

*Improving Learning*

# READ Alliance Final Report

Australian Council for Educational Research India



This evaluation report has been written by the research team of the Australian Council for Educational Research (ACER) India. Contributors to the report were (in alphabetical order): Dr Abha Bhagat, Anit Cherian, Dr Mee Young Han, Dr Mariya Khatoon, Ashtumurthy Killimangalam, Dr Sarah Richardson, Bikramjit Sen, Anu Sharma, Jennifer Star and Neelam Yadav. Multiple people contributed to the extensive fieldwork undertaken for this evaluation, all of which were managed and coordinated by Ashtumurthy Killimanglam and Bikramjit Sen.

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## Executive Summary

### Methodology

- The evaluation of the five programmes within the READ Alliance platform, was undertaken by combining qualitative and quantitative data.
- This included interviews with teachers, program and partner staff and partner heads; data collected from baseline and endline assessments of class II children involved in interventions; and a review of intervention documents and tools.
- ACER India used its existing Early Grade Reading assessment instrument to identify the percentage of grade 2 children in the project schools who demonstrate the requisite ability in pre-reading skills; an ability to read fluently; and an ability to begin to read and comprehend sentences.
- The evaluation adopted a baseline-endline approach, with the assessment instrument being administered at two intervals in English, Hindi, Marathi and Odia.
- Baseline test administration took place between October 2017 and January 2018. Endline testing took place between February 2018 and April 2018.
- Ideally the time between the baseline and endline would have been much longer but this was not possible due to the timing of the evaluation.

### Relevance findings

- India has characteristics that make learning to read particularly challenging for children.
- These include language diversity, poor teacher training, large classes that may include multi levels, limited resources and inequitable access to education.
- Given the context, it was essential that all interventions were relevant to the contexts they were operating in. This has been largely successful due to the following characteristics:
  - Intervention partners worked with socio-economically vulnerable populations where the barriers to reading are strongest.

- All interventions were implemented in government schools and partners worked hard to successfully engage with government officials to ensure buy-in.
- The role of teachers in the success of the interventions was critical and most interventions involved teacher training, support and teacher materials.
- All interventions used innovative teaching materials to engage children and support improvements in their reading abilities. Some materials were specifically designed to reflect local contexts.
- Most interventions used regular assessments to track children's progress in reading.
- In addition to the commonalities between interventions, specific interventions added particular characteristics that contributed to their success. These included the following:
  - **Aragamee**
  - **HPPI** made close links between the Kadam intervention and three government District Institutes for Education and Training in order to influence teacher training.
  - **KPEC**
  - **QUEST**
  - **PlanetRead**

## Impact findings

### Aragamee

### HPPI

- The HPPI program, which aimed to impact basic reading and writing levels in primary schools across three districts of Madhya Pradesh, implemented the *Kadam – Step-Up program*.
- This program was designed to address learning gaps among children of different ages found within the same classroom.
- It used a combination of 10 Steps for learning subject-based competencies and 'Theme Learning' for the development of general skills.

- The learning aimed to be child-oriented, activity-based as well as outcome-based, and the project included training for primary school teachers.
- Children undergoing the HPPI intervention were assessed in Hindi.
- They showed strong improvement in performance from the baseline to endline, with almost all improvements statistically significant and little gender inequality.

### KPEC

### PlanetRead

### QUEST

### READ Alliance impact

## **Sustainability findings**

## **Partnership findings**

## **Conclusion**

## Acronyms

ASER	Annual Status of Education Report
DIET	District Institute for Education and Training
EGRIC	Early Grade Reading Innovation Challenge
EI	Educational Initiatives Pvt. Ltd.
EIMP	Education Innovation Mentorship Program
HPPI	Humana People to People Initiative
KPEC	Karadi Path Education Company
ME-SLL	Magic English - Second Language Learners
MoU	Memorandum of Understanding
QUEST	Quality Education Support Trust
RAPN	READ Alliance Partnership Network
READ	Read - Engage - Achieve - Dream
RTE	The Right of Children to Free and Compulsory Education
SD	Standard Deviation
SE	Standard Error
TLM	Teaching Learning Material

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## 1 Introduction

The United States Agency for International Development (USAID) is among the leading development agencies to support initiatives in the areas of early literacy and education in India. A key intervention that USAID is supporting is the Read - Engage - Achieve - Dream (READ) Alliance, which focuses on improving the reading skills of primary school age children in India.

READ Alliance aims to spur an early grade reading movement in India by supporting innovative reading solutions and providing a platform that brings together education professionals, corporations, social organizations, and government entities as resource partners working collaboratively to improve early grade reading outcomes.

The key objectives of the READ Alliance are described below, each individual objective of the Alliance contributes to the overall developmental goal of the program.

### **Objective 1: Fostering partnerships and advocacy for building a dynamic stakeholder platform for early reading**

a) Through strategic communication and outreach, the programme aims to build and establish partnerships to strengthen the READ Alliance platform and mobilize resources (financial and non-financial) to meet or exceed the development goal

b) Champion early grade reading in India by identifying a rich pool of potential implementation partners through Innovation Challenges. Advocate for state, national, and potentially international scale-up, of effective interventions

**Objective 2: Achieving impact through scaling up promising early grade reading innovations**

a) Through the Innovation Challenges, select and scale effective reading programs by offering them a range of support services including funding, technical assistance, and networking

b) Utilize robust monitoring and evaluation processes to generate knowledge on the implementation and impact of sub-awarded projects

**Objective 3: Creating and sharing knowledge that can inform future design of interventions and can spread awareness on the importance of acquiring early literacy**

a) To create in-depth and insightful knowledge about early reading and the systemic, technological, socio-political and linguistic issues that have the potential to impact the reading outcomes of children

b) To curate a knowledge hub with repositories of reading programs, research documents, knowledge collaterals to make available to existing and new knowledge around early grade reading

c) To promote, publicize and propagate the work of the READ Alliance through online and offline communication for ensuring greater affiliation

A key mandate of the READ Alliance is to identify innovative reading interventions and support them to develop and scale up projects. The Early Grade Reading Innovation Challenge (EGRIC) was implemented by the Center for Knowledge Societies (CKS) with a view to serve this mandate. The EGRIC Challenge held in 2014 and 2015 helped identify six innovative projects that held the promise of scalability.

## **1.1 Background to the interventions**

READ Alliance selected six innovative projects through the Early Grade Reading Innovation Challenge (EGRIC) held in the year 2014 and 2015 to impact reading skills of 100 thousand children.

The EGRIC challenge aimed at identifying innovative reading interventions and supporting them to develop and scaling up their projects. All the six projects were identified after a rigorous evaluation by some of the most senior experts from education and development sectors.

The projects were selected on the basis of their knowledge and expertise, technology, communications and implementation plan. The detailed description of each of the sub recipients' projects (six projects are also referred as sub recipients in this document) are described below.

### **1.1.1 Aragamee**

Aragamee was selected from EGRIC 2015 and initiated the Creative Language Development Efforts (CLDE) project that aimed to develop the reading and literacy skills of 4,000 children enrolled in class I to V in eighteen government primary schools, located in the three tribal districts (Rayagada, Koraput and Nabrangpur) of Odisha.

The objective of the project was to develop appropriate teaching and learning materials (TLM) to facilitate literacy development in Odia language among children by engaging on-site supporters, who the project refers to as Shiksha Sathies. Aragamee planned to provide them with orientation, training and supportive TLM to work as "Shiksha Sathies" or Support Teachers in the schools.

As part of its intervention Aragamee aimed to assess improvement in reading skills among the targeted children through baseline and endline surveys, at the start and end of every academic year.

### **1.1.2 Educational Initiatives Pvt. Ltd.<sup>1</sup> (EI)**

EI was selected from EGRIC 2015 and its 'Rigorous Early Grade Reading Diagnostics' project aimed to create an accurate and intuitive diagnostic e-tool for Hindi language (mother tongue). The objective of the project was to address the

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<sup>1</sup> Excluded from the evaluation as the project completed its tenure in August 2017.

pedagogic need for an accurate and reliable diagnosis of challenges faced by 10,000 children in the age group in class I to V in three districts of Rajasthan.

The project aimed to train 250 government and/ or budget private school teachers. This tool was designed to help researchers understand the problematic areas of reading in the mother tongue language and provide them with appropriate remedial modules as an adaptive e-learning solution for enhancing that skill in the child, which would be independent of the quality of teachers administering it.

### **1.1.3 Humana People to People India (HPPI)**

HPPI was selected from EGRIC 2015 and its 'Kadam' project aimed to enhance the reading skills of children in mother-tongue language (Hindi) with a secondary focus on English (as a second language). HPPI planned to do this by developing the capacity of teachers in 200 rural government primary schools in three districts of Madhya Pradesh (Ujjain, Dewas and Khandwa).

The project aimed to reach 30,000 primary grade learners, across 8 cohorts. The objective was to enhance teaching skills of 1,000 primary grade teachers by training them in child-centric processes and TLM development.

### **1.1.4 Karadi Path Education Company Pvt. Ltd. (KPEC)**

KPEC was selected from EGRIC 2014 and planned to use its Joyful Reading project to build upon the concept of developing listening skills as the base of developing reading and language skills of children in 90 government schools in Tamil Nadu. KPEC planned to deploy the audio-visual based Magic English SLL method for the project implementation.

KPEC planned to offer its Magic English-SLL to about 30,000 primary school children enrolled in class II to V and who were from underprivileged communities in Tamil Nadu. The aim was to enable these children to read and understand English within three academic years. As part of its intervention, KPEC planned to assess children at the baseline, midline and endline of its intervention.



### **1.1.5 PlanetRead**

PlanetRead was selected from EGRIC 2015 and initiated the 'AniBooks for Early Grade Reading' project, which aimed to promote reading skills through Same Language Subtitling (SLS) of audio-visual content for first generation learners in Northern India. AniBooks were animated stories with Same Language Subtitling (SLS) that could be adapted for any screen, in any language.

The project covered Delhi and Rajasthan. The main objective was to support the development of reading skills for more than 20,000 children enrolled in class I to III by integrating 40 AniBooks into the schools and lives of these children.

PlanetRead planned to get into strategic partnerships with organizations that had the experience and infrastructure to distribute and deploy digital content on existing screens in schools.

### **1.1.6 Quality Education Support Trust (QUEST)**

QUEST was selected from EGRIC 2014 and proposed to use Lipi and Saksham interventions as a comprehensive literacy remediation solution for the children who were unable to read and write according to their grade-appropriate level.

The project aimed to build capacities of teachers, teaching in Grades 1 to 7 in 20 tribal (Ashram) schools situated in the two remote districts of Maharashtra (Thane and Palghar). QUEST aimed to provide on-site support through training and workshops for their mentors, who are referred to as *Shikshak Mitra*, and implementing government schoolteachers.

The plan was that teachers from Grades 1-3 would teach the *Lipi* curriculum, i.e., teaching of Marathi to children, while teachers from Grades 4-7, would focus on remedial teaching using *Saksham* in Marathi language. The project aimed to cover 7,120 children in both the districts of Maharashtra.

The project had a preparatory phase of eight months. Following the baseline tests conduction for the Saksham intervention in 2015, the intervention expanded to include twenty additional Ashram schools, commencing from the beginning of Year 2 (September 2016).



## **2 Evaluation methodology**

### **2.1 Introduction**

The main aim of the READ Alliance program was to support interventions that enhance student reading. Thus, the evaluation has looked both at processes – in particular the approaches and materials used in each of the interventions – as well as outcomes, specifically the achievement of targets and evidence of improved reading skills among children.

The evaluation has included the collection of both quantitative and qualitative data. The aim has been to ensure that all of the evaluation questions has been addressed and that a systematic and objective approach has been used for all of the interventions, enabling comparisons to be drawn while bearing in mind the very different contexts in which the interventions have taken place.

In terms of qualitative data, interviews were conducted with heads and project staff of all intervention partners, and detailed information was also collected from project partners in written form. In terms of quantitative data, the main focus has been on student learning assessment. The methods used in both of these is summarised below. In addition, information is provided on sampling and the limitations of the methodology used are identified.

### **2.2 Reading skills evaluation design**

To evaluate student performance in reading, a baseline-endline approach has been used. In terms of effort required, this has been the major activity of this evaluation.

Due to the evaluation commencing relatively late in the program, and the cohort-based nature of some of the interventions, it has not been possible to collect data from all children. In addition, the time between the baseline and endline has been limited, and thus does not represent the complete growth in student reading from the beginning to the end of each of the interventions.

Nevertheless, the baseline-endline approach does represent an opportunity to use a common approach to student assessment across all projects, supplementing evaluations that intervention partners have also carried out. It provides a means of drawing conclusions about relative intervention successes.

A common instrument was used to assess reading skills at the baseline and endline. This was adapted from a pre-existing instrument and versions were prepared in Marathi, Odia, Hindi and English. All language versions had similar components but the English version had an extra section to reflect a key building block of learning to read in English that is not relevant in the other languages.

### **2.2.1 Pre-reading skills**

Given the disadvantaged nature of the children targeted by the various interventions, and reflecting the substantial body of knowledge that exists on very poor achievement in reading in Indian schools, the reading assessment encompassed a number of elements that can be classed as 'pre-reading skills'. These are essential as they form the foundational skills that place children on a developmental path towards reading comprehension.

Due to time and resource constraints - as well as concerns about standardisation - it was decided not to assess children one-on-one (a common practice when assessing children in lower class levels). Instead, the approach was to assess children in small groups. This helped determine the type of skills that could be assessed. These comprised:

- **Letter shape identification** (distinguishing letters from other shapes).
- **Phonemic awareness** (recognising letters that begin words presented in the form of images).
- **Basic Vocabulary** (matching words/phrases and images) – simple words of 2-3 syllables were used. In Hindi, Odia and Marathi the number of matras were limited.
- **Sentence comprehension** (matching sentences and images) – simple 3-5 word sentences were used.

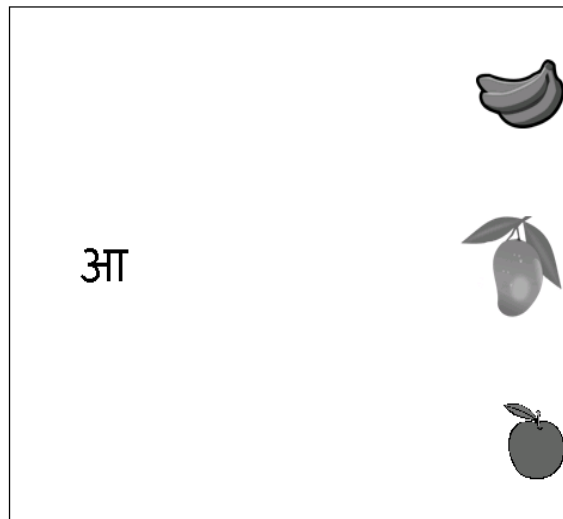
Children were tested on an additional element in English:

- **Letter matching** (matching uppercase and lowercase letters)

It is important to note that sentence comprehension is not strictly a pre-reading skill. However, it is an important stage in the path towards being able to construct meaning from entire texts and therefore, has been included in this section

All of the tasks described above were assessed using multiple choice with three options except for the matching exercise requiring children to pair the correct uppercase and lowercase letters in English.

A sample item is provided below. In this item, children are expected to identify the word that begins with the letter provided, based on the image. (Instructions are read aloud.)



**Figure 1: Sample item for pre-reading skills**

### **2.2.2 Fluency**

Standard measures of fluency usually include measures of accuracy, rate and expression (prosody). In this case prosody was not included as it is extremely difficult to ensure standardisation – a key design consideration of this study - when measuring prosody.

Elements of prosody such as intonation, emphasis, pausing appropriately, etc. are difficult to define objectively. Therefore, measurement of prosody often depends upon the subjective judgement of well-trained evaluators.

Even with extensive training, issues of inter-rater reliability, that is, the difference between how one evaluator marks a response compared to how another evaluator does, often plague studies of such a nature, undermining their ability to draw valid comparisons.

Moreover, prior studies with children that share similar characteristics to those in the target programmes included in this study suggest that the ability of children to read textual excerpts would be extremely limited. This was borne out during fieldwork. This context suggested that the use of common measures of prosody would likely be inappropriate.

For these reasons, this assessment focused on measures of accuracy in children reading aloud. Three tasks were designed to measure reading fluency – letter reading, word reading and sentence reading. The letter reading tasks included simple letters, letters with matras and conjoint letters (consonant blends) in non-English languages.

In English, a mixture of upper- and lowercase letters were used. For the word-reading task, in Hindi, Odia and Marathi, simple words with two or three syllables were used. It was ensured that words would not contain more than two matras for most of the words. The sentences were simple containing only four or five words.

### **2.2.3 Instrument Design**

The assessment consisted of two parts – pre-reading skills and reading fluency. The pre-reading skills were administered as a pen and paper test. The reading skills were assessed using reading cards.

The assessment instruments were specifically designed to be child-friendly, non-threatening, simple to administer and to include fonts that were large enough to make them easy for early readers.

### 2.2.3.1 Pre-reading skills

The test instruments were designed to ensure that sufficient items were to assess each skill were included. Pilot testing is used to test additional items so that any items that fail to perform adequately can be discarded before the final testing.

As a pilot could not be conducted due to time constraints, the design allowed for use of an increased number items for each skill. This increase in items ensured that any inadequately functioning items could be discarded before the analysis.

In order to accommodate the increased number of items, a rotated design with two booklets was introduced. Table 1 shows the total number of items by skill and how they were distributed across the two forms.

Each form was limited to about 20 items to ensure that test administration did not exceed 30 minutes, hence minimising the burden on children as far as possible. The two forms were linked through the use of 'link' or 'anchor' items.

Skill	Form A	Form B	Unique	Links
Letter recognition	4	4	6	2
First letter recognition	4	4	6	2
Word to image	4	4	6	2
Image to word	4	4	6	2
Sentences to image	2	2	3	1
image to sentences	2	2	3	1
	20	20	30	10

**Table 1: Item distribution by skill across forms**

As discussed above, the tests were designed to be administered to small groups of 5-6 children at a time. This number was chosen to reflect the ability of test administrators to appropriately monitor all children simultaneously and took into account the age of the children.

### 2.2.3.2 Reading fluency

For reading fluency, children were assessed using reading cards that were designed for one-on-one testing. Five different reading cards were used as children were assessed in groups of five.

Being able to read letters is a prerequisite skill for reading words and reading words a prerequisite skill to read sentences. Therefore, only children who could read at least one letter were asked to attempt to read words and only children who could read at least one word were asked to read sentences.

Administrators assessed each student individually for this section of the test. They used a scoring sheet to record the accuracy of the answers. Words were only marked correct if they were read as words and not as string of letters. As it was not possible to measure prosody, the sentences were also assessed using the 'number of words read correctly' measure.

#### **2.2.4 Languages of Assessment**

The assessment tools were administered in four different languages – English, Hindi, Marathi and Odia. In order to ensure reliable comparisons, the instrument was first developed in Hindi and English and the Hindi instrument was used as the source for adaptation into Marathi and Odia.

It is difficult to equate the English assessment with the assessments in other languages for multiple reasons. English is a second language in India and therefore, it is unfair to compare performance in English with performance in what may be the first language of a majority of the children.

Further, the orthographic system of English is different from the orthographic systems of the other languages being tested. Therefore, the English instrument was treated as a separate instrument though the skills assessed were mostly similar.

##### **2.2.4.1 Process for ensuring Linguistic Equivalence**

The Hindi was used as the base version for the Marathi and Odia. The initial version was adapted using translators for the respective languages. These versions were verified by a teacher with experience in teaching the language in the early grades to ensure equivalency.



## 2.3 Sampling

In educational surveys, it is important to include information from more schools rather than more children in fewer schools in order to capture the variety in a student population and to yield reliable interpretation and analysis from data.

The aim of the sampling in this study was to include as many schools in every READ Alliance project as possible and 20 children from each sample school. As a result, the sample of this evaluation study covered **almost all schools** in each project.

Very small schools, that is schools with a Grade 2 enrolment of less than five children, were excluded from the sample (accounting for six schools in the Agragamee project). This was because the logistical challenge and cost of travelling to a school with fewer than five children outweighed the value in collecting data from those schools. Details of the sample and final participation are provided in Table 2.

**Table 2: Sample**

Project	Language tested	Sample				Tested			
		Number of schools	Total Number of Grade 2 children	Children sampled per school	Total children in sample	Baseline		Endline	
						Number of schools	Number of children	Number of schools	Number of children
KPEC	English	89	3910	20	1741	89	1696	89	1661
QUEST	Marathi	20	648	20	382	20	377	20	344
HPPI	Hindi	51	1352	20	971	50	800	51	405
PlanetRead	Hindi	6	NA	20	120	6	120	6	120
Aragamee	Odiya	14	178	all	161	14	138	14	128
Total		180	<b>6088</b>	80	<b>3375</b>	179	<b>3131</b>	180	<b>2658</b>

As the table illustrates, in each school a maximum of 20 children were to be assessed. The study sampled 100 per cent of schools with up to 23 children and

randomly selected 20 children from schools with more than 23 children. In the case of HPPI, a significant attrition in sample size occurred in the endline test as children were unavailable due to a school closure and numerous festive activities.

In order to avoid bias in selection, children were asked to select stickers of different colours and shapes provided by the test administrators. It was ensured that there were 20 of one colour/shape of sticker (a red star in most cases). Children choosing that particular colour or shape were then assessed.

Gender balance of children was taken care of during the sampling. If in a classroom less than ten boys or girls were enrolled, all of them were assessed. If the numbers of girls and boys were similar, care was taken to ensure that an equal number of boys and girls were assessed.

The advantage of the use of stickers was that all children received a 'prize', even if they were not selected for inclusion in the study. This was done to minimise any distress among children who were not selected (and who were very happy with their stickers!).

## 2.4 Field plan

This section describes the methodology followed in the implementation of the assessment in different states. Details regarding the implementation in each state are provided in Appendix I. It is important to understand the approach to fieldwork as it defines the context in which children were assessed.

The baseline and endline assessments involved the following three steps:

1. **Training** of test administrators and monitors on administering and monitoring the assessments, including the provision of a Test Administration Manual.
2. **Administration** of the test among selected grade 2 children of the intervention schools in target districts, with test administrators instructed to adhere closely to the Test Administration Manual.

3. **Monitoring** the test administration to ensure that tests were conducted in a standardised way as instructed during training and as laid down in the Test Administration Manual.

#### **2.4.1 Training**

Children being assessed in this study are from extremely disadvantaged backgrounds. Therefore, it was important to ensure that test administrators were from appropriate cultural and social backgrounds. At the same time, it was also important to ensure that test administrators were independent from the schools and children.

To try and achieve all of these objectives, test administrators were recruited among teacher trainees enrolled in teacher training colleges that were geographically close to the testing site, or children enrolled in graduate studies in other relevant areas such as Master's degree in Social Work.

All test administrators were provided with a one-day orientation session before the baseline and before the endline. During the session participants were given a thorough introduction to the test instruments and emphasis was laid on the importance of standardisation and following the directions in the Test Administration Manual.

#### **2.4.2 Quality Monitoring**

On the date selected for test administration in each location, more than 20 per cent of schools were randomly selected and monitored during the administration process. The monitoring was conducted by either evaluation staff or trained monitors.

Monitoring was done to ensure that tests were conducted in a standardised way. The schools to be monitored were randomly selected and the schools were not informed beforehand. All monitors underwent a training session to ensure understanding of the procedures to be followed.

In general, monitoring showed that the test administration was conducted in a relatively standardised manner that was able to generate reliable data. It is never possible to ensure that all test administration practices are completely uniform but

monitoring suggested that the combination of training and the use of a Test Administration manual ensured that the administration was sufficiently reliable.

## **2.5 Data analysis**

After fieldwork, all student records and test forms were returned to a central location and the data was entered by professional data entry officers. Data was subject to a process of cleaning prior to analysis. This involved using a series of validation strategies to ensure that it was complete and that any missing variables were identified and labelled correctly.

Data analysis identified the proportions of children that were able to correctly answer items under each of the assessment categories and was reported for each intervention. At the endline, results between baseline and endline were compared to identify improvements in any or all assessment categories.

To identify whether performance differences between the baseline and endline were statistically significant, a t-test was performed. A t-test was also performed to identify any gender differences at the baseline and endline for all assessment categories.

## **2.6 Collection of implementation data**

In order to gather insights into how projects were designed and implemented, as well as on the benefits for intervention partners of being part of the READ Alliance, qualitative and quantitative data was collected. This included in-depth interviews with the heads of intervention partners, intervention staff, teachers and READ Alliance staff.

The interviews included questions from the READ Alliance Platform Evaluation Framework to collect information on governance, financial models, assets and infrastructure, service offerings and beneficiaries.

To supplement interviews, a series of open questions were sent to project implementation partners seeking detailed information on a number of aspects of project implementation. This was done to avoid over-burdening interview participants and to restrict interview questions to aspects that participants would be able to comment on without reference to other documents.

In addition, qualitative data was collected from intervention partners through the use of a standard spreadsheet. This was done in an attempt to collect comparable data on project implementation after it became clear that the details available in existing project documentation were not consistent across interventions.

The instruments used for interviews, as well as for the collection of qualitative and quantitative data, are available in Appendix IV.

## **2.7 Review of intervention materials**

A review of materials used by intervention partners was also done. Material was evaluated on the basis of its relevance and effectiveness. In order to better understand the unique features of the material, pertinent questions were asked from the heads of intervention partners, intervention staff, and teachers. Further, the reliability of the data obtained using these methods was also considered.

Books and digital content were examined for localisation and ease of access, with photos of material taken. Sufficiency of material in terms of number of books/videos and their progression in terms of pedagogy was taken into account. Books were scrutinised for fonts, pictures, layout presentation and possible typo errors. For animation, speed and highlighting of subtitles were examined closely. Age appropriateness of stories and animated characters used was also taken into account.

## **2.8 Limitations of the methodology**

The approach used here reflects attempts to use a multi-methods approach to collect information from a range of sources to inform the evaluation. This has the advantage of gaining insights from a number of perspectives and about a number of themes – including design, materials, approaches to implementation, challenges and results – that together provide a comprehensive picture of the various interventions and the overall program.

All research has limitations and in this case the most significant one was that the evaluation started relatively late in the project timeline. Ideally, baseline data would have been collected from a sample of all children, both at the start of their sections of the intervention (for example, at the commencement of each cohort) and then

again at the end of that particular intervention (for example, at the conclusion of each cohort). This would have provided more comprehensive insights into the impact of the interventions on children.

Since many of the interventions were already well underway prior to the baseline assessment it was not possible for the evaluators to ascertain the actual starting point of children prior to the intervention. Instead, an arbitrary time for the baseline had to be selected. A similar situation was encountered with the endline.

The challenge of undertaking a baseline and endline approach towards the end of the READ Alliance program was further exaggerated by having a very limited time available between the baseline and endline assessments, which was not at all ideal. One factor which caused delays was the challenge of obtaining permissions from relevant authorities to enter schools for the purpose of evaluation.

In order to minimise the impact of these challenges in future programs, it is recommended that the evaluation partner is engaged at the start of implementation to ensure that a consistent approach to evaluation is embedded in the design and roll out of intervention activities. Moreover, permissions from relevant authorities to conduct evaluations at various stages of interventions could be gained by program staff at the start of implementation.

Finally, an ideal experimental design would have both intervention and control groups. The reality in social research (including educational research) is that it is very difficult to identify equivalent entities for comparison purposes, or to exert control over the multiple factors that can interfere with the rigour of an experimental approach.

This is due to the inherent complexity that is characteristic of the education sector and the difficulty of isolating those characteristics known to exert an influence on student performance (including families, teachers and school environments). For example, teachers may move from school to school, approaches to parenting may vary due to a multitude of factors and school environments may improve or deteriorate.

Due to these factors, the selection of appropriately similar control schools would have required a much longer lead time than was available in this evaluation in order to try to set robust parameters.

It was thus decided in this evaluation that any attempt to rush at selecting control schools – especially given the paucity of up-to-date information available on relevant school characteristics – would result in a deeply flawed design which generated questionable results, and that this would be worse than not using control schools.

In future, however, if an evaluation design could be implemented from the beginning of a program, the identification of control schools would add value to the findings.

## 3 Relevance

### 3.1 Introduction

This section starts by setting the context for the READ Alliance program. It then goes on to examine the design of READ Alliance program – whether the most effective steps were taken to meet the intended objectives. It further examines the methodologies employed by the intervention partners and the effectiveness of these methodologies.

### 3.2 Need for early grade reading interventions

The ability to read is a key foundational skill that provides children with a sound basis on which to build a lifetime of learning. Despite its importance, there is ample evidence from around the world that many children are failing to master reading in the early years of their education.

In India, the Annual Status of Education Report (ASER) identifies that of the more than half-a-million children in rural areas aged 3-16 surveyed, only 40 per cent of children in class III are able to read at least a class I level text (ASER Center, 2017).

This finding indicates the vital importance of efforts to enhance early reading among children, and particularly those in rural areas of India. Moreover, it highlights the enormous scale of the need for interventions to enhance reading skills in the early years of schooling (as well as at the pre-school level).

The national pattern is reflected in the states in which the READ Alliance interventions operate. ASER data from 2016 indicates that the proportion of children in class II that can read a class I text varies from less than 10 per cent in Madhya Pradesh and Tamil Nadu to just over 20 per cent in Maharashtra and just over one third in Odisha (Delhi was not included in the ASER study).

As these patterns indicate, there are clearly fundamental weaknesses in the structures, systems and processes that contribute to the acquisition of basic reading skills among young children in India. At the same time, the sheer numbers of children who are missing out on gaining foundational reading skills is immense,



and this points to the need for any successful intervention to be suitable for replication and expansion.

### **3.3 Early grade reading: Barriers to learning**

India is not unique in the problems faced by many children in gaining basic reading skills. There are certain characteristics, however, that make the acquisition of reading skills particularly challenging in the Indian context. This section reviews the major factors.

#### **3.3.1 Language diversity**

India is home to many languages and significant variations exist between regional languages and local dialects. In total, 22 languages are recognised as being official, and have been identified as the main languages in the education sectors of the Indian states and territories.

Far more languages are in use, however. The 1961 census recognised 1,652 languages in India and Ethnologue (2017) identifies 448 living languages in contemporary India.

To add to the complexity, Indian languages do not stem from one language group but from a number, including the Indo-Aryan language family, Dravidian language family and Sino-Tibetan language family. This creates challenges for multi-lingual children in India that their counterparts in most other parts of the world do not have to face.

Inevitably, the language diversity within India has a significant impact on educational systems and outcomes. It is extremely common that the language of instruction used in a school is not the same as the child's home languages (or, indeed, home languages).

In a context in which global organisations such as UNESCO recognise the importance of mother tongue-based schooling for educational quality (see, for example, Benson 2004) many Indian children are at a disadvantage.

In order to support children to learn to read, therefore, reading initiatives must be designed in ways that are sensitive to these realities. (Hoffman, Sailors, Makalela,

& Matthee 2009). This is particularly critical for tribal children, whose mother tongue(s) may not have a script.

### **3.3.2 Teacher skills**

It is well known that teachers play a critical role in children's learning. As Kane (2016) suggests, teachers are the main mediators of learning and must be adequately prepared for their professional roles, as well as being provided with ongoing support.

In India, a senior government official recently stated that the "fundamental point we are missing in our education system is teachers' education. The teachers' education system is very bad in our country. That is our biggest sin." (Sisodia, 2016). This highlights the danger to children's learning of teachers lacking inadequate skills.

### **3.3.3 Class size and multilevel classes**

A further factor that places pressure on the education sector in India, and is likely to have an impact on the ability of children to learn to read, is the fact that class sizes can be very large.

The Right to Education (RTE) Act recommends a that there are 30 children per teacher at the primary level but District Information System for Education (DISE) data indicates that a third of primary schools have class sizes above this target.

In many cases, classes are not just large but include children of a number of different class levels and ages. Multi-grade classes can work well where teachers are highly trained and well supported, but are often very problematic in countries such as India where these conditions are not in place (Mathot 2001).

Multi-grade classes place immense pressure on teachers to achieve the prescribed curriculum for all children, and may mean that learning is a secondary consideration.

### **3.3.4 Limited resources**

Added to large classes, a further challenge for children's learning to read is the poor state of many Indian schools. A state-wise analysis of the National Achievement Survey 2017 has identified factors such as a lack of drinking water and toilet facilities in many schools.

Beyond infrastructure, learning resources such as textbooks may be missing, inadequate, of poor quality or insufficient in number. All of these factors can have a negative impact on children and act as a barrier to their learning.

### **3.3.5 Equity and access**

Getting to school at all can be a challenge for children, particularly those from disadvantaged background. Competing demands on their time, including housework and paid employment, can prevent children from being able to attend school consistently. In many cases the burden for out of school activities falls more on girls than on boys and this results in inequitable access to education.

In many cases, parents and community members simply do not see the value of education for children, and prioritise the contribution that children can make to income and everyday work.

Once in school, classroom environments may be more or less conducive to learning among particular cohorts. Children with special needs and learning disabilities face particular challenges as teachers may have received insufficient training in addressing their learning needs.

### **3.3.6 Overcoming the challenges**

The challenges identified here are very significant. As mentioned, most of them are certainly not unique to India, but the linguistic diversity in India can add to the complexity of the overall situation.

The sum impact of these challenges inevitably has a marked impact on the ability of children to learn essential skills. Basic reading skills are a key casualty, and this calls for effective solutions. In response, The READ Alliance program aims to address the poor reading skills among many children in Indian schools.

### **3.4 READ Alliance platform and interventions**

The READ Alliance platform is devised around three pillars – the Programs (partner interventions), Partnerships and Knowledge and Documentation. A separate chapter is dedicated to discussing Partnerships and Knowledge and Documentation, therefore, this section will mainly focus on the Programs.

#### **3.4.1 READ Alliance Platform**

In order to meet its objective of improving reading outcomes in elementary school children in India by supporting reading interventions, the platform had to first identify the appropriate partners.

READ Alliance chose the innovative method of using the Early Grade Reading Innovation Challenge (EGRIC). Six partners were selected from EGRIC based not only on their ability to deliver successful interventions but also on their novelty and their potential scalability and sustainability. As discussed above, this evaluation focusses on five of the interventions.

The populations selected were those that would benefit most from successful interventions. All the partners worked with socio-economically vulnerable populations where the challenges discussed above are further exacerbated. A majority of the children in the interventions were first generation learners and had no support to reinforce learning at home. In many cases, a child's home language was different from the language of instruction.

Since all of the interventions were implemented in government schools, a vital need was to successfully engage with government officials at different levels. This was not only to get permission for the interventions but also to ensure buy-in.

Time and effort was required to convince incumbents that the innovative and disruptive methods proposed could be successful. The intervention partners have all been successful in gaining governmental buy-in to a large degree.

Beyond government officials, the most important stakeholders in ensuring the success of most of the interventions were teachers. Most interventions involved teacher training and required teachers to put in additional efforts. This effort has,

in general, been a success. However, continuous, on-going engagement is essential for the efforts to continue to bear fruit.

A notable feature of all the partner interventions is that they all planned the use of innovative teaching materials. While the materials varied significantly from one intervention to another, they all shared a common objective of both engaging children and also supporting improvements in their reading abilities.

A key feature of some of the materials was that they were specifically designed in order to reflect local contexts. In addition, all were developed to be appropriate for the target age group. The interventions also attempted to ensure that the material provided to schools or children was sufficient for the purpose.

These are the similarities that guided the intervention design and deployment for all five READ Alliance partners. But each intervention had specific characteristics and these are summarised below.

### **3.4.2 Agramee**

### **3.4.3 HPPI**

HPPI aimed to reach out to the children of daily wage labourers who were either in school or out of school. The clear definition of this population at the planning phase helped HPPI design a program that was directly relevant to the needs of the target cohort.

HPPI's flagship reading program, KADAM, was designed to support children to read well and to gain better reading skills. HPPI reached the minimum number of children required for the intervention process by targeting districts which would give them a suitable number of children.

The material used by HPPI revolved around strategies designed to engage children. KADAM used a combination of 10 Steps for learning subject-based competencies and Theme Learning for all-round skills building. The learning was child-oriented, activity-based as well as outcome-based.

For younger children, the intervention intended to improve their phonemic awareness and reading comprehension skills, while for older children the target was on writing and dictation skills.

HPPI recognised that children were not always allowed to go to school as they had to help out with supporting the family or with daily chores. This led the project team to address school attendance through parent-teacher meetings as well as through occasional home visits.

HPPI also make close links between the Kadam intervention and three government District Institutes for Education and Training (DIETs), one in each district. These were chosen since they had been running pre- and in-service teacher training courses since many years. The teachers trained under Kadam were engaged to do continuous monitoring and follow-up of the intervention. This step was designed to make appropriate and timely feedback to the intervention to improve the program delivery.

HPPI designed its own assessment instruments for use at different stages of the intervention. The intervention targeted reading and writing in both English and Hindi. The HPPI assessment instrument includes both languages, but it would be better to separate the two languages.

In the section assessing reading of letters, the letters were presented in alphabetical order. Ideally, the order of letters should be mixed in an unpredictable manner so that children who are unable to read - but know the letter sequence by rote - are not given credit by default.

The baseline assessments were designed based on the KADAM competencies. The end-line assessment report is not yet available and hence a comparative study is not possible at this point of time to deduce a conclusion.

The HPPI intervention is quite different from the others in that it is designed for a much shorter duration (10 weeks). Therefore, it is extremely important to understand and identify the impact of the intervention. As assessment design that includes a control group should be considered in the future.

#### **3.4.4 KPEC**

#### **3.4.5 PlanetRead**

#### **3.4.6 QUEST**

### **3.5 Summary**

## **4 Impact**

### **4.1 Introduction**

The READ Alliance program comprises both overall program objectives as well as specific objectives for each of the intervention partners. In this section, qualitative and quantitative data gathered from each project partner will be drawn on to highlight the extent to which the agreed objectives have been achieved.

It is important to note that each implementation partner has used a distinct approach to identifying objectives and outcomes, and to reporting against them. In addition, the contexts in which the programs have been implemented are very different. This means that caution should be used in making comparisons between the partners.

### **4.2 Agramee Impact**

#### **4.2.1 Stated objectives of the Agramee program**

#### **4.2.2 Achievement of Agramee program objectives**

#### **4.2.3 Agramee impact on children's reading skills**

#### 4.2.4 Agraamee impact on children's reading skills by gender

#### 4.2.5 Agraamee Summary

### 4.3 HPPI Impact

#### 4.3.1 Stated objectives of the HPPI program

For the HPPI program there were four main project objectives.

- **Improve** reading skills among primary school children;
- **Enhance** teaching skills among primary grade teachers of government primary schools by training them in child-centric teaching processes and the use of teaching and learning materials;
- **Establish** a sustainable learning support system for primary grade children at the local level by engaging and networking local stakeholders - teachers, parents and local communities; and
- **Design** and present a scalable model by establishing institutional support systems for resource-scarce government primary schools.

The aim of the program was to reach 200 primary schools across 3 districts in Madhya Pradesh. Within these schools the target was to reach more than 30,000 children in class levels 1 to 5. It was intended that the children under this program would achieve basic reading and writing skills.

The program was based on the implementation of the "Kadam – Step-Up program". This was designed to address learning gaps among children of different ages found within the same classroom. It used a combination of 10 Steps for learning subject-based competencies and 'Theme Learning' for all-round skills building. The learning was child-oriented, activity-based as well as outcome-based.

The HPPI intervention was structured around six consecutive time periods of 10 weeks each, involving a different batch of on average 5,100 children (a 'cohort') and their teachers in each period. The intervention focused on improving the phonemic awareness and reading comprehension skills of grade I and II children. It also targeted the writing and dictation skills of children in class levels III to V.



The intervention was linked to one District Institute for Education and Training (DIET) in each district, selected because they had been running pre- and in-service teacher training courses for many years. In addition to the targets set for children, the program aimed to reach 1,000 government primary school teachers and to give each of them 16 hours of training in the Kadam methodology, including the use of assessment tools.

HPPI considered that adequate training of teachers in the use of teaching and learning materials was the most crucial element in improving reading skills among children. In addition to training in using the materials, teachers were also trained in how to do continuous monitoring and follow-up.

In addition, the HPPI program aimed to reach parents and community members in order to seek their support in ensuring that children attend school. There were no specific numerical targets for the numbers of parents and community members that should be reached.

#### **4.3.2 Achievement of HPPI program objectives**

In numerical terms, the HPPI program exceeded the majority of its objectives as Table 3 illustrates. Information that helps explain key factors in the achievement, or non-achievement, of these targets is provided below the table.

The intention was to work in three districts of Madhya Pradesh and the program was implemented in Dewas, Khandwa and Ujjain districts. In Dewas district, it was found that there were too few children in Dewas town (originally the only site for the planned intervention) and therefore the intervention was expanded to incorporate Satwas block in order to reach the desired number of children.

**Table 3: Summary of HPPI Targets and achievements**

<b>Sub-Category</b>	<b>Quantitative item</b>	<b>Objective</b>	<b>Achieved</b>
<b>Districts and Schools</b>	Number of districts	3	3
	Number of schools	200	215
<b>Children</b>	Number of children	30,000	31,917
	Class levels of children	I - V	I - V
	Proportion of children retained	-	99%
<b>Teachers</b>	Number of teachers involved in the intervention	1,000	1,203
	Number of hours of training per teacher	16 hours	16 hours
	Proportion of teachers retained	-	95%

<b>Master trainers</b>	Number of master-trainers trained	-	14
	Number of days of training per master-trainers	-	12
	Proportion of master trainers retained		79%
<b>Overall progress</b>	Total number of intervention days planned per cohort	55 days	90%
	Percentage of schools 'on track' with interventions		91%

The intended target of 200 schools was exceeded, with 215 schools included across the eight cohorts of the intervention. Similarly, the target of 30,000 children was exceeded, with 31,917 children included across the eight cohorts.

The children that were included were relatively evenly spread across class levels with 21 per cent in class I, 19 per cent in class II, 19 per cent in class III, 20 per cent in class IV and 21 per cent in class V. Almost all children were retained until the end of the intervention, with an overall retention rate of 99 per cent.

Children in classes I to IV received 12 hours of input while children in class V received 8 hours of input, in both cases across a period of 10 to 12 weeks. In Dewas, children in cohorts 5 and 6 received just 4 hours of input on average, across just 5 out of 10 planned weeks. This was caused by problems with moving master trainers to the Satwas block (160 kilometres distant from Dewas town).

Every student was provided with 5 worksheets for Children's Competitions and one piece of clay for Theme Week activities. The intention was to supply every student with a textbook but this was not quite achieved, with 30,618 textbooks disseminated to 31,917 children.

The shortfall is because class V children in Cohort 2 did not receive any textbooks since they were at the very end of class V, about to transition into class VI and were only part of the intervention for a total of 4 weeks.

The target of 1,000 teachers was exceeded, with 1,203 teachers included during the eight cohorts of the intervention. Each teacher received 16 hours of training, as planned. This was divided into 8 hours of theory and 8 hours of practice.

Almost all teachers were retained until the end of the intervention, although there were some transfers and retirements. All teachers were provided with a Teacher's Manual and Teacher Training Framework.

In addition, 14 master trainers were trained during the intervention, each of whom received 12 days of training. Each master trainer was also provided with a Teacher

Training Framework, a Teacher's Manual, a Kadam Level 1 Workbook and a Kadam Level 2 Level 2. Every master trainer trained, on average, 100 teachers.

Two of the master trainers resigned during the project and two additional master trainers were given training to take their places. A third master trainer resigned just before the end of the intervention and was not replaced. This affects the overall retention rate for master trainers, bringing it to 79 per cent.

Overall, HPPI estimated that 91 per cent of schools were on track with the intervention. This means that they achieved at least 80 per cent of planned activity goals, with 195 schools reaching more than 80 per cent. The total number of intervention days planned (across all intervention recipients) was 55 days for each of the eight cohorts (a total of 440 days).

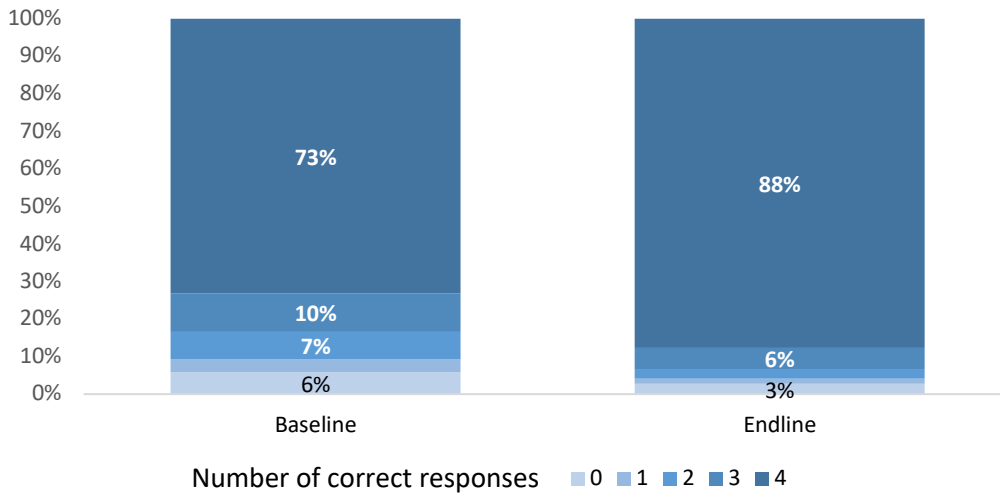
As of February 2018, 88 per cent of planned intervention days had been completed, with the prediction of 90 per cent to be completed overall. The shortfall reflects the issues faced in the Satwas block of Dewas district described above, and also that cohort 2 children in class V only participated for 4 weeks of the intervention.

#### **4.3.3 HPPI impact on children's reading skills**

This section describes in detail the results from the baseline and endline assessments of children participating in the HPPI intervention. The children were assessed in Hindi as that is the target language of the intervention.

4.3.3.1 Identifying letter shapes

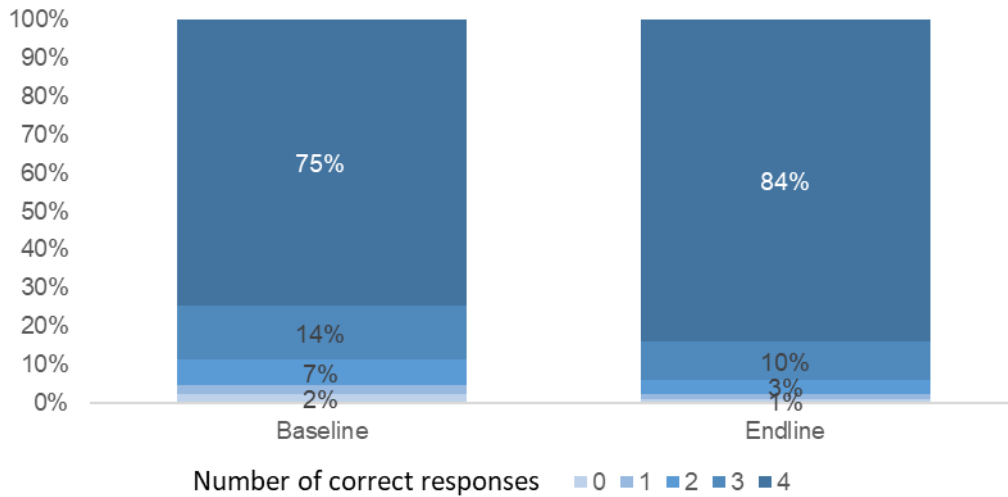
Figure 3 indicates that from baseline to endline children’s ability to identify letters improved. The proportion of children correctly identifying all letters increased from 73 to 88 per cent. The proportion of children who were not able to correctly identify any letters decreased from 6 to 3 per cent.



**Figure 3: Performance on letter shape identification task (n=240 for baseline, n=405 for endline)**

4.3.3.2 Phonemic awareness

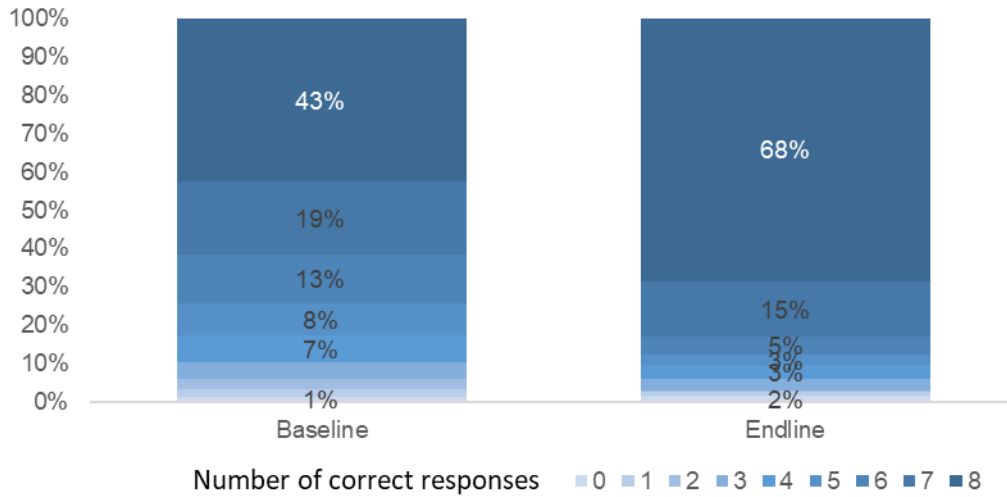
Figure 4 indicates that from baseline to endline children's ability to identify beginning sounds improved. The proportion of children correctly identifying all beginning sounds increased from 75 to 84 per cent. The proportion of children who were not able to correctly identify any letters decreased from 2 to 1 per cent.



**Figure 4: Performance on identification of beginning sound (n=240 for baseline, n=405 for endline)**

4.3.3.3 Basic Vocabulary

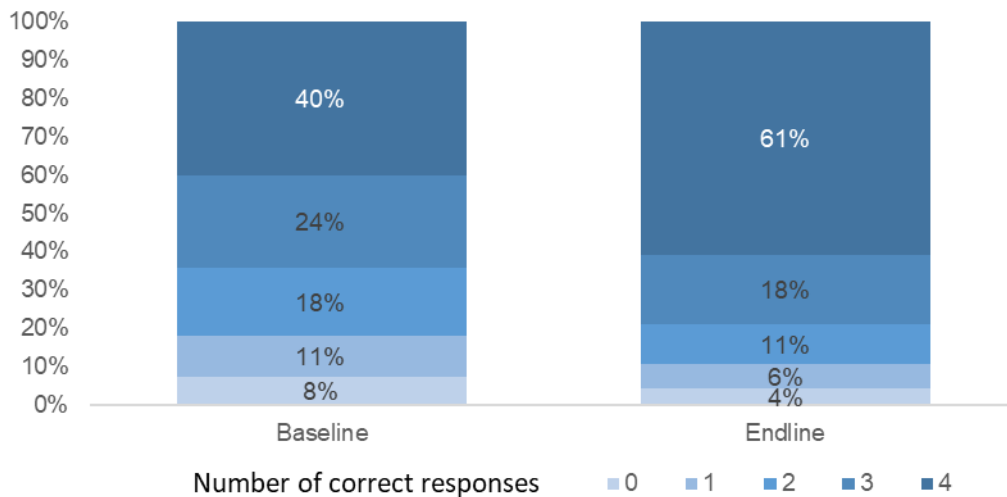
Figure 5 indicates that from baseline to endline children’s ability to identify basic vocabulary improved. The proportion of children correctly identifying all basic vocabulary increased from 75 to 84 per cent. The proportion of children who were not able to correctly identify any vocabulary decreased from 2 to 1 per cent.



**Figure 5: Performance on basic vocabulary (n=240 at baseline, n=405 at endline)**

4.3.3.4 Sentence comprehension

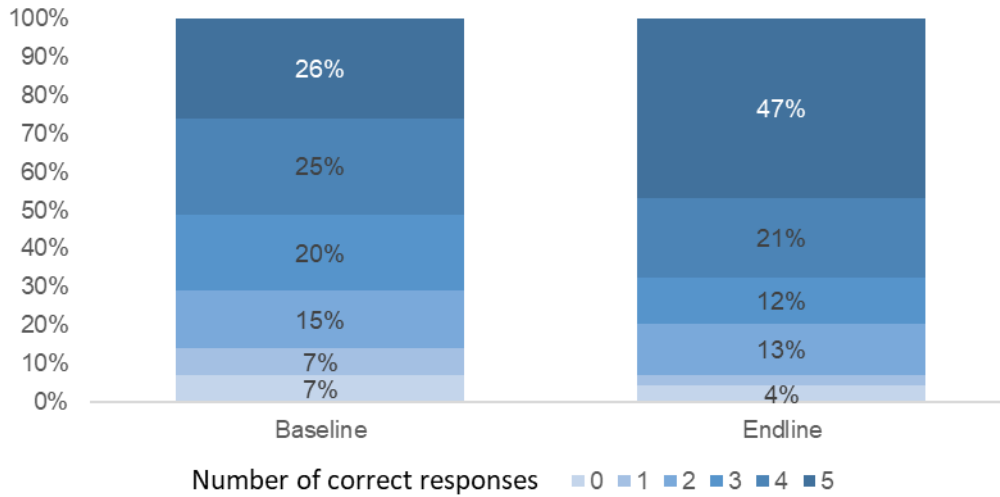
Figure 6 indicates that from baseline to endline children’s ability to comprehend sentences improved. The proportion of children able to correctly comprehend all sentences increased from 40 to 61 per cent. The proportion of children who were not able to comprehend any sentences decreased from 8 to 4 per cent.



**Figure 6: Performance of children on sentence comprehension (n=240 at baseline, n=405 at endline)**

4.3.3.5 Letter Reading

Figure 7 indicates that from baseline to endline children’s ability to read letters improved. The proportion of children correctly able to read all letters increased from 26 to 47 per cent. The proportion of children who were not able to read any letters decreased from 7 to 4 per cent.

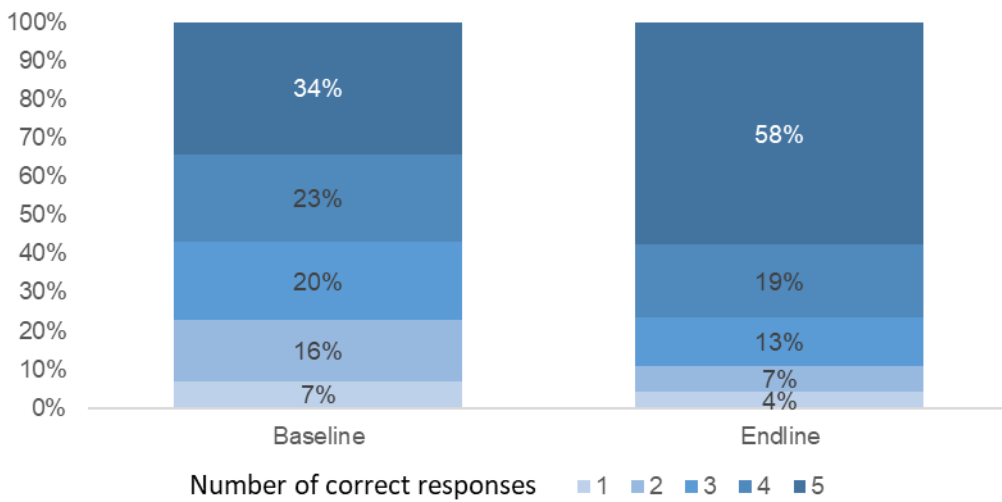


**Figure 7: Performance of children on letter reading (n=238 at baseline, n=396 at endline)**



4.3.3.6 Word Reading

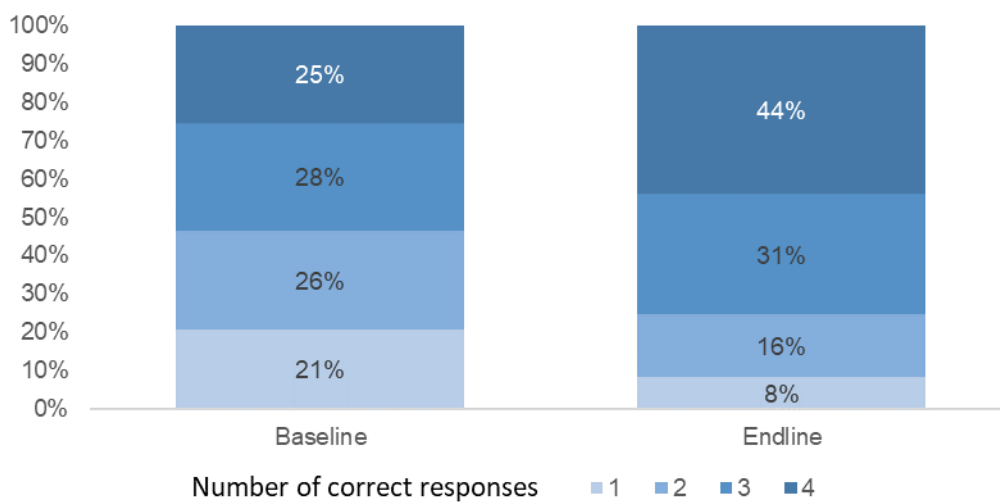
Figure 8 indicates that from baseline to endline children’s ability to read words improved. The proportion of children correctly able to read all words increased from 34 to 58 per cent. The proportion of children who were only able to read one word decreased from 7 to 4 per cent. Children who did not read a single word are not included in this figure.



**Figure 8: Performance of children on word fluency (n=238 at baseline, n=361 at endline)**

4.3.3.7 Sentence Reading

Figure 9 indicates that from baseline to endline children’s ability to read sentences improved. The proportion of children correctly able to read all sentences increased from 25 to 44 per cent. The proportion of children who were only able to read one sentence decreased from 21 to 8 per cent. Children who were unable to read any sentences are not included in the figure.



**Figure 9: Performance of children on sentence fluency (n=238 in baseline, n=321 in endline)**

4.3.3.8 Significance of baseline and endline differences

Table 4 illustrates the results of the t-test for the baseline and endline. It shows the mean score on the baseline and endline for all sub-categories (for example letter shape identification and word reading). It also shows the result of the t-test for each category, with any statistically significant findings highlighted. The figures show that the improvements in performance from baseline to endline are statistically significant for every category except phonemic awareness.

**Table 4: HPPI Intervention - Differences in baseline and endline Performance**

<b>Assessment Categories</b>	<b>Test Stage</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>SE Mean</b>	<b>t</b>	<b>df</b>	<b>Sig</b>
Letter Shape Identification	Baseline	240	3.30	1.24	0.08	-5.49	643	<b>0.00</b>
	Endline	405	3.74	0.81	0.04			
Phonemic Awareness	Baseline	240	3.67	0.77	0.05	-1.35	643	0.18
	Endline	405	3.75	0.68	0.03			
Basic Vocabulary	Baseline	240	6.42	1.94	0.13	-5.04	643	<b>0.00</b>
	Endline	405	7.16	1.71	0.09			
Sentence Comprehension	Baseline	240	2.74	1.26	0.08	-5.19	643	<b>0.00</b>
	Endline	405	3.24	1.14	0.06			
Letter Reading	Baseline	238	3.04	1.48	0.10	-6.65	632	<b>0.00</b>
	Endline	396	3.83	1.43	0.07			
Word Reading	Baseline	238	2.92	1.74	0.11	-6.57	632	<b>0.00</b>
	Endline	396	3.82	1.62	0.08			
Sentence Reading	Baseline	237	1.65	1.48	0.10	-7.12	631	<b>0.00</b>
	Endline	396	2.52	1.50	0.08			

#### 4.3.4 HPPI impact on children’s reading skills by gender

Given the emphasis on gender equality, it is worth exploring whether there were any noticeable differences between boys and girls for any of the reading elements. Overall, 53.4 per cent of children in the HPPI intervention were girls, and of these 94 per cent in cohorts 1 to 4 were retained (numbers for cohorts 5-8 are not yet available).

Table 5 shows the t-test results by gender. In terms of a gender impact, there are no significant differences found between boys and girls at either the endline or baseline. This is a good indication of gender equality.

**Table 5: HPPI Intervention - Gender Differences in Baseline and Endline**

Assessment Categories	Test Stage	Gender	N	Mean	SD	SE Mean	t	df	Sig
Letter Shape Identification	Baseline	M	350	3.36	1.22	0.07	-1.17	798	0.24
		F	450	3.46	1.07	0.05			
	Endline	M	176	3.72	0.76	0.06	-0.42	403	0.68
		F	229	3.76	0.85	0.06			
Phonemic Awareness	Baseline	M	350	3.51	0.95	0.05	-1.46	798	0.14
		F	450	3.60	0.85	0.04			
	Endline	M	176	3.70	0.76	0.06	-1.06	403	0.29
		F	229	3.78	0.62	0.04			
Basic Vocabulary	Baseline	M	350	6.33	2.05	0.11	-0.81	798	0.42
		F	450	6.45	1.92	0.09			
	Endline	M	176	7.10	1.73	0.13	-0.55	403	0.58
		F	229	7.20	1.70	0.11			
Sentence Comprehension	Baseline	M	350	2.85	1.32	0.07	1.27	798	0.20
		F	450	2.74	1.25	0.06			
	Endline	M	176	3.28	1.16	0.09	0.52	403	0.60
		F	229	3.22	1.13	0.07			
Letter Reading	Baseline	M	348	3.31	1.56	0.08	0.83	794	0.40
		F	448	3.22	1.47	0.07			
	Endline	M	172	3.84	1.48	0.11	0.14	394	0.89
		F	224	3.82	1.38	0.09			
Word Reading	Baseline	M	348	3.12	1.76	0.09	-0.07	794	0.95
		F	448	3.13	1.69	0.08			
	Endline	M	172	3.78	1.59	0.12	-0.39	394	0.70
		F	224	3.85	1.64	0.11			
Sentence Reading	Baseline	M	342	1.90	1.49	0.08	-0.21	781	0.84
		F	441	1.93	1.44	0.07			
	Endline	M	172	2.50	1.49	0.11	-0.24	394	0.81
		F	224	2.54	1.51	0.10			

#### **4.3.5 HPPI Summary**

Overall it appears that the HPPI intervention had a positive impact and was successful in improving reading skills among children.

Although many of the children undergoing the intervention under HPPI were at a basic stage in their development of reading skills, they showed strong improvement in performance from the baseline to endline, with almost all improvements statistically significant.

- About 90% of children show some basic letter identification skills.
- There was significant improvement in the basic vocabulary of children from baseline to endline.
- At the endline almost 60% of children could read all words aloud, up from just a third at the baseline.
- At the endline almost half of children could read all sentences aloud, almost double the proportion at the baseline.

The HPPI intervention was also successful in minimising gender inequalities, in supporting improvements in teaching (as evidenced by improved student performance) and in engaging local stakeholders. Aspects related to scalability are discussed in a later section.

## **4.4 Karadi Path Education Company (KPEC) Impact**

### **4.4.1 Stated objectives of the KPEC program**

### **4.4.2 Achievement of KPEC program objectives**

### **4.4.3 KPEC impact on children's reading skills**

### **4.4.4 KPEC impact on children's reading skills by gender**

### **4.4.5 KPEC Summary**

## **4.5 PlanetRead Impact**

### **4.5.1 Stated objectives of the PlanetRead program**

### **4.5.2 Achievement of PlanetRead program objectives**

### **4.5.3 PlanetRead impact on children's reading skills**

### **4.5.4 PlanetRead impact on children's reading skills by gender**

### **4.5.5 PlanetRead Summary**

## **4.6 Quality Education Support Trust (QUEST) Impact**

### **4.6.1 Stated objectives of the QUEST program**

### **4.6.2 Achievement of QUEST program objectives**

### **4.6.3 QUEST impact on children's reading skills**

#### **4.6.4 QUEST impact on children's reading skills by gender**

#### **4.6.5 QUEST Summary**

### **4.7 READ Alliance Impact**

#### **4.7.1 Summary of intervention impact**

HPPI has clearly achieved a positive impact with their interventions, with consistent patterns of improved reading skills among children. These outcomes appear to be the result of well-designed approaches which have balanced extensive support for teachers with well-targeted resources for children.

Interestingly, HPPI explicitly notes that adequate training of teachers in the use of teaching and learning materials is the most crucial element in improving reading skills among children. This seems to be borne out by the results of this evaluation, and it is pleasing to see the emphasis on professional learning for teachers in many of the interventions.

#### **4.7.2 Overall impact**

## **5 Sustainability**

### **5.1 Introduction**

As identified in an earlier section, the ability to read is a key foundational skill that provides children with a sound basis on which to build a lifetime of learning. The sheer numbers of children who are missing out on gaining foundational reading skills is immense, and this points to the need for any successful intervention to be suitable for replication and expansion.

Previous chapters have indicated that the interventions under the umbrella of READ Alliance have made a useful contribution towards addressing this situation. It is clear, however, that these interventions cannot transform the situation on their own. Instead, there is an urgent need for the potential benefit of the interventions to be spread as widely as possible.

This means not only that the interventions need to be scalable, but also that there should be sufficient access to intervention materials as well as sufficient interest from relevant authorities to make it likely that concrete steps will be taken to implement those materials and strategies more broadly.

Drawing on insights from fieldwork, there are clear findings for each of the interventions in relation to these elements.

## **5.2 Sustainability by local beneficiaries / partners**

A key component of sustainability is that each intervention would ideally be continued by the local beneficiaries or local partners once the intervention under the auspices of READ Alliance comes to an end. There are indications that this is likely to occur for interventions carried out by all partners.

### **5.2.1 Aragamee**

### **5.2.2 Human People to People Initiative (HPPI)**

The Human People to People Initiative (HPPI) intervention in Madhya Pradesh focused on teacher training through the Kadam programme. It involved building strong relationships with DIETS, and engaging very large numbers of community members and parents. The engagement of all categories of participants at such a scale is regarded by HPPI staff as a key element of the intervention's sustainability, with the scale of influence indicating widespread potential for change.

In addition, the incorporation of the Kadam programme by DIETS in the local areas, and hence the ability of HPPI to influence teacher training both in the present and the future, is a further example of the way in which local partners will be able to sustain the programme and its benefits after the intervention concludes.



### **5.2.3 Karadi Path Education Company (KPEC)**

### **5.2.4 PlanetRead**

### **5.2.5 Quality Education Support Trust (QUEST)**

## **5.3 Policy reforms at the local or national level**

## **5.4 Adoption or replication of project modules by government or other actors**

In Madhya Pradesh DIETs have adopted the Kadam programme developed by HPPI and incorporated it into their teacher training. This clearly indicates that the intervention will be replicated into the future as DIETS continue their teacher training activities.

Interviews with PlanetRead staff did not yield any information on specific plans for the intervention strategies or materials to be used by either government or other actors. Nevertheless, the staff highlighted that the approach to the intervention – providing teachers with AniBooks for use in their teaching - meant that the programme was well suited to implementation elsewhere.

## **5.5 Potential for replication and/or scalability**

A number of elements of the HPPI intervention in Madhya Pradesh also have the potential to be scaled up. First, the linking of reading interventions with teacher training programmes conducted by DIETS is clearly a model that could be used in other locations and has the potential to yield dividends. Beyond this, HPPI engaged DIETS in monitoring and capacity building of schools and again this model could be implemented more broadly.

A further characteristic of the HPPI intervention was the encouragement of schools to connect with communities and teachers to engage with parents. Both of these outreach activities had a similar role – to encourage community and family support for school attendance, and to minimise activities that might interfere with children's ability to attend school. These characteristics indicate the importance of exerting a positive influence over all those who have a bearing on reading acquisition and are a good example that could easily be replicated in other locations.

## 5.6 Sustainability Highlights

### QUEST

#### PlanetRead

#### HPPI

- Use of a cascade model of master trainers training teachers, expanding the number of beneficiaries reached
- Engagement of parents and community members to address barriers to school attendance and engagement in learning
- Incorporation of reading support programme in teacher training through DIETs

#### KPEC

## 5.7 Potential to scale

Drawing on all the elements discussed above, it is clear that all of the interventions under the READ Alliance umbrella have the potential to be scaled up, either through expansion in the locations in which they are already being implemented or through replication in other locations.

The HPPI intervention has combined a number of elements, most notably the close relationship with DIETs, enabling the Kadam programme to be incorporated into teacher training, and hence assuring its sustainability. In addition, the incorporation of outreach to parents and community members has tackled two key groups with significant influence over school attendance and engagement. Both of these key characteristics can be scaled up, either within Madhya Pradesh or more broadly.

## 6 Partnerships

## 7 Conclusion

## 7.1 Relevance

## 7.2 Impact

It is clear that, overall, progress has been made towards meeting the program outcomes of improved reading among children, with most of the children in the interventions demonstrating some improvements. The degree of improvement differs from intervention to intervention, however, with students in some interventions not showing much improvement.

Where results have been less than ideal this has largely been a function of factors beyond the control of interventions – such as low student enrolments, student absences, teacher absences, weather events and technological issues.

In many cases the intervention partners have been able to find ways to resolve the issues that these challenges have posed but this has not always been the case. Acknowledging, and working within, the constraints posed by structural weaknesses is clearly an area that is essential to address in program design.

HPPI has clearly focussed extensively on teacher training and therefore, have achieved a positive impact with their interventions, with consistent patterns of improved reading skills among children.

## 7.3 Sustainability

All of the interventions under the READ Alliance umbrella have the potential to sustain themselves and be further scaled up, either through expansion in the locations in which they are already being implemented or through replication in other locations.

One of the most important elements in being able to scale up interventions and be sustainable is the support of the government. Almost all the interventions have engaged with state governments and have developed strong relationships at various levels.

In fact, many of the interventions have already expanded by building on their relationship with governments. For instance, the HPPI intervention has a close relationship with DIETs, enabling the Kadam programme to be incorporated into teacher training at DIETs.

## **7.4 Partnerships**

## **7.5 Recommendations**

## 8 References

- ASER Center (2017) *Annual Status of Education Report 2016*. New Delhi: ASER Center.
- Benson, C. (2004) *The importance of mother tongue-based schooling for educational quality*. Retrieved on 2 June 2018 from <http://unesdoc.unesco.org/images/0014/001466/146632e.pdf>
- Centre for Civil Society (2013) Right to Education. Retrieved on 5 June 2018 from <http://righttoeducation.in/know-your-rte/about>
- Ethnologue (2017) *India*. Retrieved on 1 June 2008 from <https://www.ethnologue.com/country/IN>
- Hoffman, J., Sailors, M., Makalela, L., & Matthee, B. (2009) 'Language policy and literacy instruction: The view from South Africa to south Texas'. In J.V. Hoffman & Y.M. Goodman (Eds.) *Changing literacies for changing times: An historical perspective on the future of reading research, public policy, and classroom practices* (pp. 233–248). New York: Routledge; Newark, DE: International Reading Association.
- Kane, M. (2016) 'Gifted Learning Communities: Effective Teachers at Work'. In F. H. R. Piske, T. Stoltz, J. M. Machado, & S. Bahia (Eds) *Giftedness and Creativity: Identification and Specialized Service* (pp. 77-93). Curitiba: Juruá
- Mathot, G.B. (2001) *Improving Performance at the Primary Level. A Handbook for Teachers of Multi-Grade Classes Volume One*. Accessed 1 June 2018 from <http://unesdoc.unesco.org/images/0012/001259/125919eo.pdf>
- Ministry of Human Resource Development, Government of India (2016) Language Education. Retrieved on 1 June 2018 from <http://mhrd.gov.in/language-education>
- Roskos, K., Strickland, D. & Malik, J. (2009) *First Principles for Early Grades Reading Programs in Developing Countries*. Accessed 1 June 2018 from <https://files.eric.ed.gov/fulltext/ED524475.pdf>
- Sisodia, M. (2016) Revitalise teachers' training to improve quality of education system. Retrieved 1 June 2018 from <https://www.hindustantimes.com/editorials/revitalise-teachers-training-to-improve-quality-of-education-system/story-515jUv7gsLaTiXfIXsf46M.html>

## 9 Appendix I – Details of Field Implementation in each project

### State-wise Implementation of READ Alliance project Evaluation

Parameters	Partners									
	Aragamee		HPPI		KPEC		PlanetRead		QUEST	
	Baseline	End line	Baseline	End line	Baseline	End line	Baseline	End line	Baseline	End line
No. of schools evaluated	14	14	51	51	89	89	6	6	20	20
No. of schools monitored	6	4	13	13	25	20	6	6	6	5
Dates of evaluation	10 <sup>th</sup> to 12 <sup>th</sup> Jan 2018	26th to 30th Mar, 2018	10 <sup>th</sup> Oct – 12 <sup>th</sup> Oct, 2017	19th to 21st Apr, 2018	9 <sup>th</sup> Oct to 16 <sup>th</sup> Oct, 2017	13th to 19th Mar, 2018	11 <sup>th</sup> Oct, 2017	20th Feb & 5th March, 2018	16 <sup>th</sup> & 17 <sup>th</sup> Nov, 2017	27th to 28th Feb, and 21st to 22nd Mar, 2018
No. of test administrators trained	7	8	40	40	62	52	6	6	17	17
Date of training	9 <sup>th</sup> Jan 2018	23rd Mar, 2018	9 <sup>th</sup> Oct and 11 <sup>th</sup> Oct, 2017	17th and 19th Apr, 2018	8 <sup>th</sup> Oct, 2017	11th Mar, 2018	10 <sup>th</sup> Oct, 2017	19th Feb, 2018	15 <sup>th</sup> Nov, 2017	26th Feb, 2018

Experience/ Qualification of test administrators	NGO workers hired from targeted localities	NGO workers hired from targeted localities	B.Ed (studying)	B.Ed (studying)	MSW (studying)	MSW (studying)	M.Ed (studying)	M.Ed (studying)	MA (studying)	MA (studying)
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<p>Challenges faced during test evaluation</p>	<p>Schools were located in especially hard to reach locations. Local field operatives had to be relied upon for monitoring.</p>	<p>Schools were located in especially hard to reach locations. Local field operatives had to be relied upon for monitoring.</p>	<p>Schools are located in hard to reach areas, far from the district town and there was no room available in a few schools.</p>	<p>Schools are located in hard to reach areas, far from the district town and there was no room available in a few schools. Due to an unexpected heat wave schools were closed. This resulted in much lower number of students being available for testing.</p>	<p>Schools are located in hard to reach areas, far from the district town and there was no room available in a few schools.</p>	<p>Schools are located in hard to reach areas, far from the district town and there was no room available in a few schools.</p>	<p>Schools worked on different shifts and the evaluators had to coordinate with the schools to arrive at the appropriate times.</p>	<p>Schools worked on different shifts and the evaluators had to coordinate with the schools to arrive at the appropriate times.</p>	<p>Schools are located in hard to reach areas, far from the district town and there was no room available in a few schools.</p>	<p>Schools are located in hard to reach areas, far from the district town and there was no room available in a few schools. Additionally, some schools were closed due to alck of students due Holi holidays.</p>
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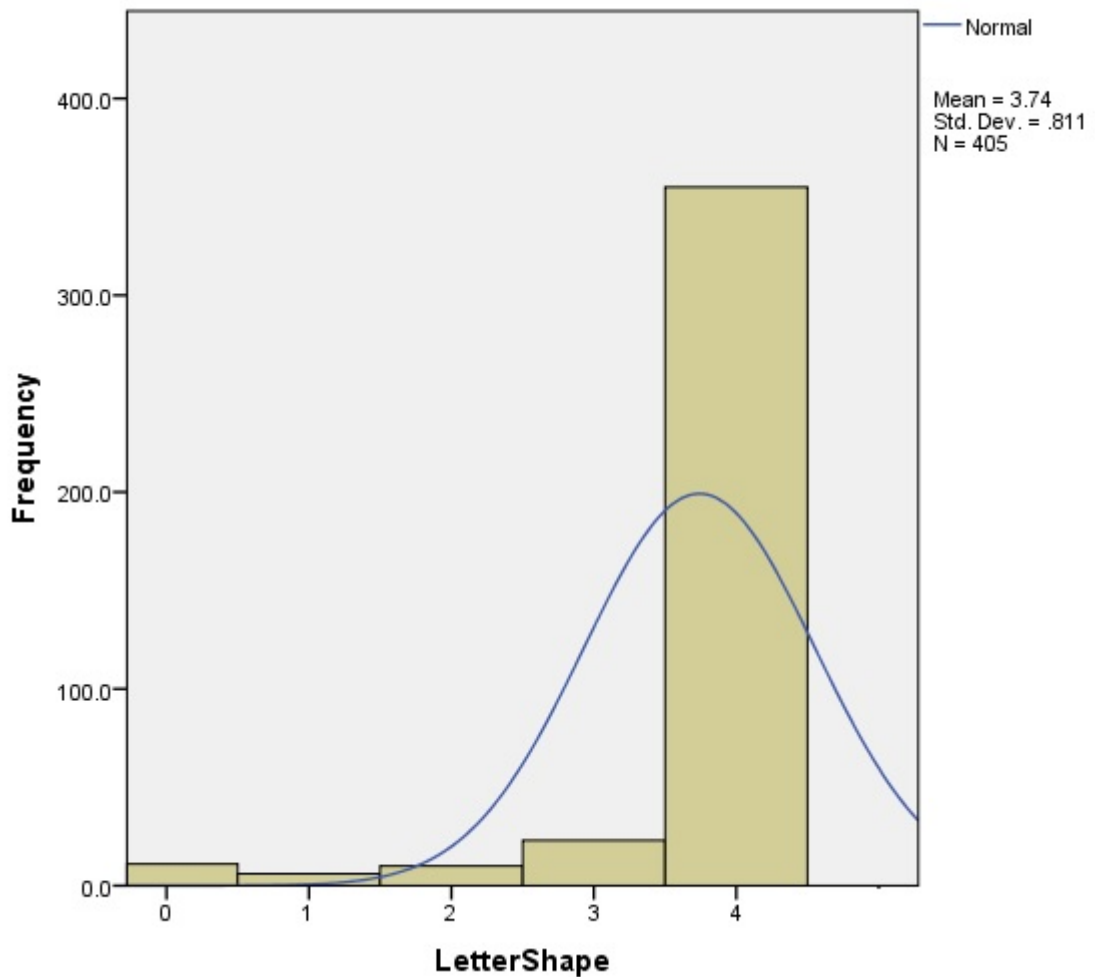


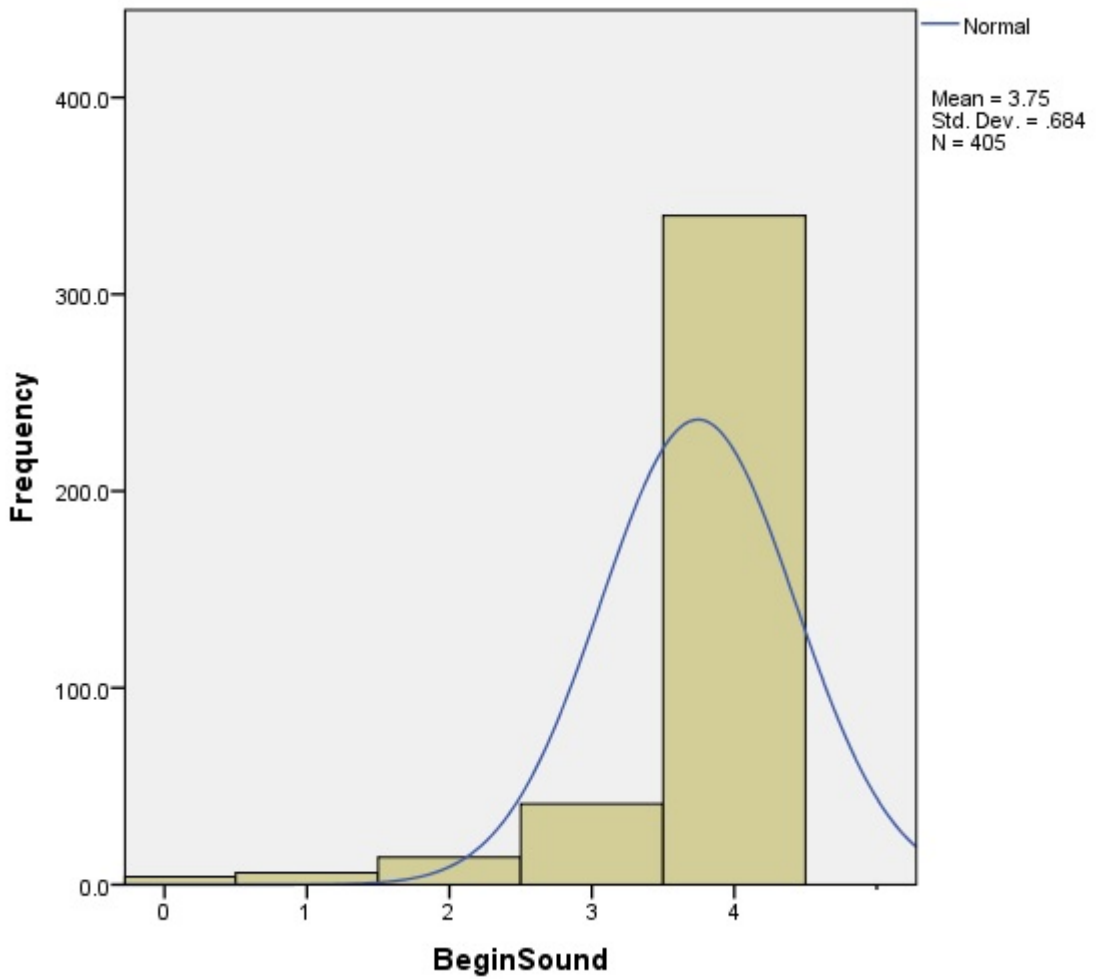
## 10 Appendix II - Additional Tables and Figures for Baseline and Endline Assessments

### HPPI (Madhya Pradesh)

#### A. Matching letters to sounds

A1. Bar-plot of total scores state wise with normal fit





A2. Mean and SD of scores by district within each state

State	DISTRICT	N_STU	Statistics	LetterShape	BeginSound
			Max Score	4	4
MP	State	405	Mean	3.74	3.75
			Standard Deviation	0.81	0.68
	Dewas	145	Mean	3.80	3.72
			Standard Deviation	0.72	0.70
Khandwa	145	Mean	3.92	3.85	

			Standard Deviation	0.36	0.60
	Ujjain	115	Mean	3.44	3.64
			Standard Deviation	1.17	0.74

A3. Mean and SD of scores by school within each state

Dist rict	SCHOOL	N_S TU	Statistics	LetterS hape	BeginS ound
			Max Score	4	4
Dewa s	GOVERNMENT PRIMARY SCHOOL AAGR	4	Mean	4.00	4.00
			Standard Deviation	0.00	0.00
Dewa s	GOVT BOYS P.S NO 2 SONKATCH	7	Mean	4.00	3.71
			Standard Deviation	0.00	0.49
Dewa s	GOVT G.P.S BAROTHA DIST DEWAS	4	Mean	4.00	4.00
			Standard Deviation	0.00	0.00
Dewa s	GOVT P.S OUD	6	Mean	4.00	3.33
			Standard Deviation	0.00	0.52
Dewa s	GOVT PS BERAGAD DEWAS(MP)	4	Mean	2.50	1.50
			Standard Deviation	1.73	1.73
Dewa s	GOVT PS BINJANA	5	Mean	4.00	3.40
			Standard Deviation	0.00	0.55
Dewa s	GOVT PS TONK KALA	15	Mean	3.93	4.00
			Standard Deviation	0.26	0.00
		10	Mean	4.00	4.00

Dewas	GOVT, P.S BANGAR DEVAS		Standard Deviation	0.00	0.00
Dewas	GOVT. P.S. JAWAHAR NAGAR	4	Mean	4.00	4.00
			Standard Deviation	0.00	0.00
Dewas	GPS BHONRASA	6	Mean	4.00	3.83
			Standard Deviation	0.00	0.41
Dewas	P.S AANT	6	Mean	4.00	3.50
			Standard Deviation	0.00	1.22
Dewas	P.S AMARPURA	15	Mean	4.00	3.93
			Standard Deviation	0.00	0.26
Dewas	P.S PANWARD DEWAS (M.P)	20	Mean	3.90	3.90
			Standard Deviation	0.31	0.31
Dewas	PS KHEDAMADHAPUR	17	Mean	3.65	3.88
			Standard Deviation	0.70	0.49
Dewas	S.K.P.VIDHYLAY SOHANKACHH	9	Mean	2.44	3.22
			Standard Deviation	1.88	0.97
Dewas	SAS PRATHMIC VIDHYLAY SAVER	11	Mean	4.00	3.64
			Standard Deviation	0.00	0.81
Dewas	UEGS MALIPURA SAWER	2	Mean	4.00	3.50
			Standard Deviation	0.00	0.71
Khandwa	G.P.S BEDIYAV	15	Mean	3.80	3.47
			Standard Deviation	0.77	1.13
Khandwa	G.P.S CHAUKI AHAMADPUR KHAIGAO	13	Mean	3.92	3.62
			Standard Deviation	0.28	1.12
	G.P.S KHEDI	12	Mean	4.00	4.00

Khan dwa			Standard Deviation	0.00	0.00
Khan dwa	GOVT P.SCHOOL BAGANVA	6	Mean	3.83	4.00
			Standard Deviation	0.41	0.00
Khan dwa	GOVT PRIMARY SCHOOL CAMPANAGAR	15	Mean	3.93	3.80
			Standard Deviation	0.26	0.41
Khan dwa	GOVT PRIMARY SCHOOL DONDWADA	4	Mean	4.00	4.00
			Standard Deviation	0.00	0.00
Khan dwa	GOVT PRIMARY SCHOOL RAIKUTWAWL	9	Mean	4.00	4.00
			Standard Deviation	0.00	0.00
Khan dwa	GOVT PRIMATY SCHOOL AHAMADPUR	5	Mean	4.00	4.00
			Standard Deviation	0.00	0.00
Khan dwa	GOVT.PRAMARI SCHOOL RUDHEE	8	Mean	3.88	3.50
			Standard Deviation	0.35	1.07
Khan dwa	GOVT.PRIMARY SCHOOL TEMIKALA	8	Mean	4.00	4.00
			Standard Deviation	0.00	0.00
Khan dwa	GPS SALYA KHEDA	7	Mean	4.00	4.00
			Standard Deviation	0.00	0.00
Khan dwa	P.S AMALPURA	9	Mean	4.00	3.78
			Standard Deviation	0.00	0.67
Khan dwa	P.S. GITIT KHADAN	4	Mean	4.00	4.00
			Standard Deviation	0.00	0.00
Khan dwa	P/S JOGI BEDA	12	Mean	3.67	4.00
			Standard Deviation	0.65	0.00
		7	Mean	3.86	4.00

Khandwa	P/S MALGAWE PRATHMIK SHALA MAL		Standard Deviation	0.38	0.00
Khandwa	P/S RAJUR	5	Mean	4.00	4.00
			Standard Deviation	0.00	0.00
Khandwa	PRIMARY SHALA SONGIR	6	Mean	4.00	4.00
			Standard Deviation	0.00	0.00
Ujjain	BPS KARTIK CHAUK	8	Mean	2.00	3.00
			Standard Deviation	2.14	0.93
Ujjain	DHANMANDI PRIMARY SCHOOL	2	Mean	4.00	3.50
			Standard Deviation	0.00	0.71
Ujjain	G.P.S DATANA	10	Mean	4.00	3.90
			Standard Deviation	0.00	0.32
Ujjain	GOVT GPS BILATIPURA	2	Mean	4.00	4.00
			Standard Deviation	0.00	0.00
Ujjain	GOVT P.S KOLUKHEDI	3	Mean	2.33	3.33
			Standard Deviation	1.53	1.15
Ujjain	GOVT P.S. SANSKRIT UJN (M.P)	1	Mean	4.00	4.00
			Standard Deviation	—	—
Ujjain	GOVT PS HEERA MIL KEE CHAL	6	Mean	4.00	3.83
			Standard Deviation	0.00	0.41
Ujjain	GOVT PS MATANA KALA	15	Mean	2.87	4.00
			Standard Deviation	1.64	0.00
Ujjain	GOVT. BOYES P.S. NARVAR	5	Mean	4.00	4.00
			Standard Deviation	0.00	0.00
	GPS DEWAS GATE NO-2	10	Mean	4.00	3.60

Ujjain			Standard Deviation	0.00	0.70
Ujjain	GPS NARWAR	3	Mean	4.00	4.00
			Standard Deviation	0.00	0.00
Ujjain	P.S BHARAVAGADH	11	Mean	3.73	4.00
			Standard Deviation	0.65	0.00
Ujjain	P.S HARSIDDHI GORD BASTI	5	Mean	3.60	3.40
			Standard Deviation	0.55	0.89
Ujjain	P.S NAYAPURA UJJAIN	5	Mean	1.40	1.40
			Standard Deviation	0.89	0.55
Ujjain	P.S PINGHLASHAWAR	9	Mean	3.78	3.89
			Standard Deviation	0.67	0.33
Ujjain	PS DHANCH BHAVAN UJJAIN	8	Mean	3.75	4.00
			Standard Deviation	0.71	0.00
Ujjain	RAJKEYA PR. VIDHYLAY BHERUNALA	12	Mean	3.67	3.42
			Standard Deviation	0.65	0.67

A4. Distribution of scores by quintiles for each district within each state

1. State

State			LetterShape	BeginSound
MP	N	Valid	405	405
		Missing	0	0
	Mean		3.74	3.75
	Median		4	4
	Mode		4	4

	Std. Deviation		0.81	0.68
Percentiles		20	4	4
		40	4	4
		60	4	4
		80	4	4

2. District

DISTRICT		LetterShape	BeginSound	
Dewas	N	Valid	145	145
		Missing	0	0
	Mean		3.80	3.72
	Median		4	4
	Mode		4	4
	Std. Deviation		0.72	0.70
	Percentiles	20	4	4
		40	4	4
		60	4	4
		80	4	4
Khandwa	N	Valid	145	145
		Missing	0	0
	Mean		3.92	3.85
	Median		4	4
	Mode		4	4
	Std. Deviation		0.36	0.60
	Percentiles	20	4	4
		40	4	4
		60	4	4
		80	4	4
Ujjain	N	Valid	115	115
		Missing	0	0
	Mean		3.44	3.64
	Median		4	4



Mode		4	4
Std. Deviation		1.17	0.74
Percentiles	20	3	3
	40	4	4
	60	4	4
	80	4	4

A5. Distribution of Total score except those who scored zero by state and district

1. State

		LetterShape		BeginSound	
State	Score	Frequency	Percent	Frequency	Percent
MP	1	6	1.5	6	1.5
	2	10	2.5	14	3.5
	3	23	5.8	41	10.2
	4	355	90.1	340	84.8
	Total	394	100.0	401	100.0

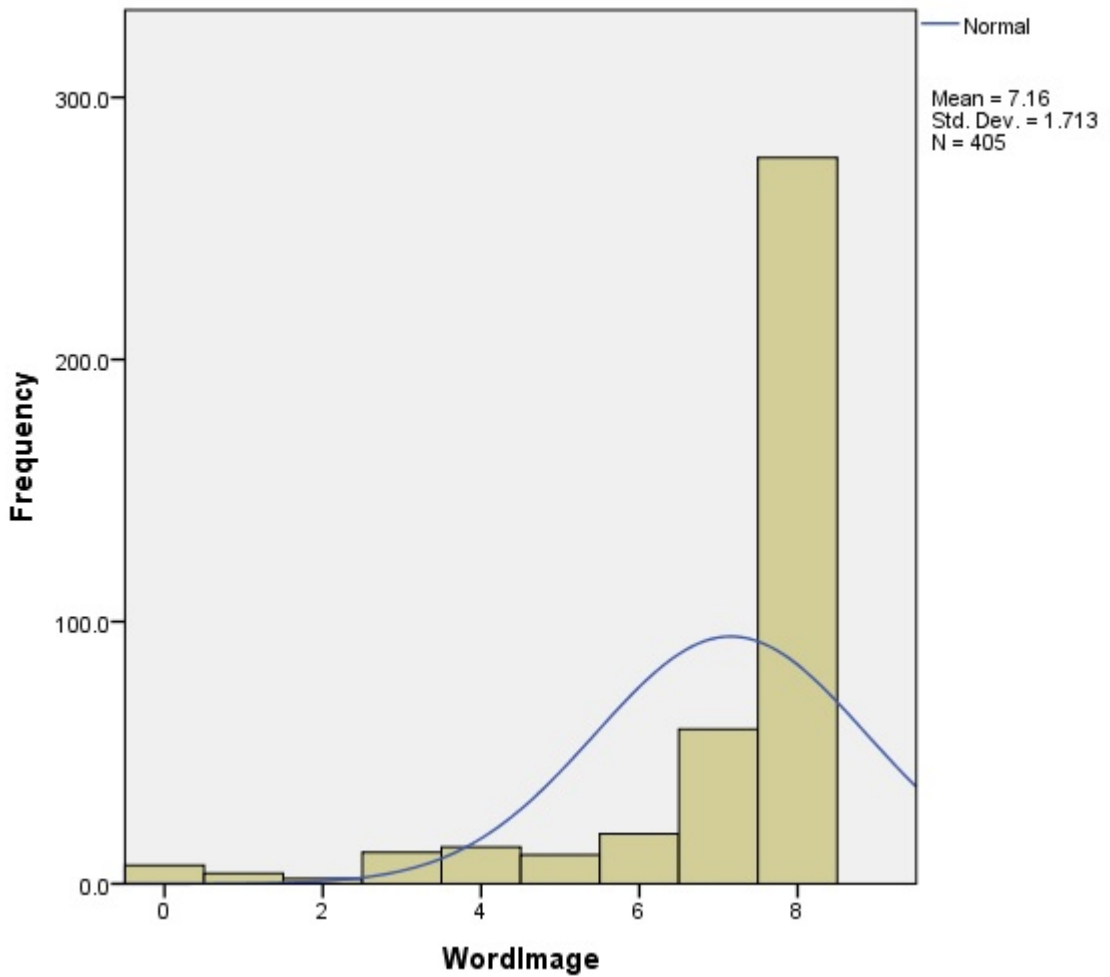
2. District

		LetterShape		BeginSound	
DIST		Frequency	Percent	Frequency	Percent
Dewas	1	0	0.0	1	0.7
	2	2	1.4	6	4.2
	3	9	6.4	17	11.9
	4	130	92.2	119	83.2
	Total	141	100.0	143	100.0
Khandwa	1	1	0.7	1	0.7
	2	1	0.7	2	1.4
	3	7	4.8	7	4.9
	4	136	93.8	133	93.0

	Total	145	100.0	143	100.0
Ujjain	1	5	4.6	4	3.5
	2	7	6.5	6	5.2
	3	7	6.5	17	14.8
	4	89	82.4	88	76.5
	Total	108	100.0	115	100.0

**B. Matching Words to pictures**

B1. Bar-plot of total scores state wise with normal fit



B2. Mean and SD of scores by district within each state

State	DISTRICT	N_STU	Statistics	WordImage
			Max Score	8
MP	State	405	Mean	7.16
			Standard Deviation	1.71
	Dewas	145	Mean	7.24
			Standard Deviation	1.73

	Khandwa	145	Mean	7.39
			Standard Deviation	1.44
	Ujjain	115	Mean	6.75
			Standard Deviation	1.94

B3. Mean and SD of scores by school within each state

District	SCHOOL	N_ST U	Statistics	WordImage
			Max Score	8
Dewas	GOVERNMENT PRIMARY SCHOOL AAGR	4	Mean	6.25
			Standard Deviation	2.87
Dewas	GOVT BOYS P.S NO 2 SONKATCH	7	Mean	7.00
			Standard Deviation	1.41
Dewas	GOVT G.P.S BAROTHA DIST DEWAS	4	Mean	7.75
			Standard Deviation	0.50
Dewas	GOVT P.S OUD	6	Mean	6.67
			Standard Deviation	1.86
Dewas	GOVT PS BERAGAD DEWAS(MP)	4	Mean	2.50
			Standard Deviation	3.32
Dewas	GOVT PS BINJANA	5	Mean	8.00
			Standard Deviation	0.00
Dewas	GOVT PS TONK KALA	15	Mean	7.93
			Standard Deviation	0.26
Dewas	GOVT, P.S BANGAR DEVAS	10	Mean	7.70

			Standard Deviation	0.67
Dewas	GOVT. P.S. JAWAHAR NAGAR	4	Mean	8.00
			Standard Deviation	0.00
Dewas	GPS BHONRASA	6	Mean	7.83
			Standard Deviation	0.41
Dewas	P.S AANT	6	Mean	7.17
			Standard Deviation	2.04
Dewas	P.S AMARPURA	15	Mean	7.87
			Standard Deviation	0.35
Dewas	P.S PANWARD DEWAS (M.P)	20	Mean	6.85
			Standard Deviation	1.50
Dewas	PS KHEDAMADHAPUR	17	Mean	7.94
			Standard Deviation	0.24
Dewas	S.K.P.VIDHYLAY SOHANKACHH	9	Mean	5.78
			Standard Deviation	3.27
Dewas	SAS PRATHMIC VIDHYLAY SAVER	11	Mean	7.18
			Standard Deviation	1.83
Dewas	UEGS MALIPURA SAWER	2	Mean	8.00
			Standard Deviation	0.00
Khandwa	G.P.S BEDIYAV	15	Mean	5.87
			Standard Deviation	2.00
Khandwa	G.P.S CHAUKI AHAMADPUR KHAIGAO	13	Mean	6.69
			Standard Deviation	2.98
Khandwa	G.P.S KHEDI	12	Mean	8.00

			Standard Deviation	0.00
Khandwa	GOVT P.SCHOOL BAGANVA	6	Mean	8.00
			Standard Deviation	0.00
Khandwa	GOVT PRIMARY SCHOOL CAMPANAGAR	15	Mean	7.53
			Standard Deviation	1.13
Khandwa	GOVT PRIMARY SCHOOL DONDWADA	4	Mean	7.75
			Standard Deviation	0.50
Khandwa	GOVT PRIMARY SCHOOL RAIKUTWAWL	9	Mean	7.89
			Standard Deviation	0.33
Khandwa	GOVT PRIMATY SCHOOL AHAMADPUR	5	Mean	7.60
			Standard Deviation	0.55
Khandwa	GOVT.PRAMARI SCHOOL RUDHEE	8	Mean	6.25
			Standard Deviation	1.91
Khandwa	GOVT.PRIMARY SCHOOL TEMIKALA	8	Mean	8.00
			Standard Deviation	0.00
Khandwa	GPS SALYA KHEDA	7	Mean	7.86
			Standard Deviation	0.38
Khandwa	P.S AMALPURA	9	Mean	7.78
			Standard Deviation	0.44
Khandwa	P.S. GITIT KHADAN	4	Mean	8.00
			Standard Deviation	0.00
Khandwa	P/S JOGI BEDA	12	Mean	7.58
			Standard Deviation	1.00
Khandwa		7	Mean	7.71

	P/S MALGAWE PRATHMIK SHALA MAL		Standard Deviation	0.49
Khandwa	P/S RAJUR	5	Mean	7.60
			Standard Deviation	0.55
Khandwa	PRIMARY SHALA SONGIR	6	Mean	7.67
			Standard Deviation	0.52
Ujjain	BPS KARTIK CHAUK	8	Mean	3.75
			Standard Deviation	2.71
Ujjain	DHANMANDI PRIMARY SCHOOL	2	Mean	7.50
			Standard Deviation	0.71
Ujjain	G.P.S DATANA	10	Mean	7.40
			Standard Deviation	1.58
Ujjain	GOVT GPS BILATIPURA	2	Mean	8.00
			Standard Deviation	0.00
Ujjain	GOVT P.S KOLUKHEDI	3	Mean	6.33
			Standard Deviation	1.53
Ujjain	GOVT P.S. SANSKRIT UJN (M.P)	1	Mean	8.00
			Standard Deviation	—
Ujjain	GOVT PS HEERA MIL KEE CHAL	6	Mean	6.00
			Standard Deviation	3.16
Ujjain	GOVT PS MATANA KALA	15	Mean	7.87
			Standard Deviation	0.52
Ujjain	GOVT.BOYES P.S. NARVAR	5	Mean	7.80
			Standard Deviation	0.45
Ujjain	GPS DEWAS GATE NO-2	10	Mean	7.10

			Standard Deviation	1.60
Ujjain	GPS NARWAR	3	Mean	6.67
			Standard Deviation	1.53
Ujjain	P.S BHARAVAGADH	11	Mean	7.18
			Standard Deviation	1.08
Ujjain	P.S HARSIDDHI GORD BASTI	5	Mean	7.00
			Standard Deviation	1.22
Ujjain	P.S NAYAPURA UJJAIN	5	Mean	2.80
			Standard Deviation	1.30
Ujjain	P.S PINGHLASHAWAR	9	Mean	7.44
			Standard Deviation	0.73
Ujjain	PS DHANCH BHAVAN UJJAIN	8	Mean	7.38
			Standard Deviation	1.06
Ujjain	RAJKEYA PR. VIDHYLAY BHERUNALA	12	Mean	6.33
			Standard Deviation	1.67

B4. Distribution of scores by quintiles for each district within each state

1. State

State			WordImage
MP	N	Valid	405
		Missing	0
	Mean		7.16
	Median		8
	Mode		8



	Std. Deviation		1.71
Percentiles		20	7
		40	8
		60	8
		80	8

2. District

DISTRICT			WordImage
Dewas	N	Valid	145
		Missing	0
	Mean		7.24
	Median		8
	Mode		8
	Std. Deviation		1.73
	Percentiles	20	7
		40	8
		60	8
		80	8
Khandwa	N	Valid	145
		Missing	0
	Mean		7.39
	Median		8
	Mode		8
	Std. Deviation		1.44
	Percentiles	20	7
		40	8
		60	8
		80	8
Ujjain	N	Valid	115
		Missing	0
	Mean		6.75
	Median		8

Mode		8
Std. Deviation		1.94
Percentiles	20	5
	40	7
	60	8
	80	8

B5. Distribution of Total score except those who scored zero by state

1. State

		<b>WordImage</b>	
State	Score	Frequency	Percent
MP	1	4	1.0
	2	2	0.5
	3	12	3.0
	4	14	3.5
	5	11	2.8
	6	19	4.8
	7	59	14.8
	8	277	69.6
	Total	398	100.0

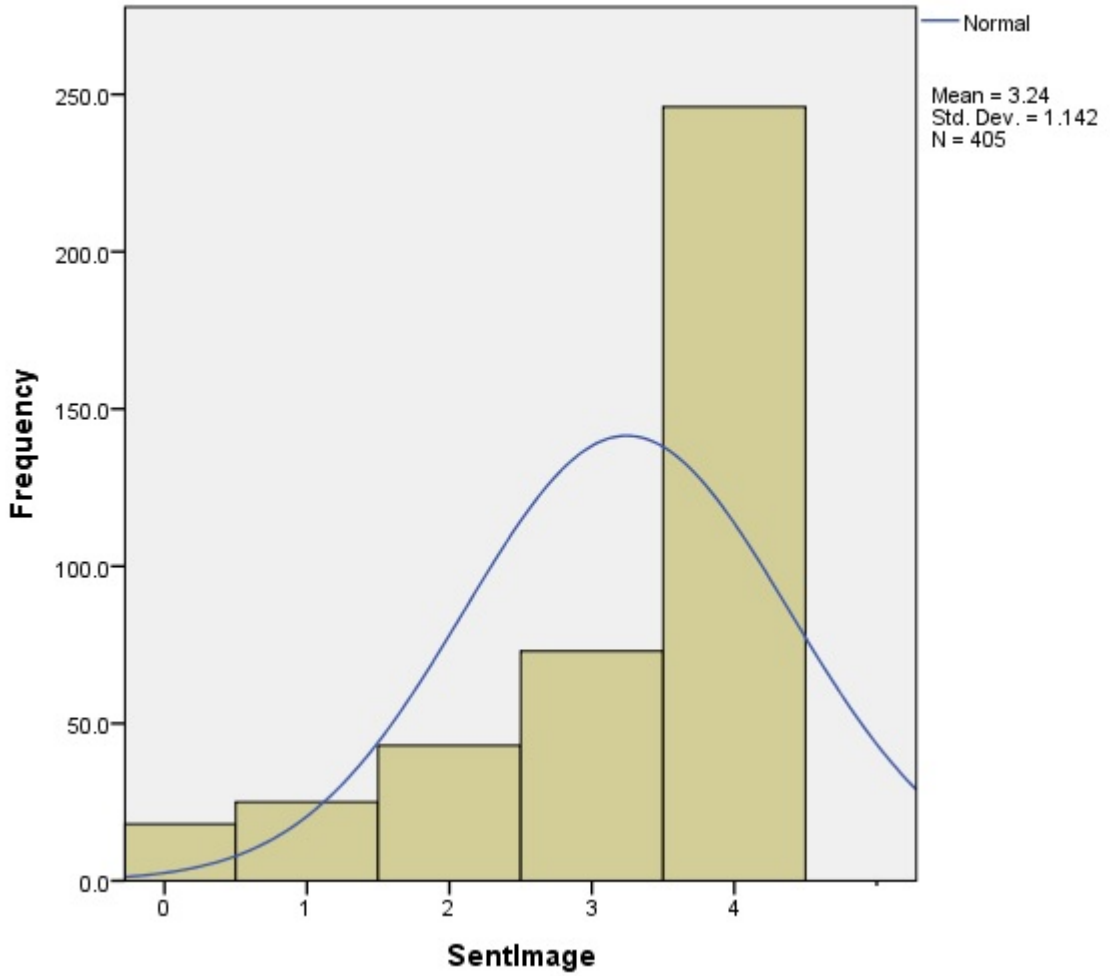
2. District

		<b>WordImage</b>	
DIST		Frequency	Percent
Dewas	1	1	0.7
	2	1	0.7
	3	5	3.5
	4	4	2.8

	5	1	0.7
	6	5	3.5
	7	19	13.4
	8	106	74.6
	Total	142	100.0
Khandwa	1	0	0.0
	2	0	0.0
	3	1	0.7
	4	3	2.1
	5	4	2.8
	6	7	4.9
	7	21	14.8
	8	106	74.6
	Total	142	100.0
Ujjain	1	3	2.6
	2	1	0.9
	3	6	5.3
	4	7	6.1
	5	6	5.3
	6	7	6.1
	7	19	16.7
	8	65	57.0
	Total	114	100.0

**C. Understanding Simple sentences**

C1. Bar-plot of total scores state wise with normal fit



C2. Mean and SD of scores by district within each state

State	DISTRICT	N_STU	Statistics	SentImage
			Max Score	4
MP	State	405	Mean	3.24

			Standard Deviation	1.14
	Dewas	145	Mean	3.23
			Standard Deviation	1.18
	Khandwa	145	Mean	3.51
			Standard Deviation	0.89
	Ujjain	115	Mean	2.92
			Standard Deviation	1.29

C3. Mean and SD of scores by school within each state

1. MP

District	SCHOOL	N_STU	Statistics	SentImage
			Max Score	4
Dewas	GOVERNMENT PRIMARY SCHOOL AAGR	4	Mean	2.00
			Standard Deviation	1.15
Dewas	GOVT BOYS P.S NO 2 SONKATCH	7	Mean	3.14
			Standard Deviation	1.46
Dewas	GOVT G.P.S BAROTHA DIST DEWAS	4	Mean	3.50
			Standard Deviation	0.58
Dewas	GOVT P.S OUD	6	Mean	3.00
			Standard Deviation	0.63
Dewas	GOVT PS BERAGAD DEWAS(MP)	4	Mean	1.00
			Standard Deviation	2.00
Dewas	GOVT PS BINJANA	5	Mean	3.80

			Standard Deviation	0.45
Dewas	GOVT PS TONK KALA	15	Mean	3.60
			Standard Deviation	0.83
Dewas	GOVT, P.S BANGAR DEVAS	10	Mean	3.80
			Standard Deviation	0.63
Dewas	GOVT. P.S. JAWAHAR NAGAR	4	Mean	3.75
			Standard Deviation	0.50
Dewas	GPS BHONRASA	6	Mean	3.33
			Standard Deviation	1.03
Dewas	P.S AANT	6	Mean	2.83
			Standard Deviation	1.47
Dewas	P.S AMARPURA	15	Mean	3.93
			Standard Deviation	0.26
Dewas	P.S PANWARD DEWAS (M.P)	20	Mean	2.40
			Standard Deviation	0.99
Dewas	PS KHEDAMADHAPUR	17	Mean	4.00
			Standard Deviation	0.00
Dewas	S.K.P.VIDHYLAY SOHANKACHH	9	Mean	1.56
			Standard Deviation	1.51
Dewas	SAS PRATHMIC VIDHYLAY SAVER	11	Mean	4.00
			Standard Deviation	0.00
Dewas	UEGS MALIPURA SAWER	2	Mean	3.50
			Standard Deviation	0.71
Khandwa	G.P.S BEDIYAV	15	Mean	2.67

			Standard Deviation	1.18
Khandwa	G.P.S CHAUKI AHAMADPUR KHAIGAO	13	Mean	3.38
			Standard Deviation	1.50
Khandwa	G.P.S KHEDI	12	Mean	4.00
			Standard Deviation	0.00
Khandwa	GOVT P.SCHOOL BAGANVA	6	Mean	3.33
			Standard Deviation	0.82
Khandwa	GOVT PRIMARY SCHOOL CAMPANAGAR	15	Mean	3.80
			Standard Deviation	0.41
Khandwa	GOVT PRIMARY SCHOOL DONDWADA	4	Mean	3.50
			Standard Deviation	0.58
Khandwa	GOVT PRIMARY SCHOOL RAIKUTWAWL	9	Mean	3.78
			Standard Deviation	0.44
Khandwa	GOVT PRIMATY SCHOOL AHAMADPUR	5	Mean	3.20
			Standard Deviation	1.30
Khandwa	GOVT.PRAMARI SCHOOL RUDHEE	8	Mean	2.75
			Standard Deviation	1.28
Khandwa	GOVT.PRIMARY SCHOOL TEMIKALA	8	Mean	3.38
			Standard Deviation	0.74
Khandwa	GPS SALYA KHEDA	7	Mean	2.86
			Standard Deviation	0.38
Khandwa	P.S AMALPURA	9	Mean	3.89
			Standard Deviation	0.33
Khandwa	P.S. GITIT KHADAN	4	Mean	3.75

			Standard Deviation	0.50
Khandwa	P/S JOGI BEDA	12	Mean	3.75
			Standard Deviation	0.62
Khandwa	P/S MALGAWE PRATHMIK SHALA MAL	7	Mean	4.00
			Standard Deviation	0.00
Khandwa	P/S RAJUR	5	Mean	4.00
			Standard Deviation	0.00
Khandwa	PRIMARY SHALA SONGIR	6	Mean	4.00
			Standard Deviation	0.00
Ujjain	BPS KARTIK CHAUK	8	Mean	0.75
			Standard Deviation	0.89
Ujjain	DHANMANDI PRIMARY SCHOOL	2	Mean	3.00
			Standard Deviation	1.41
Ujjain	G.P.S DATANA	10	Mean	3.40
			Standard Deviation	0.84
Ujjain	GOVT GPS BILATIPURA	2	Mean	4.00
			Standard Deviation	0.00
Ujjain	GOVT P.S KOLUKHEDI	3	Mean	3.00
			Standard Deviation	1.00
Ujjain	GOVT P.S. SANSKRIT UJN (M.P)	1	Mean	4.00
			Standard Deviation	—
Ujjain	GOVT PS HEERA MIL KEE CHAL	6	Mean	2.67
			Standard Deviation	2.07
Ujjain	GOVT PS MATANA KALA	15	Mean	3.53



			Standard Deviation	0.52
Ujjain	GOVT.BOYES P.S. NARVAR	5	Mean	3.60
			Standard Deviation	0.55
Ujjain	GPS DEWAS GATE NO-2	10	Mean	3.10
			Standard Deviation	1.10
Ujjain	GPS NARWAR	3	Mean	2.33
			Standard Deviation	1.53
Ujjain	P.S BHARAVAGADH	11	Mean	3.27
			Standard Deviation	1.10
Ujjain	P.S HARSIDDHI GORD BASTI	5	Mean	3.00
			Standard Deviation	1.41
Ujjain	P.S NAYAPURA UJJAIN	5	Mean	0.80
			Standard Deviation	0.45
Ujjain	P.S PINGHLASHAWAR	9	Mean	2.78
			Standard Deviation	0.67
Ujjain	PS DHANCH BHAVAN UJJAIN	8	Mean	3.50
			Standard Deviation	1.07
Ujjain	RAJKEYA PR. VIDHYLAY BHERUNALA	12	Mean	3.00
			Standard Deviation	1.35

C4. Distribution of scores by quintiles for each district within each state

1. State

<b>State</b>			<b>SentImage</b>	
<b>MP</b>	N	Valid	405	
		Missing	0	
	Mean		3.24	
	Median		4	
	Mode		4	
	Std. Deviation		1.14	
	Percentiles	20		2
		40		4
		60		4
		80		4

2. District

<b>DISTRICT</b>			<b>SentImage</b>	
Dewas	N	Valid	145	
		Missing	0	
	Mean		3.23	
	Median		4	
	Mode		4	
	Std. Deviation		1.18	
	Percentiles	20		2
		40		4
		60		4
		80		4
Khandwa	N	Valid	145	
		Missing	0	
	Mean		3.51	
	Median		4	

	Mode		4
	Std. Deviation		0.89
	Percentiles	20	3
		40	4
		60	4
		80	4
Ujjain	N	Valid	115
		Missing	0
	Mean		2.92
	Median		3
	Mode		4
	Std. Deviation		1.29
	Percentiles	20	2
		40	3
60		4	
80		4	

C5. Distribution of Total score except those who scored zero by state

1. State

		<b>SentImage</b>	
State	Score	Frequency	Percent
MP	1	25	6.5
	2	43	11.1
	3	73	18.9
	4	246	63.6
	Total	387	100.0

2. District

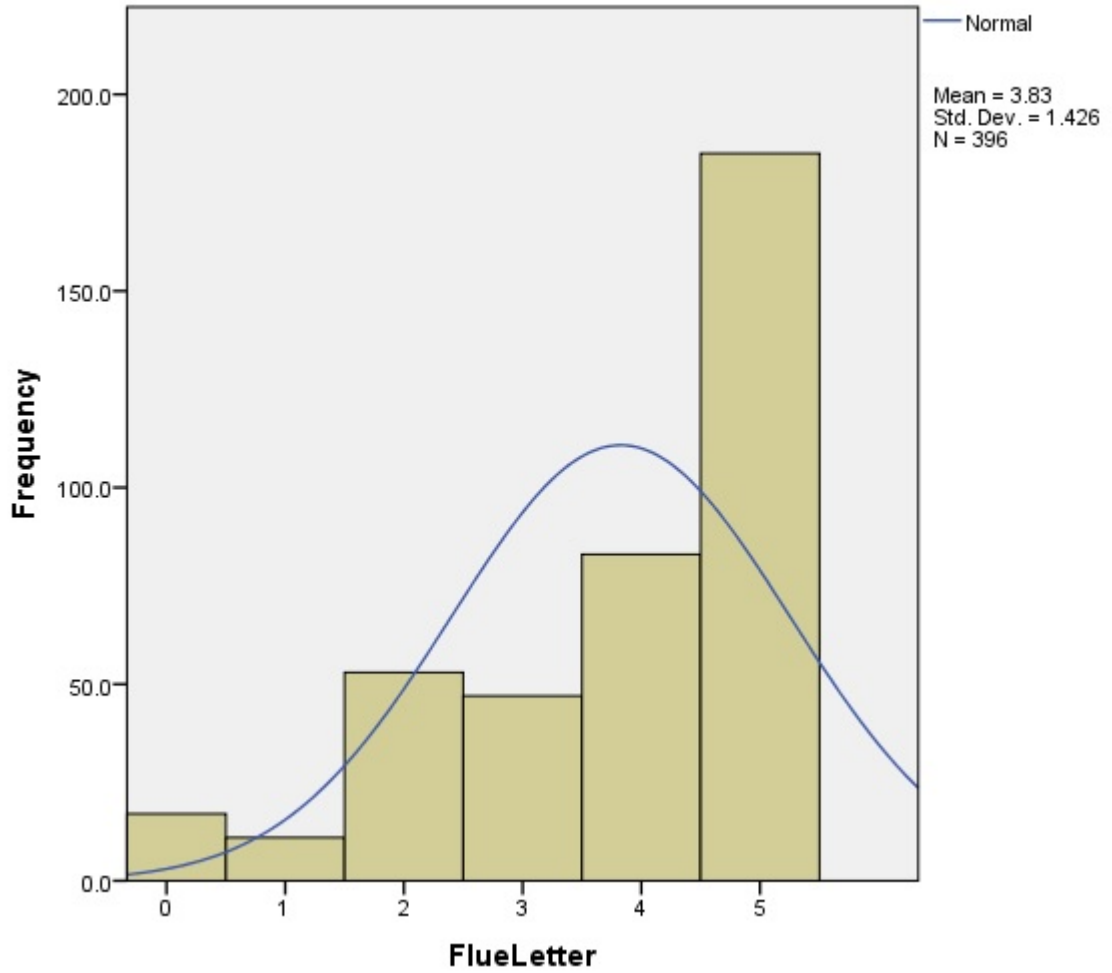
		<b>SentImage</b>	
DIST		Frequency	Percent
Dewas	1	7	5.1

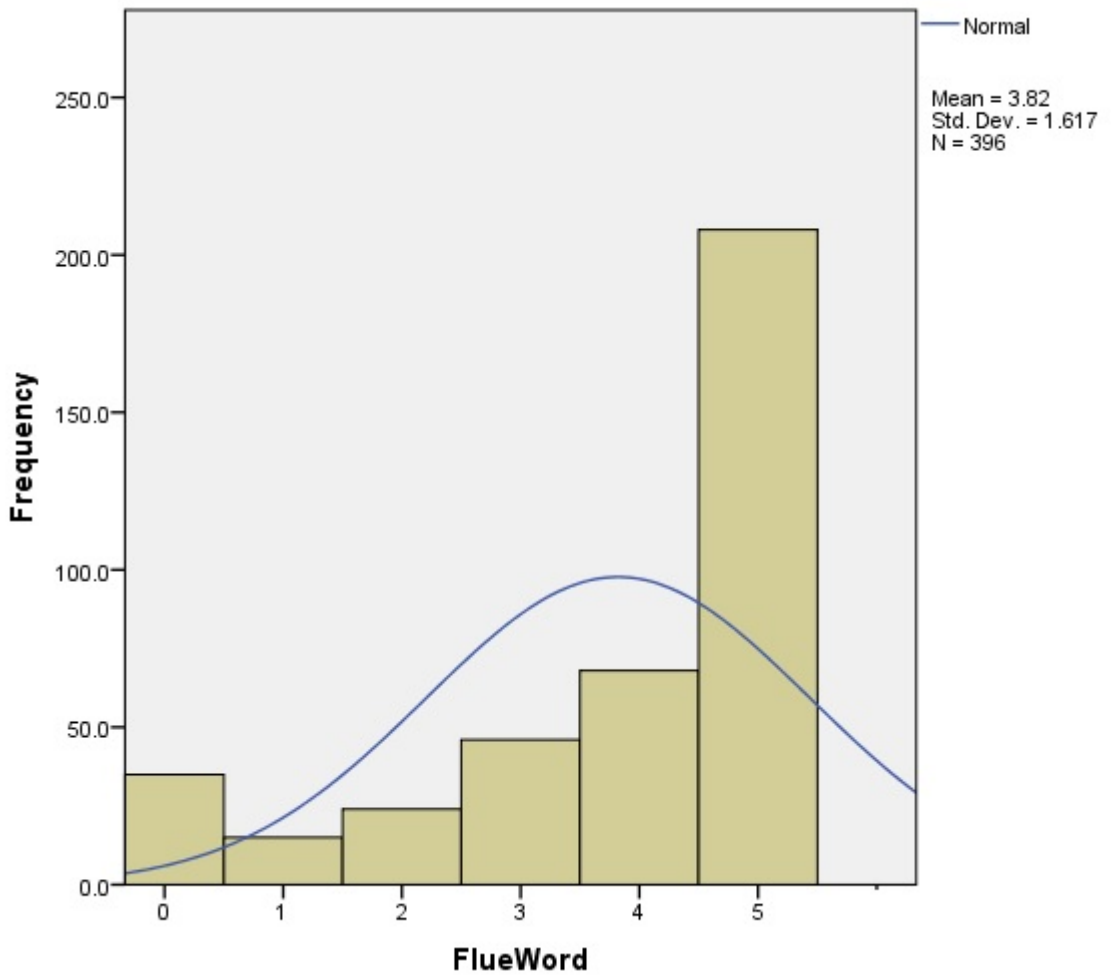
READ Alliance - Interim Report

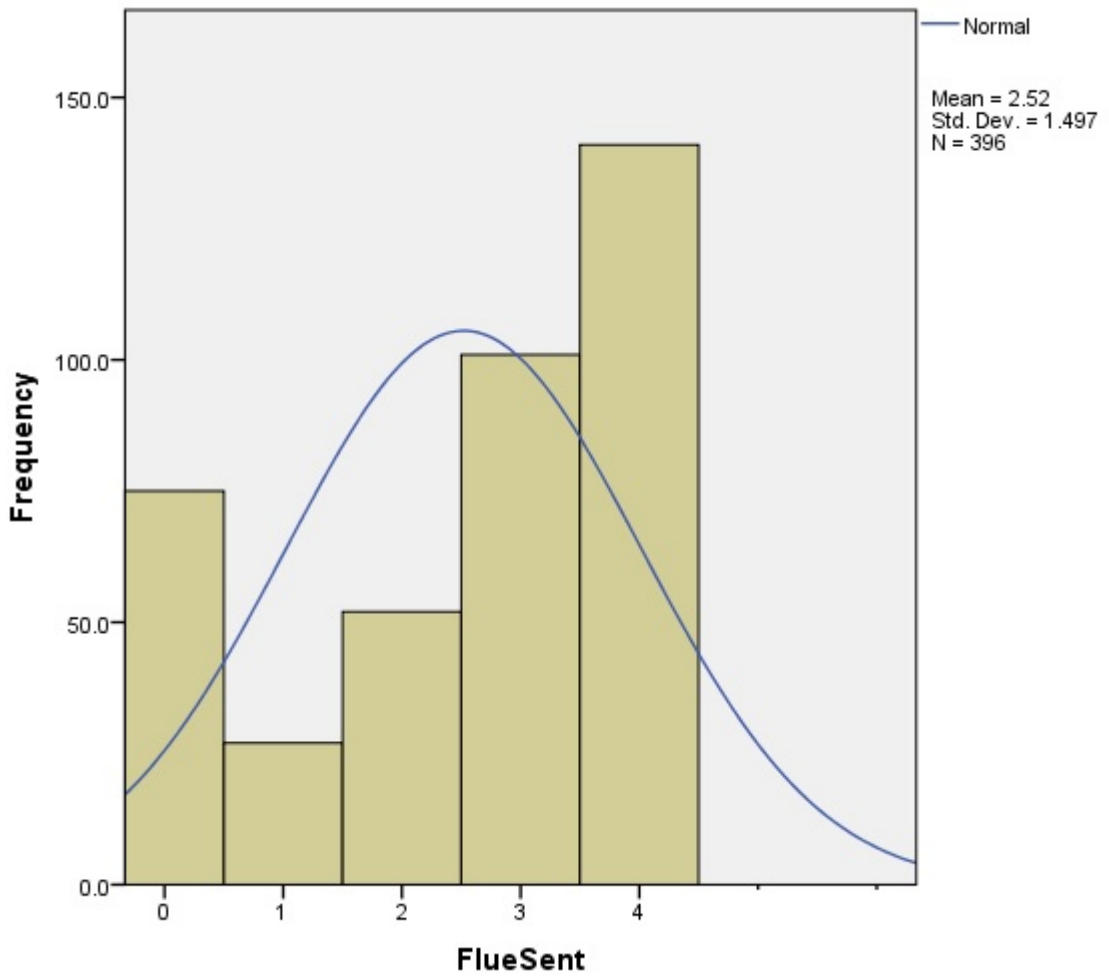
	2	18	13.1
	3	22	16.1
	4	90	65.7
	Total	137	100.0
Khandwa	1	4	2.8
	2	9	6.3
	3	29	20.4
	4	100	70.4
	Total	142	100.0
Ujjain	1	14	13.0
	2	16	14.8
	3	22	20.4
	4	56	51.9
	Total	108	100.0

**D. Fluency**

D1. Bar-plot of total scores with and without zero scores state wise with normal fit







D2. Mean and SD of total scores with and without zero scorers by district within each state

1. With zero scores

State	DISTRICT	N_STU	Statistics	FlueLetter	FlueWord	FlueSent
			Max Score	5	5	4
MP	State	405	Mean	3.83	3.82	2.52
			Standard Deviation	1.43	1.62	1.50
	Dewas	145	Mean	3.97	3.90	2.54
			Standard Deviation	1.35	1.56	1.49

Khandwa	145	Mean	3.78	4.00	2.88
		Standard Deviation	1.38	1.45	1.20
Ujjain	115	Mean	3.70	3.50	2.08
		Standard Deviation	1.57	1.83	1.71

**2. Without zero scores**

State		FlueLetter		FlueWord		FlueSent	
		Frequency	Percent	Frequency	Percent	Frequency	Percent
MP	1	11	2.9	15	4.2	27	8.4
	2	53	14.0	24	6.6	52	16.2
	3	47	12.4	46	12.7	101	31.5
	4	83	21.9	68	18.8	141	43.9
	5	185	48.8	208	57.6	—	—
	Total	379	100.0	361	100.0	321	100.0

DIST		FlueLetter		FlueWord		FlueSent	
		Frequency	Percent	Frequency	Percent	Frequency	Percent
Dewas	1	4	2.8	3	2.3	11	9.2
	2	17	12.1	8	6.0	20	16.8
	3	18	12.8	21	15.8	35	29.4
	4	27	19.1	21	15.8	53	44.5
	5	75	53.2	80	60.2	—	—
	Total	141	100.0	133	100.0	119	100.0
Khandwa	1	4	3.1	7	5.4	7	5.6
	2	11	8.5	6	4.7	25	19.8
	3	19	14.7	12	9.3	42	33.3
	4	44	34.1	31	24.0	52	41.3
	5	51	39.5	73	56.6	—	—



	Total	129	100.0	129	100.0	126	100.0
Ujjain	1	3	2.8	5	5.1	9	11.8
	2	25	22.9	10	10.1	7	9.2
	3	10	9.2	13	13.1	24	31.6
	4	12	11.0	16	16.2	36	47.4
	5	59	54.1	55	55.6	—	—
	Total	109	100.0	99	100.0	76	100.0

D3. Mean and SD of total scores with and without zero scorers by school within each state

1. With zero scores

STATE	DISTRICT	SCHOOL	N_STU	Mean	Standard Deviation
MP	Dewas	GOVERNMENT PRIMARY SCHOOL AAGR	4	10.25	4.27
	Dewas	GOVT BOYS P.S NO 2 SONKATCH	7	11.43	3.36
	Dewas	GOVT G.P.S BAROTHA DIST DEWAS	4	11.00	2.83
	Dewas	GOVT P.S OUD	6	9.33	3.83
	Dewas	GOVT PS BERAGAD DEWAS(MP)	4	2.75	4.86
	Dewas	GOVT PS BINJANA	5	13.00	1.73
	Dewas	GOVT PS TONK KALA	14	11.00	2.54
	Dewas	GOVT, P.S BANGAR DEVAS	7	11.43	1.27
	Dewas	GOVT. P.S. JAWAHAR NAGAR	4	12.25	1.50
	Dewas	GPS BHONRASA	6	13.00	0.89
	Dewas	P.S AANT	5	9.00	5.24
	Dewas	P.S AMARPURA	14	11.29	1.82
	Dewas	P.S PANWARD DEWAS (M.P)	19	7.32	4.14
	Dewas	PS KHEDAMADHAPUR	17	13.71	0.47
	Dewas	S.K.P.VIDHYLAY SOHANKACHH	9	5.00	4.03
	Dewas	SAS PRATHMIC VIDHYLAY SAVER	11	12.91	2.66

Dewas	UEGS MALIPURA SAWER	2	13.00	1.41
Khandwa	G.P.S BEDIYAV	15	5.13	3.48
Khandwa	G.P.S CHAUKI AHAMADPUR KHAIGAO	13	11.46	4.20
Khandwa	G.P.S KHEDI	3	13.67	0.58
Khandwa	GOVT P.SCHOOL BAGANVA	6	10.67	0.52
Khandwa	GOVT PRIMARY SCHOOL CAMPANAGAR	14	11.57	1.99
Khandwa	GOVT PRIMARY SCHOOL DONDWADA	4	7.00	5.23
Khandwa	GOVT PRIMARY SCHOOL RAIKUTWAWL	9	11.56	0.73
Khandwa	GOVT PRIMATY SCHOOL AHAMADPUR,	5	12.80	0.84
Khandwa	GOVT.PRAMARI SCHOOL RUDHEE	8	8.75	4.33
Khandwa	GOVT.PRIMARY SCHOOL TEMIKALA	8	11.00	4.57
Khandwa	GPS SALYA KHEDA	7	9.57	5.00
Khandwa	P.S AMALPURA	8	11.25	2.05
Khandwa	P.S. GITIT KHADAN	4	14.00	0.00
Khandwa	P/S JOGI BEDA	11	12.09	1.51
Khandwa	P/S MALGAWE PRATHMIK SHALA MAL	7	13.00	1.41
Khandwa	P/S RAJUR	5	11.60	2.51
Khandwa	PRIMARY SHALA SONGIR	6	13.33	0.52
Ujjain	BPS KARTIK CHAUK	8	6.00	2.83
Ujjain	DHANMANDI PRIMARY SCHOOL	2	8.00	7.07
Ujjain	G.P.S DATANA	10	12.70	1.95
Ujjain	GOVT GPS BILATIPURA	2	6.50	6.36
Ujjain	GOVT P.S KOLUKHEDI	3	12.67	0.58
Ujjain	GOVT P.S. SANSKRIT UJN (M.P)	1	11.00	
Ujjain	GOVT PS HEERA MIL KEE CHAL	6	10.17	5.60
Ujjain	GOVT PS MATANA KALA	15	13.47	0.52
Ujjain	GOVT.BOYES P.S. NARVAR	5	11.40	2.41

Ujjain	GPS DEWAS GATE NO-2	10	7.50	4.81
Ujjain	GPS NARWAR	3	7.00	6.24
Ujjain	P.S BHARAVAGADH	11	5.00	3.07
Ujjain	P.S HARSIDDHI GORD BASTI	4	2.75	3.40
Ujjain	P.S NAYAPURA UJJAIN	5	4.40	2.41
Ujjain	P.S PINGHLASHAWAR	8	11.75	2.12
Ujjain	PS DHANCH BHAVAN UJJAIN	8	13.63	0.52
Ujjain	RAJKEYA PR. VIDHYLAY BHERUNALA	12	7.50	6.19

2. Without zero scores

STATE	DISTRICT	SCHOOL	N_S TU	Me an	Standard Deviation
MP	Dewas	GOVERNMENT PRIMARY SCHOOL AAGR	4	10.3	4.3
	Dewas	GOVT BOYS P.S NO 2 SONKATCH	7	11.4	3.4
	Dewas	GOVT G.P.S BAROTHA DIST DEWAS	4	11.0	2.8
	Dewas	GOVT P.S OUD	6	9.3	3.8
	Dewas	GOVT PS BERAGAD DEWAS(MP)	2	5.5	6.4
	Dewas	GOVT PS BINJANA	5	13.0	1.7
	Dewas	GOVT PS TONK KALA	14	11.0	2.5
	Dewas	GOVT, P.S BANGAR DEVAS	7	11.4	1.3
	Dewas	GOVT. P.S. JAWAHAR NAGAR	4	12.3	1.5
	Dewas	GPS BHONRASA	6	13.0	0.9
	Dewas	P.S AANT	5	9.0	5.2
	Dewas	P.S AMARPURA	14	11.3	1.8
	Dewas	P.S PANWARD DEWAS (M.P)	18	7.7	3.8
	Dewas	PS KHEDAMADHAPUR	17	13.7	0.5

Dewas	S.K.P.VIDHYLAY SOHANKACHH	8	5.6	3.8
Dewas	SAS PRATHMIC VIDHYLAY SAVER	11	12.9	2.7
Dewas	UEGS MALIPURA SAWER	2	13.0	1.4
Khand wa	G.P.S BEDIYAV	13	5.9	3.0
Khand wa	G.P.S CHAUKI AHAMADPUR KHAIGAO	12	12.4	2.5
Khand wa	G.P.S KHEDI	3	13.7	0.6
Khand wa	GOVT P.SCHOOL BAGANVA	6	10.7	0.5
Khand wa	GOVT PRIMARY SCHOOL CAMPANAGAR	14	11.6	2.0
Khand wa	GOVT PRIMARY SCHOOL DONDWADA	3	9.3	2.9
Khand wa	GOVT PRIMARY SCHOOL RAIKUTWAWL	9	11.6	0.7
Khand wa	GOVT PRIMATY SCHOOL AHAMADPUR,	5	12.8	0.8
Khand wa	GOVT.PRAMARI SCHOOL RUDHEE	8	8.8	4.3
Khand wa	GOVT.PRIMARY SCHOOL TEMIKALA	7	12.6	1.1
Khand wa	GPS SALYA KHEDA	6	11.2	2.9
Khand wa	P.S AMALPURA	8	11.3	2.1
Khand wa	P.S. GITIT KHADAN	4	14.0	0.0
Khand wa	P/S JOGI BEDA	11	12.1	1.5
Khand wa	P/S MALGAWE PRATHMIK SHALA MAL	7	13.0	1.4
Khand wa	P/S RAJUR	5	11.6	2.5
Khand wa	PRIMARY SHALA SONGIR	6	13.3	0.5

Ujjain	BPS KARTIK CHAUK	8	6.0	2.8
Ujjain	DHANMANDI PRIMARY SCHOOL	2	8.0	7.1
Ujjain	G.P.S DATANA	10	12.7	1.9
Ujjain	GOVT GPS BILATIPURA	2	6.5	6.4
Ujjain	GOVT P.S KOLUKHEDI	3	12.7	0.6
Ujjain	GOVT P.S. SANSKRIT UJN (M.P)	1	11.0	
Ujjain	GOVT PS HEERA MIL KEE CHAL	6	10.2	5.6
Ujjain	GOVT PS MATANA KALA	15	13.5	0.5
Ujjain	GOVT.BOYES P.S. NARVAR	5	11.4	2.4
Ujjain	GPS DEWAS GATE NO-2	9	8.3	4.3
Ujjain	GPS NARWAR	3	7.0	6.2
Ujjain	P.S BHARAVAGADH	10	5.5	2.7
Ujjain	P.S HARSIDDHI GORD BASTI	2	5.5	2.1
Ujjain	P.S NAYAPURA UJJAIN	5	4.4	2.4
Ujjain	P.S PINGHLASHAWAR	8	11.8	2.1
Ujjain	PS DHANCH BHAVAN UJJAIN	8	13.6	0.5
Ujjain	RAJKEYA PR. VIDHYLAY BHERUNALA	10	9.0	5.6

D4. Mean and SD of scores by school within each state

Dist rict	SCHOOL	N <sub>ST</sub> U	Statistics	FlueL etter	Flue Word	Flue Sent
			Max Score	5	5	4
Dew as	GOVERNMENT PRIMARY SCHOOL AAGR	4	Mean	4.00	4.00	2.25
			Standard Deviation	1.41	1.41	1.50
		7	Mean	4.57	4.57	2.29

Dewas	GOVT BOYS P.S NO 2 SONKATCH		Standard Deviation	0.79	1.13	2.14
Dewas	GOVT G.P.S BAROTHA DIST DEWAS	4	Mean	3.75	4.50	2.75
			Standard Deviation	0.96	1.00	1.26
Dewas	GOVT P.S OUD	6	Mean	4.00	3.67	1.67
			Standard Deviation	1.55	1.51	1.51
Dewas	GOVT PS BERAGAD DEWAS(MP)	4	Mean	1.50	1.00	0.25
			Standard Deviation	2.38	2.00	0.50
Dewas	GOVT PS BINJANA	5	Mean	4.80	4.80	3.40
			Standard Deviation	0.45	0.45	0.89
Dewas	GOVT PS TONK KALA	15	Mean	3.87	4.33	2.67
			Standard Deviation	0.92	0.90	1.11
Dewas	GOVT, P.S BANGAR DEVAS	10	Mean	3.50	4.10	3.10
			Standard Deviation	0.97	0.57	0.74
Dewas	GOVT. P.S. JAWAHAR NAGAR	4	Mean	4.75	4.50	3.00
			Standard Deviation	0.50	1.00	0.82
Dewas	GPS BHONRASA	6	Mean	4.50	5.00	3.50
			Standard Deviation	0.55	0.00	0.55
Dewas	P.S AANT	6	Mean	3.50	3.50	2.00
			Standard Deviation	1.22	2.07	1.67
Dewas	P.S AMARPURA	15	Mean	4.80	3.80	2.53
			Standard Deviation	0.56	1.08	1.13
Dewas	P.S PANWARD DEWAS (M.P)	20	Mean	2.45	3.15	1.80
			Standard Deviation	1.32	1.53	1.54
	PS KHEDAMADHAPUR	17	Mean	5.00	5.00	3.71

Dew as			Standard Deviation	0.00	0.00	0.47
Dew as	S.K.P.VIDHYLAY SOHANKACHH	9	Mean	3.67	0.89	0.44
			Standard Deviation	1.73	1.83	1.33
Dew as	SAS PRATHMIC VIDHYLAY SAVER	11	Mean	4.55	4.73	3.64
			Standard Deviation	0.93	0.65	1.21
Dew as	UEGS MALIPURA SAWER	2	Mean	4.50	5.00	3.50
			Standard Deviation	0.71	0.00	0.71
Khan dwa	G.P.S BEDIYAV	15	Mean	2.00	1.93	1.20
			Standard Deviation	1.13	1.62	1.01
Khan dwa	G.P.S CHAUKI AHAMADPUR KHAIGAO	13	Mean	4.31	4.38	2.77
			Standard Deviation	1.55	1.45	1.48
Khan dwa	G.P.S KHEDI	12	Mean	5.00	5.00	3.67
			Standard Deviation	0.00	0.00	0.58
Khan dwa	GOVT P.SCHOOL BAGANVA	6	Mean	4.50	3.83	2.33
			Standard Deviation	0.55	0.75	0.52
Khan dwa	GOVT PRIMARY SCHOOL CAMPANAGAR	15	Mean	4.27	4.33	2.80
			Standard Deviation	0.80	0.82	0.77
Khan dwa	GOVT PRIMARY SCHOOL DONDWADA	4	Mean	2.25	2.75	2.00
			Standard Deviation	1.71	2.22	1.63
Khan dwa	GOVT PRIMARY SCHOOL RAIKUTWAWL	9	Mean	3.67	4.44	3.44
			Standard Deviation	0.71	0.73	0.53
Khan dwa	GOVT PRIMATY SCHOOL AHAMADPUR	5	Mean	4.80	4.60	3.40
			Standard Deviation	0.45	0.55	0.55
		8	Mean	3.00	3.38	2.38

Khandwa	GOVT.PRAMARI SCHOOL RUDHEE		Standard Deviation	1.41	2.07	1.19
Khandwa	GOVT.PRIMARY SCHOOL TEMIKALA	8	Mean	3.50	4.25	3.25
			Standard Deviation	1.60	1.75	1.39
Khandwa	GPS SALYA KHEDA	7	Mean	2.71	3.86	3.00
			Standard Deviation	2.06	1.86	1.53
Khandwa	P.S AMALPURA	9	Mean	4.00	3.89	3.11
			Standard Deviation	0.71	1.05	0.93
Khandwa	P.S. GITIT KHADAN	4	Mean	5.00	5.00	4.00
			Standard Deviation	0.00	0.00	0.00
Khandwa	P/S JOGI BEDA	12	Mean	4.25	4.33	3.25
			Standard Deviation	0.62	0.49	0.62
Khandwa	P/S MALGAWE PRATHMIK SHALA MAL	7	Mean	4.57	4.86	3.57
			Standard Deviation	0.79	0.38	0.79
Khandwa	P/S RAJUR	5	Mean	3.80	4.40	3.40
			Standard Deviation	1.30	0.89	0.89
Khandwa	PRIMARY SHALA SONGIR	6	Mean	4.50	5.00	3.83
			Standard Deviation	0.55	0.00	0.41
Ujjain	BPS KARTIK CHAUK	8	Mean	3.00	2.63	0.38
			Standard Deviation	0.76	1.69	1.06
Ujjain	DHANMANDI PRIMARY SCHOOL	2	Mean	3.00	3.00	2.00
			Standard Deviation	1.41	2.83	2.83
Ujjain	G.P.S DATANA	10	Mean	4.80	4.80	3.10
			Standard Deviation	0.42	0.42	1.29
	GOVT GPS BILATIPURA	2	Mean	2.50	2.50	1.50



Ujjain			Standard Deviation	0.71	3.54	2.12
Ujjain	GOVT P.S KOLUKHEDI	3	Mean	4.33	5.00	3.33
			Standard Deviation	0.58	0.00	0.58
Ujjain	GOVT P.S. SANSKRIT UJN (M.P)	1	Mean	3.00	4.00	4.00
			Standard Deviation	—	—	—
Ujjain	GOVT PS HEERA MIL KEE CHAL	6	Mean	4.00	3.67	2.50
			Standard Deviation	1.55	2.16	1.97
Ujjain	GOVT PS MATANA KALA	15	Mean	4.93	5.00	3.53
			Standard Deviation	0.26	0.00	0.52
Ujjain	GOVT.BOYES P.S. NARVAR	5	Mean	4.40	4.40	2.60
			Standard Deviation	0.89	0.89	1.34
Ujjain	GPS DEWAS GATE NO-2	10	Mean	3.80	2.60	1.10
			Standard Deviation	1.81	2.01	1.60
Ujjain	GPS NARWAR	3	Mean	3.00	2.33	1.67
			Standard Deviation	1.73	2.52	2.08
Ujjain	P.S BHARAVAGADH	11	Mean	2.27	2.45	0.27
			Standard Deviation	1.27	1.44	0.65
Ujjain	P.S HARSIDDHI GORD BASTI	5	Mean	1.80	1.40	0.80
			Standard Deviation	1.79	1.52	1.79
Ujjain	P.S NAYAPURA UJJAIN	5	Mean	2.00	1.80	0.60
			Standard Deviation	0.71	1.30	0.55
Ujjain	P.S PINGHLASHAWAR	9	Mean	4.78	4.11	2.56
			Standard Deviation	0.67	1.05	0.88
		8	Mean	5.00	5.00	3.63

Ujjain	PS DHANCH BHAVAN UJJAIN		Standard Deviation	0.00	0.00	0.52
Ujjain	RAJKEYA PR. VIDHYLAY BHERUNALA	12	Mean	2.75	2.67	2.08
			Standard Deviation	2.09	2.27	2.02

D5. Distribution of scores by quintiles for each district within each state

1. State

State			FlueLetter	FlueWord	FlueSent	
MP	N	Valid	396	396	396	
		Missing	9	9	9	
	Mean		3.83	3.82	2.52	
	Median		4	5	3	
	Mode		5	5	4	
	Std. Deviation		1.43	1.62	1.50	
	Percentiles	20		2	3	1
		40		4	4	3
		60		5	5	3
		80		5	5	4

2. District

DISTRICT		FlueLetter	FlueWord	FlueSent	
Dewas	N	Valid	145	145	145
		Missing	0	0	0
	Mean		3.97	3.90	2.54
	Median		5	5	3
	Mode		5	5	4
	Std. Deviation		1.35	1.56	1.49

		20	3	3	1	
	Percentiles	40	4	4	3	
		60	5	5	3	
		80	5	5	4	
Khandwa		N	Valid	136	136	136
	Missing		9	9	9	
	Mean		3.78	4.00	2.88	
	Median		4	5	3	
	Mode		5	5	4	
	Std. Deviation		1.38	1.45	1.20	
		Percentiles	20	3	3	2
			40	4	4	3
			60	4	5	3
			80	5	5	4
Ujjain	N	Valid	115	115	115	
		Missing	0	0	0	
	Mean		3.70	3.50	2.08	
	Median		5	4	3	
	Mode		5	5	0	
	Std. Deviation		1.57	1.83	1.71	
		Percentiles	20	2	2	0
			40	4	4	1
			60	5	5	3
			80	5	5	4

## 11 Appendix III - Questionnaires

### 11.1 NGO Head

#### BASIC INFORMATION

[Note for interviewer: Please fill in this information in CAPITAL letters]

- a. Name and Designation of the Respondent:
- b. Name of the organization:
- c. Location:
- d. Interviewer(s):
- e. Date of interview:
- f. Place of interview:

#### GENERAL QUESTIONS

**Objective:** Obtain background information about (i) the partner organization, their areas of expertise and operation (ii) To gauge their understanding of READ Alliance intervention (iii) understand the reach of the organization( iv) their experience with the READ Alliance platform

[Note for interviewer: This information is mostly available in secondary literature/ telephonic interviews. However, these questions will allow to validate the available information. In case reports have not been collected earlier, request for recent data and information available in reports]

1. Can you please introduce your organization? What are the key issues you work on? How long has your organization been working in this state?
2. When did your organization start working on READ Alliance project? How has your intervention evolved over time?
3. What are the broad objectives of the READ Alliance supported early grade reading interventions that you implement? What are the key activities undertaken by your organization to achieve these objectives?

4. What are the opportunities provided to your organisation by the READ Alliance partnership? [Note to the interviewer: probe on support received under the partnership, scope for networking with other NGOs, prospect of sharing and learning from each other's experience, and opportunities for sharing of materials].
  
5. What kind of engagement platforms does READ Alliance project provide for your organisation and other programme partners? Which of these have you participated in?
  - (a) Have you participated in any kind of training? If yes, please describe
  - (b) Have you participated in any meetings? If yes, please describe
  - (c) Have you been involved in any other form of engagement?[Note to interviewer, ask for a list of participants in any of these
  
6. What are the districts that the intervention covers? How many blocks and schools do you cover? Approximately how many children do you think come **under** your intervention?
  
7. Please describe the socio economic and demographic details of the children that your intervention targets.
  
8. Are there any other early grade reading interventions in the state that you are aware of? If yes, please provide details.
  
9. Can you list the major donors involved in early education in the state?
  
10. Who are the key influencers/ what are the key factors in the district /block/community that affect the implementation of early grade reading programs in the field?

11. Which key education departments are involved in school education in the state? In what ways do you engage with each of these bodies? Have there been other outcomes in terms of reading in this state

## KEY QUESTIONS

**Objective:** Obtain information about (i) institutional capacity (ii) institutionalised processes (iii) project implementation.

[Note for interviewer: This information is mostly available in secondary literature/ telephonic interviews. However, these questions will allow to validate the available information. In case reports have not been collected earlier, request for recent data and information available in reports]

### Programme /NGO Characteristics

1. What is the philosophy, objective, coverage and history of your organization?\_ [*Note to the interviewer: Collect annual report of the organization*]
2. Who is leading your organization in the state? Since when is he or she in their leadership role? Have there been frequent changes in leadership?
3. What are the different other interventions that you are engaged in? Please describe in short about them. Please elaborate your previous experience in implementing early grade reading interventions\_
4. With regards to the READ Alliance intervention, what are the key processes in place? Could you describe the process of implementation and any challenges faced?

Please identify your key partners in implementation of the early grade reading project and explain how you engage with them and extent to which the involvement of partners with READ has supported your activities.

### **Project Staff**

5. What are the roles and responsibilities of the key staff involved in implementation of the project?
6. What is the experience level of the staff in early grade reading and overall? How many staff work on the project?
7. How do you recruit project staff? Can you please elaborate on the recruitment process? In case of tribal communities, do you recruit staff members from the community?
8. Are there challenges in the recruitment of staff? If yes, please elaborate.
9. Are the key staff members of the project employed as permanent or contractual staff? On what basis is the employment status determined- who is permanent and who is contractual? Does the nature of employment determine staff commitment? If yes, please elaborate your observation.
10. What are the various types of training provided to the project staff? Do staff receive any specific training on early grade reading? When was the last training conducted? Please provide details on: content, duration, trainers, frequency of training and cost. Are there any pre/ post evaluation conducted for the training? If yes, please mention how and provide a copy of the test.
11. Have you observed attrition of project staff? If yes, can you identify the reasons?
12. What is the reporting structure for project staff? How do you evaluate your staff

### **School Characteristics**

13. In total, how many schools are covered in this intervention, what are the names of the schools? Can you provide a list of the schools?
14. Are there any external impediments which impact the intervention, and how?
15. In total, how many school teachers do you engage with?
16. In the schools you engage with, to what extent do issues such as teacher recruitment challenges, teacher absenteeism and student-teacher ratio impact on student learning?
17. What impact do issues such as infrastructure, facilities, resources, and sanitation have on student learning?
18. What is the general organizational structure of the schools? Please elaborate the reporting mechanisms between your organisation and the schools?

### **Materials**

19. What are the different types of textbooks/non-text- materials and teaching aids used in the classroom? [*Please provide examples if possible*]
20. How are the materials developed? Is there any local adaptation of the materials used?
21. To what extent is the material provided sufficient for children and are there any shortfall?
22. How are the materials used? [*Please provide specific examples*]
23. Is there any specific pre- service/in service training on usage of texts and teaching aids? If yes, please elaborate.
24. What is the approximate cost of the materials used in the intervention?



25. What are the key quality assurance mechanisms followed by your organization with regards to the implementation of the materials?

26. Are there any teacher training program run by your organization? If yes, what are they? Could you please elaborate on aspects such as- content, frequency, trainers, pre and post evaluation of such programs? [*Please provide example materials*]

### **Monitoring, Information collection and sustainability**

27. What are the monitoring mechanisms institutionalised in the intervention? How frequently do you visit the project sites? What are the key components that you monitor?

[Please share monitoring tools/formats if available]

28. What elements of the project do you monitor and how do you report on these? How often do you report the progress of the project? Monthly, quarterly etc.?

[Please provide copies of report if available]

29. How long will you receive funding from READ alliance? Please provide the key factors that will affect the sustainability of the project?

30. How do you use monitoring and field data in the planning process? Please describe how the data collected from the field is utilised. [Please provide monitoring indicators if available]

### **Good practices**

31. Could you describe one good practice from the project that you are especially proud of? Why would you consider it a good practice? Please describe the practice in detail. [*Note to interviewer: Request for reports, documents*].

## 11.2 NGO Staff

### BASIC INFORMATION

[Note for interviewer: Please fill in this information in CAPITAL letters]

- a. Name and Designation of the Respondent:
- b. Qualification:
- c. Name of the organization:
- d. Interviewer(s):
- e. Date of interview:
- f. Place of interview:

### GENERAL QUESTIONS

**Objective:** Obtain background information about (i) the partner organization, their areas of expertise and operation (ii) To gauge their understanding of READ Alliance intervention (iii) understand the reach of the organization.

[Note for interviewer: This information is mostly available in secondary literature/ telephonic interviews. However, these questions will allow to validate the available information. In case reports have not been collected earlier, request for recent data and information available in reports]

1. What is your role and responsibility under the READ Alliance early grade reading intervention?
2. Since when have you been working in this READ Alliance supported early grade reading intervention?
3. What are the broad objectives of the READ Alliance supported early grade reading intervention? What are the key activities undertaken by you and your organization to achieve these objectives?
4. What are the opportunities provided to your organisation by the READ Alliance partnership? [Note to the interviewer: probe on support received under the partnership, scope for networking with staff of other NGOs,

prospect of sharing and learning from each other's experience, and opportunities for sharing of materials].

5. What kind of engagement platforms does READ Alliance project provide for your organisation and other programme partners? Which of these have you participated in?
  - a) Have you participated in any kind of training? If yes, please describe
  - b) Have you participated in any meetings? If yes, please describe
  - c) Have you been involved in any other form of engagement?

[Note to interviewer, ask for a list of participants in any of these

12. What are the districts that the intervention covers? How many blocks and schools do you cover? Approximately how many children do you think come **under** your intervention?
13. Please describe the socio economic and demographic details of the children that your intervention targets.
14. Are there any other early grade reading interventions in the state that you are aware of? If yes, please provide details.
15. Can you list the major donors involved in early education in the state?
16. Who are the key influencers/ what are the key factors in the district /block/community that affect the implementation of early grade reading programs in the field?
17. Which key education departments are involved in school education in the state? In what ways do you engage with each of these bodies? Have there been other outcomes in terms of reading in this state

## KEY QUESTIONS

**Objective:** Obtain information about (i) institutional capacity (ii) institutionalised processes (iii) project implementation.

### Project Staff

1. How were you recruited for the post? Can you please elaborate on the recruitment process?
2. Do you have a copy of the Job description? Can you provide a copy of the same?
3. What is your experience in early grade reading?
4. Are you employed as a permanent or contractual staff? In what ways is this beneficial?
5. Have you attended any training recently? If yes, what did it focus on?
6. Have you attended any specific training on early grade reading? When was the last training conducted? Please provide details on: content, duration, trainers, frequency of training. Are there any pre/ post evaluation conducted for the training?
7. Have you and your colleagues been working for a long time in the project? If no, can you identify the reasons for people to leave? If yes, what factors contribute to low attrition?
8. Is your performance evaluated regularly? If yes, how?
9. In case you face any challenge in carrying out the responsibilities for the READ Alliance intervention what do you do and who are your immediate supervisors you reach out to?

### **School Characteristics**

10. In total, how many schools are under your supervision? What are the names of the schools? Can you provide a list of the schools?
  
11. Are there any external impediments which impact the intervention, and how?
  
12. Do you engage with school teachers? How many school teachers do you engage with? What do you engage with school teachers on?
  
13. In the schools you engage with, to what extent do issues such as teacher recruitment challenges, teacher absenteeism and student-teacher ratio impact on student learning?
  
14. What impact do issues such as infrastructure, facilities, resources, and sanitation have on student learning?
  
15. What is the general organizational structure of the schools? Please elaborate the reporting mechanisms between your organisation and the schools?

### **Materials**

16. What are the different types of textbooks/non text- materials and teaching aids used in the classroom? [*Collect copies and specimens if possible*]
  
17. How are the materials developed? Is there any local adaptation of the materials used?
  
18. To what extent is the material provided sufficient for children and are there any shortfall?

19. How are the materials used? [Note to the interviewer: Request program staff to demonstrate its usage. Collect photos and videos wherever possible]
20. Have you received any specific pre- service/in service training on usage of texts and teaching aids? If yes, please elaborate.
21. To what extent does your intervention make use of technology? If this is included, to what extent are teachers and school infrastructure prepared for the use of technology? How were any challenges overcome? To what extent do you anticipate that the use of technology will be sustained and what factors may increase or decrease the likelihood?
22. Are you also responsible for any teacher training program run by your organization? If yes, what are they? Could you elaborate on- content, frequency, trainers, pre and post evaluation of such programs? [ *Note to the interviewer: Collect reports/ photographs of training sessions*]
23. If teacher training is included in the program, what evidence do you have that it has had an impact on teacher behaviour and/or student achievement?

**Monitoring, Information collection and sustainability**

24. Are you responsible for monitoring the intervention? If yes, how frequently do you visit the project sites? What are the key components that you monitor?
25. What elements of the project do you monitor and how do you report on these? How often do you report the progress of the project? Monthly, quarterly etc.? [please provide copies of report if available]

26. How do you use monitoring and field data in the planning process? Please describe how the data collected from the field is utilised. [Note to the interviewer: *Please probe meetings with supervisors, reporting mechanism, online data entry etc.*][Note to the interviewer: *Please collect available monitoring formats*]

**Good practices**

27. Could you describe one good practice from the project that you are especially proud of? Why would you consider it a good practice? Please describe the practice in detail. [Note to interviewer: *Request for reports, documents*].

## 11.3 Teachers

### BASIC INFORMATION

[Note for interviewer: Please fill in this information in CAPITAL letters]

- a. Name and Designation of the Respondent:
- b. Name of the school:
- c. State:
- d. Panchayat:
- e. Block and Village:
- f. Interviewer(s):
- g. Date of interview:
- h. Place of interview:

### GENERAL QUESTIONS

**Objective:** Obtain background information/ problem statement for early grade reading in intervention areas.

[Note for interviewer: Request teachers to elaborate through examples wherever applicable]

1. How long have you been working as a teacher in the school? What subjects and grade levels do you teach in the school?
2. Since when have you been engaged in the READ Alliance supported early grade reading intervention?
3. What is your role in the READ Alliance supported intervention?
4. What are the key activities performed under the intervention?
5. Does your school fall under the hard to reach, inaccessible and tribal areas? What are the socio economic dynamics of the village? How many villages does your school cover?
6. What are the factors that affect early grade reading intervention in the field?



7. What are the key challenges that affect literacy acquisition in early grades?

Check list for interviewer

- Teacher's intro, role, key activities.
- Background of school and socio economic dynamics of village.
- Key factors affecting early grade reading.
- Challenges in literacy acquisition at early grade.

**KEY QUESTIONS**

Objective: To understand capacity building among school teachers on early grade reading.

6. Have you received any pre- service/in service training in the last 1 year? If yes, was there any specific training early grade reading? Also, was there any specific training on usage of texts and teaching aids of early reading?

If yes, please elaborate on.

- (i) Location
- (ii) content,
- (iii) organizers
- (iv) frequency,
- (v) trainers,
- (vi) pre and post evaluation

Check List for interviewer

- Capacity building and training questions.

**School Characteristics**

- (vii) Does the location of your school have any implication on the intervention? If yes, how does it affect the intervention? *[Note for interviewer: Please provide examples to explain]*
  
- (viii) Are there teacher vacancies in your schools? If yes, could you tell us why? Also, is learning in schools affected by teacher absenteeism? If yes, why?
  
- (ix) What is the average student-teacher ratio in your school? How does student teacher ratio affect learning in your school?
  
- (x) What is the condition of infrastructure facilities of your school? Are drinking water facilities, ramps, boundary wall, playground, library and electricity facilities available?
  
- (xi) What is the general organizational structure of the school? Please elaborate the reporting mechanisms.

- School- location.
- Teachers- vacancy, absenteeism, parent teacher ratio
- School infrastructure

## Materials

- (xii) What are the different types of textbooks/non text- materials and teaching aids used in the classroom to improve early grade reading? [*Note to the interviewer: Collect copies and specimens of the same. Request the respondent to provide an example*]
- (xiii) What is the number of textbooks and other teaching and learning materials provided to children on early grade reading?
- (xiv) How are the materials used? [*Note to the interviewer: Request program staff to demonstrate its usage. Collect photos and videos wherever possible*]
- (xv) Have you received any pre- service/in service training in the last 1 year? If yes, was there any specific training on usage of texts and teaching aids of early reading? If yes, please elaborate on.- content, frequency, trainers, pre and post evaluation

- Types, number of textbooks and teaching aids
- Training on text books
- Cost of materials
- Quality assurance of text books
- Teacher training- content, frequency, trainers, pre-post evaluation

## Monitoring, Information collection and sustainability

- (xvi) If you face any challenges in teaching, who supports you to resolve the problem?
- (xvii) Do you report on the progress of the project to the program staff? If yes, what is the frequency- Monthly, quarterly etc.?

[Note to the interviewer: Please collect all possible reports]

- Monitoring and evaluation

- Progress reporting

### **Success story**

(xviii) Could you describe one success story from the project? Why would you consider it a success story? Please describe the practice in detail.

- Case study/ narrative on good practices

## 12 Appendix IV – additional evaluation tools

### Qualitative Data collection tool

#### COLLECTION OF QUALITATIVE DATA FROM READ ALLIANCE PARTNERS

Partner Name:

#### Section 1 - Questions from the READ Alliance Platform Evaluation Framework

##### **Governance**

1. Who are all of the stakeholders involved in investment decisions in your organisation?
2. Who are all of the stakeholders involved in investment decisions in partner organisations?
3. Once an investment is made, who has responsibility for its oversight?
4. Who is responsible for the overall management of investments related to the early grade reading intervention?
5. Are there external regulations that influence the decision-making process? If so, please specify.

##### **Financial Model**

6. What are main sources of revenue and main expenses for your organisation?
7. What are major factors that influence the revenue and expenses of your organisation?
8. What are the key steps that help your organisation to sustain its operations over time?

##### **Assets and infrastructure**

9. What are the basic categories of investments (*e.g. infrastructure, human resources, etc*) required by your organisation to support the early grade reading intervention?

10. What is the relative cost of each of these factors in the early grade reading interventions? In the interventions has it been possible to achieve economies of scale? Why or why not?
11. How important are non-physical assets (e.g., brand, certifications) on the ability of your organisation to meet its goals in the early grade reading intervention?

**Service offering**

12. What are your organisation's key strengths and service offerings?
13. Which other organisations do you regard as offering an alternative yet similar service in the field of early grade reading interventions in the state(s) in which your organisation operates?
14. Can a strategic partnership help your organisation expand its service offerings in the field of early grade reading interventions, or to control its costs?

**Beneficiaries**

15. Who are the primary beneficiaries of the early grade reading interventions managed by your organisation?
16. What are other categories of beneficiaries that your organisation serves in other activities?
17. In what ways does your organisation interact with beneficiaries (in early grade reading and other interventions)?
18. What is the estimated overall demand for the services that your organisation offers? What issues affect the ability of your organisation to meet this demand?
19. In what ways (if any) would a strategic partnership enable your organisation to better meet demand for its services?
20. Do you have any other comments that you would like to make about any of the issues raised in questions 1 to 19?

**Section 2 - Questions about the early grade reading intervention**

**Student participation**

21. What are the contextual factors that appear to have encouraged student participation and retention in the early grade reading intervention? How has your organisation tried to capitalise on these?
22. What are the contextual factors that appear to have acted as barriers to student participation and retention in the early grade reading intervention? How has your organisation tried to address these?

23. What specific factors appear to have encouraged or acted as barriers to the participation of girls in the early grade reading intervention? How has your organisation tried to address these?

**Approaches to reading instruction**

24. What approaches to reading instruction were used in the intervention led by your organisation? What was the philosophical, scientific or theoretical underpinning to the choice of the approaches used?
25. In what ways (if any) did your organisation revise approaches to reading instruction as the project evolved? What were the issues that these revisions aimed to address?
26. Does your organisation have evidence of the efficacy of the approaches to reading instructions it has used in this project? If so please describe this evidence

**Please provide ACER India with details of this evidence (e.g. data, evaluations, reports).**

27. What revisions (if any) to the approaches to reading instruction used in this project would be beneficial for future project with similar characteristics?

**Learning Materials**

**Please supply ACER India with exemplars of all materials used**

28. What textbooks and/or reading materials have been used in the early grade reading intervention? Please describe their key characteristics.
29. How were the materials selected or developed? What efforts were made to ensure that the materials were suitable for the specific needs of the target students?
30. How would you evaluate the suitability of the materials during the intervention? Please provide examples to justify your response.
31. In what ways could the materials be improved for use in future interventions of a similar nature?

**Teacher training**

32. What contextual factors appear to have encouraged or acted as barriers to the participation of teachers / teaching assistants / master trainers in the early grade reading intervention? How has your organisation tried to address these?
33. What approaches were taken to ensure that the training provided to teachers, teaching assistants and/or master trainers was appropriate to their needs and ensured that they met learning outcomes?

34. How was the impact of training on participants evaluated and measured? What revisions to the approaches to training (if any) were made on the basis of this evaluation or measurement?
35. Does your organisation have evidence of the impact of training on participants' professional practice (in terms of pedagogy and reading support activities)? If so, please describe.

**Please provide ACER India with details of this evidence (e.g. data, evaluations, reports).**

**Assessment of skills**

36. In what ways have reading skills among students been assessed and monitored during the intervention? How frequently has this taken place?
37. How have the insights gained from assessment been used to improve project effectiveness?

**Engagement in READ Alliance**

38. To what extent has your organisation engaged in READ Alliance events throughout the intervention? What has been the benefit of engagement in READ Alliance events for your organisation?
39. To what extent has any engagement in READ Alliance events helped your organisation feel like it is part of a collaborative network of stakeholders? Please give examples.
40. What has been the frequency of communication with READ Alliance coordinators throughout the intervention? What has been the value of this communication for your organisation?
41. To what extent has your organisation made use of the READ Alliance interactive platform during the intervention? What has been the value of the platform for your organisation?
42. What has been the impact of READ Alliance initiative (including events, communications and the interactive platform) for your organisation? Please explain any ways in which it has contributed to the success of the early reading intervention.
43. How do you feel that READ Alliance events, communications and the interactive platform could be improved to better support early grade reading partners?



### Quantitative Data collection tool

		Please only insert dates, numbers or percentages in this column	
Sub-Category	Quantitative item	Response	Explanation of response (if relevant) - please add your notes as required
<b>Intervention parameters</b>	Start date of the intervention		
	End data of the intervention		
	Number of districts involved in the intervention		
	Number of schools involved in the intervention		
<b>Students</b>	Number of students involved in the intervention		
	Class levels of students involved in the intervention		
	Proportion of students involved in the intervention per class level		For example, of all of the students involved in the intervention, 80% are in class II, and 20% are in class III.
	Average proportion of students per class level per school involved in the intervention		For example, per school approximately 50% of class II students are involved in the intervention.

	Proportion of students involved in the intervention that are female		
	Total number of hours of intervention per student		
	Proportion of students retained until the end of the intervention		
	Proportion of female students retained until the end of the intervention		
	Number of textbooks provided to students		
	Quantity of equipment provided to students		Please provide an explanation of how you have quantified equipment.
	Quantity of teaching materials provided to students		Please provide an explanation of how you have quantified materials.
<b>Teachers</b>	Number of teachers involved in the intervention		
	Number of hours of training per teacher		
	Proportion of teachers retained until the end of the intervention		
	Quantity of teaching/classroom resources provided to teachers		Please provide an explanation of how you have quantified materials
<b>Teaching assistants</b>	Number of teaching assistants involved in the intervention		

	Number of hours of training per teaching assistant		
	Proportion of teaching assistants retained until the end of the intervention		
	Quantity of teaching/classroom resources provided to teaching assistants		Please provide an explanation of how you have quantified materials
<b>Master trainers</b>	Number of master-trainers who have been trained in project implementation		
	Number of days of training per master-trainers		
	Proportion of master trainers retained until the end of the intervention		
	Quantity of teaching/classroom resources provided to master trainers		Please provide an explanation of how you have quantified materials.
	Average number of teachers trained by each master trainer		
<b>Intervention progress</b>	Total number of intervention days planned (for all intervention recipients)		
	Percentage of planned intervention days completed as per 1 February 2018		
	Percentage of planned intervention days predicted for completion by end date		
	Percentage of schools 'on track' with interventions		

	Please list any additional quantitative information about the project that you would like to add in the cells below, providing both the item description and data as per the table above		
<b>Specific quantitative characteristics of this intervention</b>			