levels

Levels	Bench Mark Level	Progress on 31 st day	Progress on 46 th day	No. of Children who moved upwards on the 46 th day over benchmark levels
0	80 (25.8)	24 (7.7)	14 (4.5)	66 (82.5)
L	104 (33.5)	67 (21.6)	31 (10.0)	73 (70.1)
W	126 (40.6)	92 (29.7)	82 (26.5)	44 (35.0)
S		46 (14.8)	76 (24.5)	
P		32 (10.3)	67 (21.6)	
Absentees		49 (15.8)	40 (12.9)	
Total	310 (100.0)		310 (100.0)	183 (59.0)

Note: Figures in Brackets indicate percentages

It is interesting to note that 25 per cent of the children over the Benchmark Level (BML) in the control schools moved to other higher reading levels and 15.8 per cent of them were absent for the 31st day assessment. This means that out of 310 children from the control schools, nearly 78

children moved to other higher levels on the 31st day. These children could read long sentences and paragraphs by the 31st day.

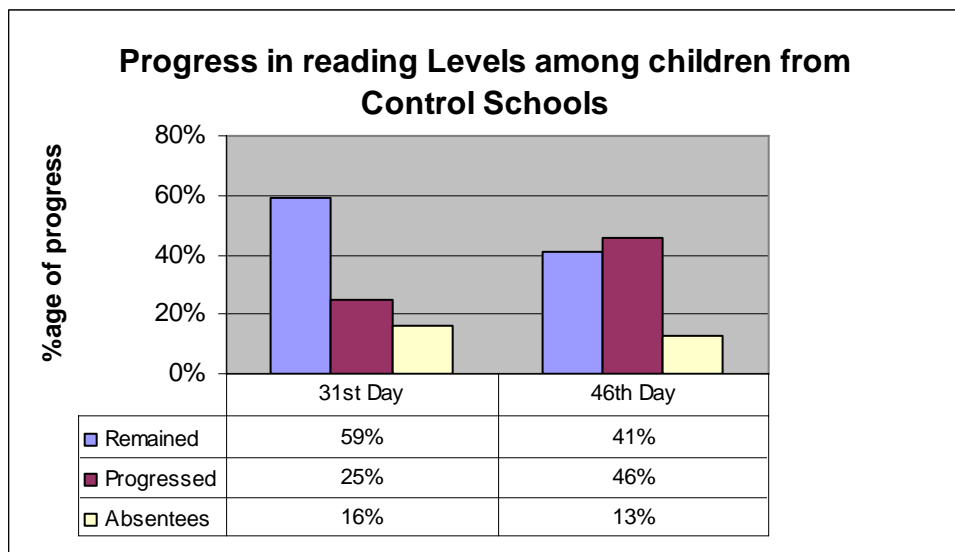
5.2 Progress levels on the 46th day in Control Schools

Progress levels on the 46th day in control schools when compared to the benchmark level revealed that 46 per cent of the children moved to other higher levels and could read Kannada sentences and paragraphs.

Nearly 13 per cent of the children were absent from the control schools for the 46th day assessment. Excluding these children, 143 children moved from ‘O’ , ‘L’ , ‘W’ levels to ‘S’ & ‘P’ levels which indicates the fact that the rate of acceleration in reading is cognizable between the 31st and the 46th day. This would also imply that children would have acquired reading skills quickly during the period between 31st and 46th day or the teachers must have contributed effectively in providing children the required reading skills through the specified story cards.

It can be seen from Table-3 that out of 310 children from control schools, 59 per cent remained in the same reading levels on the 31st day and 41 per cent remained at the same reading level on the 46th day. 25 per cent children moved to other higher levels on the 31st day and the same increased to 46 per cent on the 46th day. Thus there was a growth to the tune of 21-per cent age scores in progress levels between the 31st day and 46th day in control schools.

Graph – 3



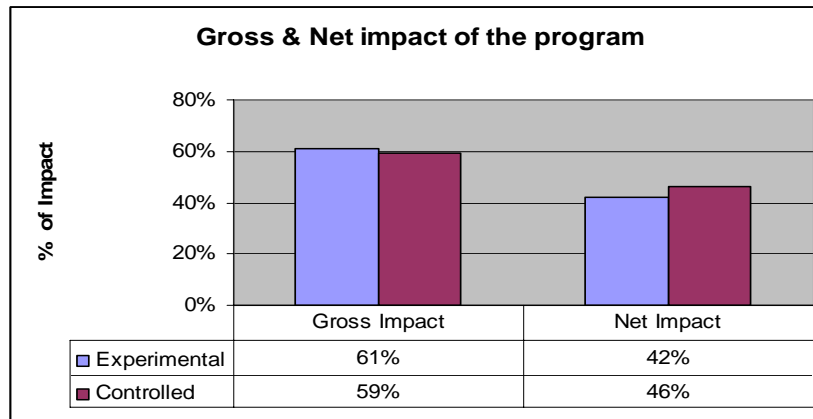
In absolute terms, by the 46th day 143 children out of 310 children from control schools moved to over and above the bench mark levels. This was compared to the progress achieved in experimental schools and Table – 4 shows the picture that emerged.

Table - 4

Reading levels of Children in Experimental and Control Schools from the 31st to the 46th day.

Sl No.	Progress Levels	% Growth on the 31 st day		% Growth on the 46 th day	
		Control	Experimental	Control	Experimental
01	'0' Level	7.7	5.5	4.5	4.5
02	'L' Level	21.6	19.7	10.0	11.6
03	'W' Level	29.7	35.0	26.5	22.9
04	'S' Level	14.8	12.6	24.5	25.8
05	'P' Level	10.3	6.8	21.6	16.6
06	Absentees	15.8	20.2	12.9	18.7
			Gross Impact	59%	61%
			Net Impact	46.1%	42.4%

Graph-4



On the whole, it can be inferred that the program could create a gross impact of 61 per cent in experimental schools and 59 per cent gross impact is discernable in the control schools. The net impact corresponding to experimental schools is 42 per cent where as it is 46 per cent in control schools. Graph - 4 indicates the overall patterns.

Section - 6

6.1 Other Dimensions of Analysis

The study included 38 schools – 19 experimental schools and 19 control schools – from four blocks namely N-1, N-3, S-1 and S-4 from Bangalore Urban District. Initially, it was intended to select 25 experimental schools and another 25 control Schools. Finally, 38 schools (19+19) from both the groups were included for analysis and the remaining twelve schools (6+6) could not get included as a sample for the study. The reasons for excluding the above schools were primarily non-continuation of the program. (Vide the reasons in Section-II under “Final size of the sample” and “Problems faced during process of evaluation”).

6.2 Block-Wise Analysis

Among the total number of children in the sample, more children are covered from N-1 block. Net performance levels of children from the control schools of the S-4 Block were more than that of the other blocks. In the experimental schools, children from the S-1 Block could fare better than those from other blocks. Block-wise net progress levels of control and experimental schools are furnished in Table-5.

Table – 5

Net Impact Over and Above the Bench Mark Levels by 46th Day (In %ge)

Sl. No.	Block	Net Progress	
		Control Schools	Experimental Schools
1	North – 1	6.8%	8.1%
2	North -3	5.5%	10.6%
3	South -1	16.1%	13.7%
4	South -4	17.7%	10.0%
	Over all	46.1%	42.4%

Table -5 indicates that 17.7 per cent of children from control schools of the S-4 Block moved from ‘O’ ‘L’ and ‘W’ levels to ‘S’ and ‘P’ levels by the end of the 45th day. The percentage of movement is the highest for control schools in the S-4 Block and the same percentage for experimental schools is the highest in S-1 Block. Though a higher number of children participated in the program from N-1 block, their progress levels were not better than the progress levels of S-4 and S-1 Blocks.

Experimental Schools from the S-1 Block with 13.7 per cent progress levels scored the highest and S - 4 Block with 17.7 per cent progress stood first among the Control Schools. The overall upward movement of children from the Control Schools was 46.1 per cent whereas the same from Experimental Schools was 42.4 per cent. This would indicate that the net program impact in the Experimental Schools relative to that of the Control Schools was not so significant.

One of the fundamental reasons for such a pattern was a delay in program implementation due to leans and lags in supplying story cards. Added to this, government school teachers who were loaded with other tasks during the academic year were partly responsible for delayed or relaxed implementation of the program.

Block-wise net impact of the program regressed over that of the impact created by the control schools through their normal teaching learning processes. Progress levels between the Controlled and the Experimental Schools are provided in Table-6 to have block-wise comparisons about the net impact created by the program.

Table-6
Block-wise analysis of impact between control and experimental schools by 46th day

Block	Reading levels in Control Schools							Reading levels in Experimental Schools						
	'0'	'L'	'W'	'S'	'P'	Ab	Tot	'0'	'L'	'W'	'S'	'P'	Ab	Tot
N1	9 (2.9)	14 (4.5)	39 (12.6)	16 (5.2)	5 (1.6)	16 (5.2)	99 (31.9)	6 (1.6)	17 (4.5)	34 (8.9)	24 (6.3)	7 (1.8)	14 (3.7)	102 (26.8)
N3	0 (0)	9 (2.9)	16 (5.2)	10 (3.2)	7 (2.3)	11 (3.5)	53 (17.1)	2 (0.5)	7 (1.8)	12 (3.2)	23 (6.1)	17 (4.5)	26 (6.8)	87 (22.9)
S1	3 (1.0)	8 (2.6)	20 (6.5)	17 (5.5)	33 (10.6)	11 (3.5)	92 (29.7)	7 (1.8)	12 (3.2)	25 (6.6)	21 (5.5)	31 (8.2)	21 (5.5)	117 (30.8)
S4	2 (0.6)	0 (0)	7 (2.3)	33 (10.6)	22 (7.1)	2 (0.6)	66 (21.3)	2 (0.5)	8 (2.1)	16 (4.2)	30 (7.9)	8 (2.1)	10 (2.6)	74 (19.5)
Total	14 (4.5)	31 (10.0)	82 (26.6)	76 (24.5)	67 (21.6)	40 (12.8)	310 (100.0)	17 (4.4)	44 (11.6)	87 (22.9)	98 (25.8)	63 (16.6)	71 (18.6)	380 (100.0)

6.3 Program Impact based on Mother Tongue of Children

It would be interesting to note that the children with Urdu as their mother tongue did better than those children whose mother tongue was Kannada. However, the progress of children from experimental schools whose mother tongue was Kannada was higher than those whose mother tongue was Urdu. Another observation from the analysis was that children from control schools who spoke Telugu and Urdu progressed to other higher levels relatively better than those who spoke Kannada. A few children from Urdu schools acquired higher levels of reading Urdu. The details of children who speak different languages at home and the progress levels compared between control and experimental schools are furnished in Table-7.

Table – 7
Analysis of impact between Control and Experimental Schools according to Mother Tongue of Children by 46th Day

Mother Tongue	Reading levels in Controlled schools							Reading levels in Experimental Schools						
	'0'	'L'	'W'	'S'	'P'	Ab	Tot	'0'	'L'	'W'	'S'	'P'	Ab	Tot
Kannada	6 (1.9)	8 (2.6)	41 (13.2)	29 (9.4)	34 (11.0)	12 (3.9)	130 (41.9)	5 (1.3)	20 (5.3)	35 (9.3)	32 (8.5)	33 (8.7)	30 (7.9)	155 (41.0)
Telugu	1 (0.3)	6 (1.9)	14 (4.5)	15 (4.8)	12 (3.9)	10 (3.2)	58 (18.7)	3 (0.8)	8 (2.1)	16 (4.2)	29 (7.7)	8 (2.1)	24 (6.3)	88 (23.3)
Tamil	4 (1.3)	12 (3.9)	12 (3.9)	12 (3.9)	9 (2.9)	11 (3.5)	60 (19.4)	4 (1.1)	05 (1.3)	9 (2.4)	11 (2.9)	9 (2.4)	8 (2.1)	46 (12.2)
Urdu	3 (1.0)	4 (1.3)	12 (3.9)	15 (4.8)	7 (2.3)	7 (2.3)	48 (15.5)	3 (0.8)	9 (2.4)	21 (5.6)	21 (5.6)	9 (2.4)	9 (2.4)	72 (19.0)
Marathi	0 (0.0)	0 (0.0)	1 (0.3)	1 (0.3)	0 (0.0)	0 (0.0)	2 (0.6)	2 (0.5)	1 (0.3)	2 (0.5)	0 (0.0)	2 (0.5)	1 (0.3)	8 (1.9)
Hindi	0 (0.0)	1 (0.3)	2 (0.6)	4 (1.3)	3 (1.0)	0 (0.0)	10 (3.2)	0 (0.0)	0 (0.0)	2 (0.5)	4 (1.1)	0 (0.0)	0 (0.0)	6 (1.6)
Others	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.6)	0 (0.0)	2 (0.6)	0 (0.0)	1 (0.3)	2 (0.5)	1 (0.3)	0 (0.0)	1 (0.3)	5 (1.1)
Total	14 (4.5)	31 (10.0)	82 (26.4)	76 (24.2)	67 (21.7)	40 (12.9)	310 (100.0)	17 (4.5)	44 (11.7)	87 (23.0)	98 (26.1)	61 (16.1)	73 (19.3)	380 (100.0)

6.4 Gender-wise Impact of the Program

The performance levels of girls were relatively better in the control schools than those from experimental schools. Percentage progress levels of girls from word level to other higher levels in experimental schools appeared to be more impressive than those of the boys. Within the baseline levels, the movement of girls from control schools to other higher levels was steeper than the boys from experimental schools. In control schools, movement of girls from the letter level to word level was steeper than the boys and from there the progress was normal. In the experimental schools the progress of boys from bench mark levels to sentence and paragraph levels was more impressive than that of girls. The following table gives the details of percentage variations in progress levels of girls and boys.

Table-8

Gender-wise distribution of Progress levels (in %) in Control and Experimental schools by 46th day

Gender	Control Schools					Experimental Schools				
	0	L	W	S	P	0	L	W	S	P
Boys	1.9	7.1	12.9	10.3	9	3.2	7.9	9.7	15.3	17.6
Girls	2.6	2.9	13.5	14.2	12.6	1.3	3.7	13.2	10.5	8.9

Graph - 5 depicts variations in progress levels between girls and boys. It can be seen from the graph that on an average the growth of girls from relatively lower levels of progress to higher levels was more in the control schools than in the experimental schools. The growth rate in progress levels of boys from experimental schools was on the rise compared to that of the girls.

Graph-5

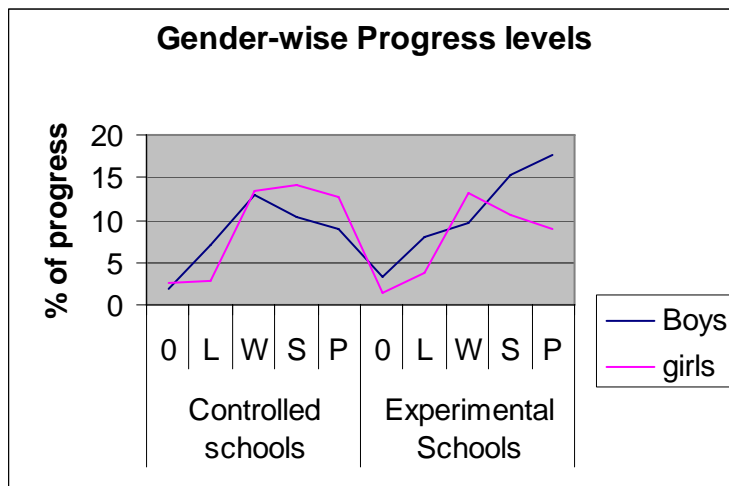


Table-9 gives overall details of progress among reading levels of boys and girls between control and experimental schools.

Table-9
Gender-wise Progress levels of Children from Control & Experimental Schools by 46th day.

Gender	Reading levels in Control Schools							Reading levels in Experimental Schools						
	'0'	'L'	'W'	'S'	'P'	Ab	Tot	'0'	'L'	'W'	'S'	'P'	Ab	Tot
Boys	6 (1.9)	22 (7.1)	40 (12.9)	32 (10.3)	28 (9.0)	23 (7.4)	151 (48.7)	12 (3.2)	30 (7.9)	37 (9.7)	58 (15.3)	29 (7.6)	28 (7.4)	194 (51.1)
Girls	8 (2.6)	9 (2.9)	42 (13.5)	44 (14.2)	39 (12.6)	17 (5.5)	159 (51.3)	5 (1.3)	14 (3.7)	50 (13.2)	40 (10.5)	34 (8.9)	43 (11.3)	186 (48.9)
Total	14 (4.5)	31 (10.0)	82 (26.4)	76 (24.5)	67 (21.6)	40 (12.9)	310 (100.0)	17 (4.5)	44 (11.6)	87 (22.9)	98 (25.8)	63 (16.5)	71 (18.7)	380 (100.0)

Section-7

7.1 Conclusions

Based on the above analysis, the following conclusions are presented:

1. The program created a lot of excitement among children from experimental schools. The same levels of excitement were not found in control schools. The story cards were found to be very attractive to children and motivated them to participate effectively in the program. Field notes and experiences validate the fact that the program could generate great enthusiasm among children for reading and learning in experimental schools.
2. On the whole, the program could create a gross impact of 61 per cent while considering the upward movement of children within the benchmark levels to higher reading levels. By the forty-sixth day, out of 104 children from '0' level, 87 (83.6 per cent) children moved to higher levels. Similarly, out of 160 children from 'L' level, 116 (73.6 per cent) moved to higher levels of reading. Out of 116 children categorized at 'W' level during the benchmark assessment, 29 (25.0 per cent) children moved to higher levels, 98 (25.8 per cent) children could read sentences and another 63(16.6 per cent) children could read paragraphs by the end of the forty-sixth day.
3. Keeping the bench mark assessment as a basis, if one measures the net impact of the program i.e. upward movements of children over and above the bench mark levels, the percentage progress is 42.4 per cent in the experimental schools. This, in absolute terms implies that out of 380 children taken for the sample, 161 (42.4 per cent) children could read sentences and paragraphs by the end of forty-fifth day. Initially, these children were at the '0', 'L' or 'W' levels. Excluding the upward movement in reading levels within the bench mark levels, the net impact of the program is 42.4 per cent.
4. In order to establish the progress levels of children in experimental schools, children from control schools were also selected and their reading levels were tested to understand the comparative advantage of the program. Out of 310 children selected from control schools, 80 (25.8 per cent) children were at zero level at the time of bench mark assessment and by the end of the forty-fifth day, 66 (82.5 per cent) children moved to higher reading levels.

Out of 104 (33.5 per cent) children who were categorized at 'L' level on the first day of the program, 73 (70.1 per cent) children moved to higher levels. Out of 126 (40.6 per cent) children identified to be at 'W' level at the time of bench mark assessment, 44 (35.0 per cent) children moved to higher levels of reading. By the end of forty-fifth day, 183 out of 310 (59 per cent) children from control schools moved to other higher levels. This means that in the control schools, gross program impact was 59 per cent.

5. Based on the same measurements, the net impact created in control schools by the end of the forty-fifth day was 46.1 per cent. This means that out of 310 children from the control schools, 143 (46.1 per cent) children could read sentences and paragraphs by the end of the

forty-fifth day. Thus, the net impact in control schools was 46.1 per cent by the end of the forty-fifth day. This can be compared to the net impact created in experimental schools which was 42.4 per cent, less by 3.7 per cent age scores.

6. The gross impact created in experimental schools was 61 per cent and it was 59 per cent in control schools – an excess of 2 percentage scores in experimental schools. But the net impact created by the program in experimental schools was less by 3.7 percentage scores than that of the control schools. This implies that the control schools with normal reading practices showed no less progress than that achieved by children from experimental schools.
7. If one goes strictly by the comparisons between the experimental and control schools, it is obvious that the program could not significantly create a clinch over and above the progress levels attained by the children from control schools. Marginal gross influence of the program is discernable when compared to the progress levels achieved by the children from control schools.
8. The upward movements of children within the identified bench mark levels in experimental schools are also not so significant when compared with that of the children from control schools.
9. The contributions of the program are discernable in bringing the children from zero level to either ‘L’ or ‘W’ level and this may force us to draw the conclusion that reading levels among children may get augmented gradually with a strong base of letter recognition and pronunciation. Gradually, this was expected to provide reading skills to read sentences and paragraphs.
10. While making an all out effort to inculcate reading abilities among children, the program has not taken cognizance of comprehension by the child. The study has no measurement of that. This may not limit the skill of reading but comprehension would contribute for meaningful reading by the child.
11. Reading a language and comprehension is a process which may be acquired over a period of time by continuous practice. A required adjustment on the duration of the program (forty-five days) needs to be revisited in the light of the impact created by the program.

7.2 Recommendations

Based on the observations while executing the study and the outcome of it, some suggestions and recommendations would enrich the functioning of the program.

1. The distribution mechanisms of story cards to children and their timely administration would to a large extent address the timely completion of the program. For example, interactions with teachers revealed that they could not supply reading material to children in later stages and were forced to wait till the new consignment of reading material arrived to the school. This made them tackle reading activities at a time when they had to start from the beginning or refresh reading activities while taking children to

the higher levels of reading. Proper coordination in handling logistics would help in accomplishing timely results.

2. From the analysis of the data, it can be understood that most of the reading activities are cramped between the thirtieth day and the fortieth day. This, however, is not suggestive of the fact that acquiring reading skills is a gradual process and crushing the process strictly into fifteen days is not warranted. As such it is suggested that a uniform and gradual introduction of reading practices over the defined time limits may do more good than hurriedly packing the program into forty-five working days.
3. Constant follow-up and monitoring by the Akshara Foundation functionaries appears to be inevitable for two reasons. First is to understand field problems and support the teachers as and when required and second is to understand whether program implementation is moving towards the direction in which the expected results are materialized.
4. Government school teachers are loaded with activities during the academic year and for them implementation of ARP is yet another innovative program taken up for experimentation. Training programs on ARP provided to teachers should be distinctive from other programs and they are required to motivate teachers for effective implantation of the program. Otherwise, there a possibility that the teachers tend to blend the program with normal reading practices as implemented in general classrooms. This might be the reason why the control school children's reading levels have surfaced on par with those of the children from experimental schools.
5. To implement the program effectively, the ARP package could be implemented during the first trimester of the academic year. The program could begin in the third week of June and could end by the first week of August.
6. Progress levels of children should be recorded every working day and displayed to have an understanding on attainment levels of progress. This builds in transparency, accountability and helps to initiate corrective reading practices by the teachers. The display should be in the reading center for everyone to understand progress on the day of visit.
7. Training provided to teachers should include not only the process of administering the story cards but also the purpose for which the program is initiated. The emphasis should be more on the rationale behind acquiring progress levels in an accelerated manner. Accordingly, the program implementation should adhere to stipulated timelines.
8. Since teachers are heavily loaded with activities, it is suggested that the Foundation may select children from schools and during specific and convenient time periods, trained teachers from Akshara Foundation may implement the program in consultation with the teachers by seeking their advice and guidance. This to a larger extent addresses the issues relating to leans and lags in implementation and contributes to the timely

outcome of the results. This kind of arrangement also builds in buoyancy and dynamism within the program.

9. It is suggested that while implementing the program, a team of external evaluators may also work along with the implementation team to look into the aspects relating to program implementation and its effectiveness. External evaluators may also be consulted while the program is up-scaled for a larger target population.
10. It would be good if the Foundation were to organize experience-sharing workshops, consultative meetings or interim interactions with the teachers at regular intervals of program implementation to understand the direction in which the program is going. A forum may be created for teachers to share their problems, if any, and facilitate decision-making at the school level or in forums without much waiting for help from the Foundation functionaries.
11. It also suggested that DIETs may get integrated with program implementation. The DIET faculty, responsible for academic support in a Block, may be encouraged or enthused to participate actively in ARP and extend expert support while the program is under implementation.

Annexure-1

Overall

EXPERIMENTAL SCHOOLS						CONTROLLED SCHOOLS					
Level	Before		After 45th card			Level	Before		After 45th card		
	No of Children	%	Level	No of Children	%		No of Children	%	Level	No of Children	%
O	104	27.37%	P	2	2%	O	80	25.81%	P	4	5%
			S	12	12%				S	5	6%
			W	25	24%				W	25	31%
			L	19	18%				L	18	23%
			O	17	16%				O	14	18%
			AB	29	28%				AB	14	18%
Letter	160	42%	P	20	13%	Letter	104	34%	P	14	13%
			S	46	29%				S	31	30%
			W	39	24%				W	33	32%
			L	25	16%				L	13	13%
			AB	30	19%				AB	13	13%
Word	116	30.53%	P	41	35%	Word	126	40.65%	P	49	39%
			S	40	34%				S	40	32%
			W	23	20%				W	24	19%
			AB	12	10%				AB	13	10%
Total	380	100.00%		380		Total	310	100.00%		310	

EXPERIMENTAL SCHOOLS LANGUAGEWISE KANNADA						EXPERIMENTAL SCHOOLS LANGUAGEWISE URDU					
Level	Before		After 45th card			Level	Before		After 45th card		
	No of Children	%	Level	No of Children	%		No of Children	%	Level	No of Children	%
O	102	30.27%	P	2	2%	O	2	4.65%	P	0	0%
			S	12	12%				S	0	0%
			W	25	25%				W	0	0%
			L	19	19%				L	0	0%
			O	15	15%				O	2	100%
			AB	29	28%				AB	0	0%
Letter	134	40%	P	18	13%	Letter	26	60%	P	2	8%
			S	38	28%				S	8	31%
			W	34	25%				W	5	19%
			L	21	16%				L	4	15%
			AB	23	17%				AB	7	27%
Word	101	29.97%	P	40	40%	Word	15	34.88%	P	1	7%
			S	32	32%				S	8	53%
			W	18	18%				W	5	33%
			AB	11	11%				AB	1	7%
Total	337			337		Total	43	100.00%		43	

EXPERIMENTAL KANNADA SCHOOLS BOYS						EXPERIMENTAL KANNADA SCHOOLS GIRLS					
Level	Before		After 45th card			Level	Before		After 45th card		
	No of Children	%	Level	No of Children	%		No of Children	%	Level	No of Children	%
O	57	33.14%	P	1	2%	O	45	27.27%	P	1	2%
			S	9	16%				S	3	7%
			W	11	19%				W	14	31%
			L	14	25%				L	5	11%
			O	10	18%				O	5	11%
			AB	12	21%				AB	17	38%
Letter	64	37%	P	6	9%	Letter	70	42%	P	12	17%
			S	21	33%				S	17	24%
			W	15	23%				W	19	27%
			L	14	22%				L	7	10%
			AB	8	13%				AB	15	21%
Word	51	29.65%	P	21	41%	Word	50	30.30%	P	19	38%
			S	19	37%				S	13	26%
			W	5	10%				W	13	26%
			AB	6	12%				AB	5	10%
Total	172	100.00%		172		Total	165	100.00%		165	

CONTROLED (KANNADA) SCHOOLS BOYS						CONTROLED (KANNADA) SCHOOLS GIRLS					
Level	Before		After 45th card			Level	Before		After 45th card		
	No of Children	%	Level	No of Children	%		No of Children	%	Level	No of Children	%
O	38	27.14%	P	1	3%	O	34	25.19%	P	3	9%
			S	3	8%				S	1	3%
			W	13	34%				W	11	32%
			L	11	29%				L	6	18%
			O	4	11%				O	8	24%
			AB	6	16%				AB	5	15%
Letter	48	34%	P	6	13%	Letter	44	33%	P	8	18%
			S	15	31%				S	13	30%
			W	11	23%				W	16	36%
			L	8	17%				L	3	7%
			AB	8	17%				AB	4	9%
Word	54	38.57%	P	21	39%	Word	57	42.22%	P	25	44%
			S	12	22%				S	18	32%
			W	15	28%				W	8	14%
			AB	6	11%				AB	6	11%
Total	140	100.00%		140		Total	135	100.00%		135	

EXPERIMENTAL KANNADA SCHOOLS MOTHER TONGUE KANNADA						EXPERIMENTAL KANNADA SCHOOLS MOTHER TONGUE TELUGU					
Level	Before		After 45th card			Level	Before		After 45th card		
	No of Children	%	Level	No of Children	%		No of Children	%	Level	No of Children	%
O	42	27.10%	P	1	2%	O	21	23.86%	P	1	5%
			S	2	5%				S	3	14%
			W	10	24%				W	3	14%
			L	11	26%				L	2	10%
			O	5	12%				O	3	14%
			AB	13	31%				AB	9	43%
Letter	60	39%	P	7	12%	Letter	45	51%	P	1	2%
			S	16	27%				S	18	40%
			W	18	30%				W	8	18%
			L	9	15%				L	6	13%
			AB	10	17%				AB	12	27%
Word	53	34.19%	P	25	47%	Word	22	25.00%	P	6	27%
			S	14	26%				S	8	36%
			W	7	13%				W	5	23%
			AB	7	13%				AB	3	14%
Total	155	100.00%		155		Total	88	100.00%		88	

CONTROLLED KANNADA SCHOOLS MOTHER TONGUE KANNADA					
Level	Before		After 45th card		
	No of Children	%	Level	No of Children	%
O	37	28.46%	P	4	11%
			S	3	8%
			W	11	30%
			L	7	19%
			O	6	16%
			AB	6	16%
Letter	39	30%	P	7	18%
			S	10	26%
			W	19	49%
			L	1	3%
			AB	2	5%
Word	54	41.54%	P	23	43%
			S	16	30%
			W	11	20%
			AB	4	7%
Total	130	100.00%		130	300%

CONTROLLED KANNADA SCHOOLS MOTHER TONGUE TELUGU					
Level	Before		After 45th card		
	No of Children	%	Level	No of Children	%
O	10	17.24%	P	0	0%
			S	1	10%
			W	4	40%
			L	3	30%
			O	1	10%
			AB	1	10%
Letter	23	40%	P	3	13%
			S	7	30%
			W	5	22%
			L	3	13%
			AB	5	22%
Word	25	43.10%	P	9	36%
			S	7	28%
			W	5	20%
			AB	4	16%
Total	58				

EXPERIMENTAL KANNADA SCHOOLS N1BLOCK						EXPERIMENTAL KANNADA SCHOOLS N3BLOCK					
Level	Before		After 45th card			Level	Before		After 45th card		
	No of Children	%	Level	No of Children	%		No of Children	%	Level	No of Children	%
O	62	30.85%	P	0	0%	O	14	21.88%	P	2	14%
			S	6	10%				S	3	21%
			W	13	21%				W	0	0%
			L	16	26%				L	1	7%
			O	15	24%				O	0	0%
			AB	12	19%				AB	8	57%
Letter	72	36%	P	2	3%	Letter	29	45%	P	7	24%
			S	10	14%				S	7	24%
			W	32	44%				W	3	10%
			L	15	21%				L	2	7%
			AB	13	18%				AB	10	34%
Word	67	33.33%	P	10	15%	Word	21	32.81%	P	7	33%
			S	24	36%				S	8	38%
			W	28	42%				W	2	10%
			AB	5	7%				AB	4	19%
Total	201	100.00%		201		Total	64	100.00%		64	

CONTROLLED KANNADA SCHOOLS N1BLOCK						CONTROLLED KANNADA SCHOOLS N3BLOCK					
Level	Before		After 45th card			Level	Before		After 45th card		
	No of Children	%	Level	No of Children	%		No of Children	%	Level	No of Children	%
O	30	30.30%	P	0	0%	O	5	13.89%	P	0	0%
			S	0	0%				S	0	0%
			W	8	27%				W	2	40%
			L	8	27%				L	2	40%
			O	9	30%				O	0	0%
			AB	5	17%				AB	1	20%
Letter	35	35%	P	1	3%	Letter	12	33%	P	0	0%
			S	2	6%				S	3	25%
			W	17	49%				W	4	33%
			L	6	17%				L	4	33%
			AB	9	26%				AB	1	8%
Word	34	34.34%	P	4	12%	Word	19	52.78%	P	5	26%
			S	14	41%				S	3	16%
			W	14	41%				W	5	26%
			AB	2	6%				AB	6	32%
Total	99	100.00%		99	300%	Total	36	100.00%		36	

EXPERIMENTAL KANNADA SCHOOLS N1AND N3BLOCK						EXPERIMENTALKANNADA SCHOOLS S1ANDS3BLOCK					
Level	Before		After 45th card			Level	Before		After 45th card		
	No of Children	%	Level	No of Children	%		No of Children	%	Level	No of Children	%
O	76	28.68%	P	2	3%	O	56	32.75%	P	0	0%
			S	9	12%				S	3	5%
			W	13	17%				W	20	36%
			L	17	22%				L	10	18%
			O	15	20%				O	9	16%
			AB	20	26%				AB	14	25%
Letter	101	38%	P	9	9%	Letter	68	40%	P	10	15%
			S	17	17%				S	23	34%
			W	35	35%				W	16	24%
			L	17	17%				L	10	15%
			AB	23	23%				AB	9	13%
Word	88	33.21%	P	17	19%	Word	47	27.49%	P	27	57%
			S	32	36%				S	14	30%
			W	30	34%				W	2	4%
			AB	9	10%				AB	4	9%
Total	265	100.00%		265		Total	171	100.00%		171	

CONTROLLED KANNADA SCHOOLS N1ANDN3 BLOCK						CONTROLLEDKANNADA SCHOOLS S1ANDS3BLOCK					
Level	Before		After 45th card			Level	Before		After 45th card		
	No of Children	%	Level	No of Children	%		No of Children	%	Level	No of Children	%
O	35	25.93%	P	0	0%	O	37	26.43%	P	4	11%
			S	0	0%				S	4	11%
			W	10	29%				W	14	38%
			L	10	29%				L	7	19%
			O	9	26%				O	3	8%
			AB	6	17%				AB	5	14%
Letter	47	35%	P	1	2%	Letter	45	32%	P	13	29%
			S	5	11%				S	23	51%
			W	21	45%				W	6	13%
			L	10	21%				L	1	2%
			AB	10	21%				AB	2	4%
Word	53	39.26%	P	9	17%	Word	58	41.43%	P	37	64%
			S	17	32%				S	13	22%
			W	19	36%				W	4	7%
			AB	8	15%				AB	4	7%
Total	135	100.00%		135		Total	140	100.00%		140	

CONTROLED SCHOOLS LANGUAGE KANNADA						CONTROLED SCHOOLS LANGUAGE URDU					
Level	Before		After 45th card			Level	Before		After 45th card		
	No of Children	%	Level	No of Children	%		No of Children	%	Level	No of Children	%
O	72	26.18%	P	4	6%	O	8	22.86%	P	0	0%
			S	4	6%				S	1	13%
			W	24	33%				W	1	13%
			L	17	24%				L	1	13%
			O	12	17%				O	2	25%
			AB	11	15%				AB	3	38%
Letter	92	33%	P	14	15%	Letter	12	34%	P	0	0%
			S	28	30%				S	3	25%
			W	27	29%				W	6	50%
			L	11	12%				L	2	17%
			AB	12	13%				AB	1	8%
Word	111	40.36%	P	46	41%	Word	15	42.86%	P	3	20%
			S	30	27%				S	10	67%
			W	23	21%				W	1	7%
			AB	12	11%				AB	1	7%
Total	275	100.00%		275		Total	35	100.00%		35	

EXPERIMENTAL URDU SCHOOL BOYS						EXPERIMENTAL URDU SCHOOLS GIRLS					
Level	Before		After 45th card			Level	Before		After 45th card		
	No of Children	%	Level	No of Children	%		No of Children	%	Level	No of Children	%
O	2	9.09%	P	0	0%	O	0	0.00%	P	0	0%
			S	0	0%				S	0	0%
			W	0	0%				W	0	0%
			L	0	0%				L	0	0%
			O	2	100%				O	0	0%
			AB	0	0%				AB	0	0%
Letter	13	59%	P	1	8%	Letter	13	62%	P	1	8%
			S	7	54%				S	1	8%
			W	2	15%				W	3	23%
			L	2	15%				L	2	15%
			AB	1	8%				AB	6	46%
Word	7	31.82%	P	0	0%	Word	8	38.10%	P	1	13%
			S	2	29%				S	6	75%
			W	4	57%				W	1	13%
			AB	1	14%				AB	0	0%
Total	22	100.00%		22		Total	21	100.00%		21	

CONTROLED URDU SCHOOL BOYS						CONTROLED URDU SCHOOL GIRLS					
Level	Before		After 45th card			Level	Before		After 45th card		
	No of Children	%	Level	No of Children	%		No of Children	%	Level	No of Children	%
O	6	54.55%	P	0	0%	O	2	8.33%	P	0	0%
			S	1	17%				S	0	0%
			W	0	0%				W	1	50%
			L	1	17%				L	0	0%
			O	2	33%				O	0	0%
			AB	2	33%				AB	1	50%
Letter	4	36%	P	0	0%	Letter	8	33%	P	0	0%
			S	0	0%				S	3	38%
			W	1	25%				W	5	63%
			L	2	50%				L	0	0%
			AB	1	25%				AB	0	0%
Word	1	9.09%	P	0	0%	Word	14	58.33%	P	3	21%
			S	0	0%				S	9	64%
			W	1	100%				W	1	7%
			AB	0	0%				AB	1	7%
Total	11	100.00%		11		Total	24	100.00%		24	

EXPERIMENTAL KANNADA SCHOOLS MOTHER TONGUE TAMIL						EXPERIMENTAL KANNADA SCHOOLS MOTHER TONGUE URDU					
Level	Before		After 45th card			Level	Before		After 45th card		
	No of Children	%	Level	No of Children	%		No of Children	%	Level	No of Children	%
O	17	36.96%	P	0	0%	O	15	20.83%	P	0	0%
			S	2	12%				S	2	13%
			W	3	18%				W	6	40%
			L	1	6%				L	4	27%
			O	4	24%				O	3	20%
			AB	7	41%				AB	0	0%
Letter	15	33%	P	4	27%	Letter	34	47%	P	5	15%
			S	2	13%				S	9	26%
			W	4	27%				W	8	24%
			L	4	27%				L	5	15%
			AB	1	7%				AB	7	21%
Word	14	30.43%	P	5	36%	Word	23	31.94%	P	4	17%
			S	7	50%				S	10	43%
			W	2	14%				W	7	30%
			AB	0	0%				AB	2	9%
Total	46	100.00%		46		Total	72	100.00%		72	

CONTROLLED KANNADA SCHOOLS MOTHER TONGUE TAMIL						CONTROLLED KANNADA SCHOOLS MOTHER TONGUE URDU					
Level	Before		After 45th card			Level	Before		After 45th card		
	No of Children	%	Level	No of Children	%		No of Children	%	Level	No of Children	%
O	19	31.67%	P	0	0%	O	11	22.92%	P	0	0%
			S	0	0%				S	1	9%
			W	6	32%				W	2	18%
			L	5	26%				L	2	18%
			O	4	21%				O	3	27%
			AB	4	21%				AB	3	27%
Letter	23	38%	P	3	13%	Letter	15	31%	P	0	0%
			S	8	35%				S	4	27%
			W	1	4%				W	7	47%
			L	7	30%				L	2	13%
			AB	4	17%				AB	2	13%
Word	18	30.00%	P	6	33%	Word	22	45.83%	P	7	32%
			S	4	22%				S	10	45%
			W	5	28%				W	3	14%
			AB	3	17%				AB	2	9%
Total	60	100.00%		60		Total	48	100.00%		48	

EXPERIMENTALKANNADA SCHOOLS S1BLOCK						EXPERIMENTALKANNADA SCHOOLS S4BLOCK					
Level	Before		After 45th card			Level	Before		After 45th card		
	No of Children	%	Level	No of Children	%		No of Children	%	Level	No of Children	%
O	40	34.19%	P	0	0%	O	16	29.63%	P	0	0%
			S	2	5%				S	1	6%
			W	14	35%				W	6	38%
			L	7	18%				L	3	19%
			O	7	18%				O	2	13%
			AB	10	25%				AB	4	25%
Letter	45	38%	P	9	20%	Letter	23	43%	P	1	4%
			S	13	29%				S	10	43%
			W	10	22%				W	6	26%
			L	5	11%				L	5	22%
			AB	8	18%				AB	1	4%
Word	32	27.35%	P	22	69%	Word	15	27.78%	P	5	33%
			S	6	19%				S	8	53%
			W	1	3%				W	1	7%
			AB	3	9%				AB	1	7%
Total	117	100.00%		117		Total	54	100.00%		54	

CONTROLLEDKANNADA SCHOOLS S1BLOCK						CONTROLLEDKANNADA SCHOOLS S4BLOCK					
Level	Before		After 45th card			Level	Before		After 45th card		
	No of Children	%	Level	No of Children	%		No of Children	%	Level	No of Children	%
O	33	35.87%	P	4	12%	O	4	8.33%	P	0	0%
			S	4	12%				S	0	0%
			W	10	30%				W	4	100%
			L	7	21%				L	0	0%
			O	3	9%				O	0	0%
			AB	5	15%				AB	0	0%
Letter	28	30%	P	10	36%	Letter	17	35%	P	3	18%
			S	9	32%				S	14	82%
			W	6	21%				W	0	0%
			L	1	4%				L	0	0%
			AB	2	7%				AB	0	0%
Word	31	33.70%	P	19	61%	Word	27	56.25%	P	18	67%
			S	4	13%				S	9	33%
			W	4	13%				W	0	0%
			AB	4	13%				AB	0	0%
Total	92	100.00%		92		Total	48	100.00%		48	