

*Arivu-Disha*



# *Stocktaking Headstreams' Arivu Project*

*2015-17*

An initiative of



In association with





## Contents

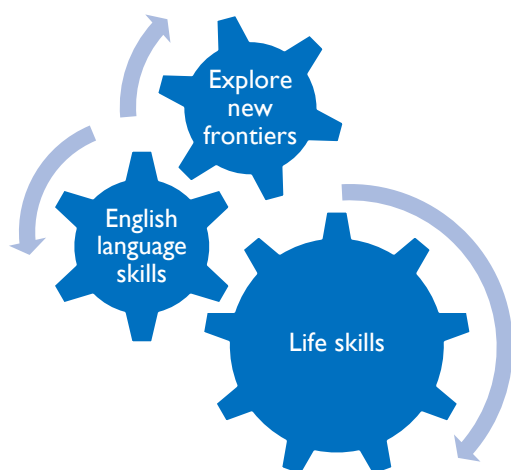
<i>Executive Summary</i> .....	5
<b>SECTION A: ENGLISH LANGUAGE OUTCOMES</b> .....	8
Section 1: Introduction.....	9
Section 2: Mid-term Evaluation.....	10
2.1 Administration of the ASER Test.....	10
2.2 Listening Comprehension and Speaking Test.....	11
Section 3: Sample Data .....	11
Section 4: Results from the ASER Test.....	12
4.1 Comparison of ASER Scores.....	13
4.2 Overall Results: Comparisons between Baseline and Current Evaluation .....	13
4.3 Component-wise Results: Comparisons between Baseline and Current Evaluation.....	15
4.4 Changes in Comprehension .....	17
Section 5: Results from the Listening Comprehension and Speaking Test.....	21
5.1 Listening and Comprehension Results.....	21
<b>SECTION B: LIFE SKILLS OUTCOMES</b> .....	24
Section 6: Introduction .....	24
Section 7: Mid-term Evaluation.....	24
7.1 Methods.....	24
Section 8: Changes in the Academic Domain.....	25
8.1 Improved Grasp of the English Language .....	25
8.2 Enhanced Digital Literacy .....	26
8.3 Influence on Other Academic Subjects .....	26
8.4 Influence on Creativity.....	26
Section 9: Changes in Emotional Awareness.....	27
9.1 Identification of Emotions .....	27
9.2 Emotional Regulation .....	27
9.3 Stories, as Part of Arivu Curriculum, are Powerful Agents of Change.....	27
Section 10: Changes in Interpersonal Skills.....	28
10.1 Enhanced Confidence .....	28
10.2 Interpersonal Skills .....	28
10.3 Sharing of Knowledge and Transfer of Learning Across Contexts .....	29
10.4 Teamwork Capabilities.....	29
Section 11: Conclusions.....	30

## **ANNEXURES**

<b>ANNEX 1: Researcher Profiles.....</b>	<b>33</b>
<b>ANNEX 2: ASER Test Samples .....</b>	<b>37</b>
<b>ANNEX 3: English Speaking Test Samples.....</b>	<b>37</b>
<b>ANNEX 4: Summary Results Tables .....</b>	<b>41</b>

## Executive Summary

Arivu is a four-year English learning, digital literacy and life skills project for Class VI, VII and VIII students in select government schools in Hosakote taluk of Bengaluru Rural district, Kolar block of Kolar district and Shivajinagar and K.R. Puram blocks of Bengaluru Urban districts of Karnataka. It is an initiative of Headstreams, a not-for-profit organisation based in Bengaluru, working towards catalysing holistic, positive changes in the school education space, in association with Mphasis. **Arivu's project has three broad objectives – increasing life skills of students, enhancing English language outcomes and sparking curiosity and engagement among students.**



The project was rolled out in September 2015, with approximately 1300 Class VI students in 30 schools across these districts (6 schools in Bengaluru Rural and 12 each in Kolar and Bengaluru Urban). In 2016, in addition to the students who transitioned from Class VI to Class VII, the project worked with the new incoming Class VI batch in the same schools, taking the reach of Arivu to approximately 2600 students.

### Section A: English Language Outcomes

At the start of the project, a baseline assessment of English language skills was administered to 100 percent of students present in the selected 30 schools. The Annual Survey of Education Report (ASER) tool was used for this assessment. The ASER tool

assesses the reading capacity of the student in English w.r.t. upper case and lower case letters, words and easy sentences. Additionally, students are also asked to provide the meanings of the words and sentences they read.

In 2017, a mid-term evaluation of the project was undertaken to map the changes (if any) in English language skills (listening, comprehension and speaking) of these students, when compared to the above ASER baseline. For this, a similar ASER test was administered to the sample cohort. Additionally, a listening comprehension and speaking test, was also administered to the same sample cohort. The latter tested the

PARAMETER	INTENDED OUTCOMES
English language skills	<ul style="list-style-type: none"><li>Familiarity with simple, common, oft-used words in everyday conversation (listening, comprehension &amp; basic spelling)</li><li>Ability to follow simple instructions and conversation</li><li>Confidence in using English</li></ul>
Explore new frontiers	<ul style="list-style-type: none"><li>Spark curiosity to read/learn about other fields (history, geography, culture, science)</li></ul>
Life skills	<ul style="list-style-type: none"><li>Confidence, self-expression, emotional awareness</li><li>Interpersonal and teamwork skills</li></ul>

students in their ability to listen, comprehend and follow instructions and basic questions; and to respond, all in English.

The results from the ASER test revealed that the performance of the Arivu students on all four components was better than the average performance of Class VI and Class VII students across all schools in rural Karnataka, as measured by ASER 2016. This was especially true on the upper and lower case letter recognition tests and the sentence tests. Comparison between baseline results on the

ASER test for the Arivu cohort and current evaluation results revealed a near 100 percent pass rate on the letter component and 10 percent point improvement on the word component pass rates. Maximum improvements were seen in the number of students correctly reading the sentences provided to them. The results also highlighted that the total number of correct letters, words and sentences read in the mid-term evaluation was significantly higher than the numbers in the baseline. For example, the number of students reading all four sentences increased from 50 percent to 77 percent. Finally, not only were there improvements in the number of correctly identified letters, words and sentences, there were also increments in the ability of students to provide meanings of words and sentences. For example, in Shivajinagar and Kolar, a larger number of students could provide meanings for 5 to 6 words, while in K.R. Puram, Hosakote and Kolar, close to 40 percent of students provided the meanings of 7 to 8 words (out of a total of 8 words).

Critically, the speaking component revealed that 100 percent of students could understand and follow basic questions and instructions provided by the facilitator. Thirty seven percent of students could speak grammatically correct, full English sentences on a particular topic given to them (e.g. favourite food, activities performed on a holiday, etc.).

The mid-term stock-taking exercise demonstrates that the Arivu project has indeed helped students become more familiar with simple, common, oft-used words in everyday parlance. Contiguously, this familiarity extends to a slightly deeper level,

with close to 80 percent of students able to spell words. The format of Arivu sessions, of using pictorial illustrations with the words spelled out under the illustrations, could have plausibly contributed to this. Also, the facilitators administering the project speak to the students only in English, and encourage students to respond in English as well. This has facilitated the pick-up of basic conversational skills in English by the students. Having said this, the next focus area for the project should be on deepening the comprehension abilities of the students and working towards the continued provision of the Arivu learning space for the students post-project to ensure sustained proficiency.

## Section B: Life Skills Enhancement

Under the project, the purpose of incorporating elements of life skills is to:

1. *Enhance emotional awareness of students*
  - a. Improve self-awareness/ability to identify emotions
  - b. Improve emotional regulation skills
2. *Enhance interpersonal skills*
  - a. Increase communication/self-expression
  - b. Improve empathic skills
  - c. Inculcate peer-to-peer learning, and enhance teamwork capacities

In 2017, when the stock-taking of the Arivu project was planned, it was decided to evaluate possible life skills outcomes that may have taken place during the last two years in students of Arivu. Accordingly, intensive Focus Group Discussions (FGDs) were conducted in 10 select schools where the project was undertaken. Information was garnered along three main axes:

(a) changes in academic domain (grasp of the English language, increased curiosity and engagement in other subjects);

(b) self-awareness; and

(c) interpersonal skills (including communication and team work capacities). The main reason for undertaking this component of the evaluation was to gain a more nuanced understanding of how the Arivu project has impacted students' lives.

**Feeling confident about English:** One of the primary motives of the project is to equip school students with English language skills. In the Focus Group Discussions (FGDs), students unambiguously stated that they had learnt to speak and write better English, as a result of the activities and use of digital applications. Additionally, they felt that they were able to read better, given that the project had provided the students with storybooks. Contiguously, the enhanced ability and eagerness of the students to speak the language was also demonstrated. For instance, in most schools, students spoke in near complete sentences in English, albeit broken or with a smattering of Kannada. Critically, the students felt that they were able to perform better in other subjects due to enhanced English language skills and were also able to transfer learning from Arivu activities to other activities. For example, activities relating to maps helped them in social studies.

**Changes in Emotional Awareness and Regulation:** Another big impact area has been changes in emotional awareness and regulation of emotions among the students. This largely draws from the fact that the Arivu modules focus on increasing familiarity of words, by drawing upon associated words and emotions associated with the word. For example, to familiarise students with the word 'fort', the module used associated words such as 'king', 'queen', and 'country' and characteristics associated with a fort,

such as 'courage', 'strength', and 'fear'. Once cognisant of these emotions, students felt that they were better able to manage negative emotions, especially anger. Moreover, discussions revealed that stories and the protagonists in them, were powerful agents in heightening emotional awareness.

**Better Teamwork Capabilities:** With regards to communication, students illustrated examples of where they experienced a boost of confidence, owing to the enhancement of their knowledge and skills in various domains through the project. The influence of Arivu activities on interpersonal and social skills was palpable. A vast majority of students stated that they had made more friends. Some mentioned that they were now more helpful towards their friends after hearing stories as part of the project. Also sharing stories with their peers helped them bolster stronger bonds with them. All this had led to better team work capabilities.

**Transfer of Learning:** A critical finding was that students had shared what they learnt during Arivu sessions with parents, grandparents, siblings, friends and even neighbours. Several students stated that they taught their younger sibling by narrating stories or reciting poems, akin to the approach followed in Arivu. This shows that the model adopted by the project was liked and has had an impact on the students, so much so that they felt that others would benefit from it! Also, some students mentioned that they practised what they learned in the sessions. For example, a student had noted down a recipe and went home to make the dish along with her mother!

The FGDs revealed enhancements across academic, social, personal and interpersonal domains. Keeping in mind the social-economic and cultural contexts, Arivu modules can be replicated across other schools in Karnataka.

## Section A

### **HIGHLIGHTING ENGLISH LANGUAGE OUTCOMES IN ARIVU SCHOOL STUDENTS IN KARNATAKA**

KADAMBARI ANANTRAM



## Section 1: Introduction

Arivu is a four-year English learning, digital literacy, and life skills enhancement project for Class VI, VII and VIII students in select government schools in Hosakote taluk of Bengaluru Rural district, Kolar block of Kolar district and Shivajinagar and K.R. Puram blocks of Bengaluru Urban districts of Karnataka. It is an initiative of Headstreams, a not-for-profit organisation based in Bengaluru, working towards triggering holistic, positive changes in the school education space, in association with Mphasis. The work of Headstreams is actuated by the belief that students learn best when they observe, explore and engage actively with that which is to be learned. Therefore, Arivu's project content is designed to spark curiosity and engagement among its students and its delivery is through play-based modules and the use of digital technology (tablet-based modules and applications). The project was rolled out in September 2015, with approximately 1300 Class VI students in 30 schools across three districts (6 schools in Bengaluru Rural and 12 each in Kolar and Bengaluru Urban districts). In 2016, in addition to the students who transitioned from Class VI to Class VII, the project worked with the new incoming Class VI batch in the same schools, taking the reach of Arivu to approximately 2600 students.

The project has broadly three parameters w.r.t. English Language Skills:

- Increase familiarity with simple, common, oft-used words in everyday conversation (listening, comprehension and basic spelling)
- Ability to follow simple instructions and questions
- Confidence in speaking the English language

Arivu sessions are held by resource personnel from Headstreams (facilitators) during regular class hours. To achieve the above-mentioned outcomes, Arivu incorporates pictorial

illustrations, team activities (games, music, dance, skits) and props into project sessions with students. Classroom activities are followed by digital sessions, where students use age-appropriate games and applications on a tablet to reinforce classroom learning. Additionally, take home assignments are also provided to students. Each Arivu module incorporates a combination of these innovative methodologies and devotes attention to the three aforementioned parameters.

### THREE PARAMETERS ADDRESSED IN ONE ACTIVITY: AN EXAMPLE

**Activity:** *Making a fort by cutting along pre-drawn dotted lines.*

**Familiarity with simple words:** recognise & comprehend associated words such as king, queen, palace, country.

**Follow simple instruction:** instructions for undertaking the activity (e.g. cut along the line, colour in blue, have you completed the exercise?) all said in English.

**Communicate in English:** talk about instances where students exhibited characteristics associated with a fort (e.g. strength, courage)

This approach adopted by Headstreams is driven by evidence that shows that people learn better when they are intrinsically motivated, and explore the world interactively and creatively on their own terms. Concretely, what this leads to is (a) better retention and recall of information/concepts presented (b) better grasp of complex academic content and (c) greater confidence to discuss the subject matter.<sup>1</sup>

<sup>1</sup> See Gungah, S. 6<sup>th</sup> September 2013. "Physics is a Story – Lets teach it that way". Physicsfocus. Available at <http://physicsfocus.org/physics-story-teach-way>. Fang,

## Section 2: Mid-term Evaluation

At the start of the Arivu project, a baseline assessment of 998 students<sup>2</sup> across the 30 schools was undertaken to ascertain the ability of students to read and comprehend 'basic' English. The Annual Survey of Education Report (ASER)<sup>3</sup> tool was administered orally to these students.<sup>4</sup> The adjacent box summarises findings from the baseline.

In 2017, a mid-term evaluation of the Arivu project was undertaken to assess changes in English language skills, curiosity & engagement levels, and life skills. This report provides details regarding the first component, i.e. **changes in English language skills** (listening, comprehension and speaking). The evaluation was undertaken with 100 percent of 2015's students (i.e.

### RESULTS OF BASELINE ASER ASSESSMENT (30 PROJECT SCHOOLS)

- **Letter identification:** Most students could identify letters on the test (92% upper case letters and 90% lower case letters).
- **Reading Words:** More than half of the students (63%) could read four out of the ten words given to them.
- **Meanings of Words:** Less than half of the students (45%) could provide meanings of at least four out of the 10 words given to them.
- **Reading Sentences:** Less than half (46%) could read at least two out of the four easy sentences presented to them.
- **Meanings of Sentences:** Only a quarter (25%) could provide meanings of at least two of the four sentences.

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Z. (1996). "Illustrations, text and the child reader. What are pictures in students's storybooks for?" *Reading Horizons*. Vol 37: 130-142. Goodman, K., Maras, L., and Birdswye D. (1994). "Look! Look! Who stole the pictures from the picture books? The basalization of picture books". *New Advocate*. Vol 7(1): 1-24. Garrety, C.M. (2008). "Digital storytelling: an emerging tool for student and teacher learning". Available at <http://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=16780&context=rtid>. Barrett, H. (2006). "Researching and evaluating digital storytelling as a deep learning tool" in Crawford, C. (eds). *Proceedings of Society for Information Technology and Teacher Education International Conference*. Pp: 647-654. Chesapeake, VA: AACE. Dupain, M and Maquire, L. (2005). "Digital storybook projects 101: How to create and implement digital storytelling into your curriculum. Available at [www.uwex.edu/disted/conference/Resource\\_library/proceedings/05\\_2-12.pdf](http://www.uwex.edu/disted/conference/Resource_library/proceedings/05_2-12.pdf). Kadjor, S. (2004). "Enter here: Personal narrative and digital storytelling". *English Journal*. Vol 93(4): 64-68. Goyal, A. 23<sup>rd</sup> May 2016. "Teaching the innovative way". Deccan Herald. Moitra, K. 2014. "Storytelling as an Active Learning Tool to engage students in a genetics classroom" *Journal of Microbiology & Biology Education*. Vol 15 (2): 332-334.

<sup>2</sup> While the assessment was meant to be administered to a 100 percent sample size, only 998 out of 1300 students were available on the assessment day.

<sup>3</sup> <http://www.asercentre.org/Survey/Basic/Pack/Sampling/History/p/54.html>

<sup>4</sup> Components of the test included: letter name identification (upper case and lower case letters), word reading and comprehension, sentence reading and comprehension.

among erstwhile Class VI and current Class VII students who were present on that day).

The evaluation has two components: first, **administration of the ASER test** and second, **administration of a test based on the Arivu module of Headstreams**. It is important to note that all instructions and conversations with the students were in English and they were encouraged to respond and communicate in English.

### 2.1 Administration of the ASER Test

ASER represents a series of simple tests in basic English and arithmetic capabilities, administered to school students aged 3 to 16 years. For English language skills, this contains four components, viz., reading letters (upper and lower case), reading and comprehending short words, and reading and comprehending simple sentences, all designed at the Class I and Class II levels. Students who can provide a minimum number of correct answers in each level move on to the next level.

As aforementioned, at the start of the Arivu project in 2015, a baseline assessment with 100 percent of Class VI students across the 30

schools had been undertaken. In March 2017, the same test used for the baseline assessment was administered to 100 percent of current Class VII students (erstwhile Class VI students) (see Annex 1 for the four samples).

## 2.2 Listening Comprehension and Speaking Test

This component tested the student's ability to **listen and understand simple instructions in English, and to respond in English**. A critical element of the Arivu project is to help students follow simple instructions, questions and conversations, and to encourage them to communicate in English, to support them in overcoming their inhibitions in speaking English. Most students shy away from using the language as it is alien to them. Arivu exhorts students to ask questions, and respond and express themselves in English –

words, sentences or phrases, whether grammatically correct or incorrect! This is a critical first step.<sup>5</sup> So, in Section C, students were asked to speak three sentences in English about a familiar topic (i.e. how they spend a holiday; their favourite food; their favourite festival; or a description of their school). The student is encouraged to speak only in English. In case he/she uses a mix of Kannada and English or responds only in Kannada, a note is made of this.

## Section 3: Sample Data

The mid-term stocktaking exercise was conducted in 30 schools across four blocks of Karnataka: K.R. Puram, Shivajinagar, Hosakote and Kolar. The details of the schools chosen and the student sample sizes are provided in Table 3.1.

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<sup>5</sup> Additionally, informal discussions with teachers during the stock-taking exercise to understand perceived changes in the English class revealed that an overwhelming number of them felt that students were now more forthcoming in responding in English.

Table 3.1: Details of the Sample chosen for Baseline Assessment			
District	Block	School	Sample Strength
Bengaluru (Urban)	K.R. Puram	A. Narayanapura	23
		Chikkadevasandra	10
		Hoodi	13
		K.R. Puram	26
		Kaverinagar	25
		Munnekolala	19
		<b>Sub-Total</b>	<b>116</b>
	Shivajinagar	B.Channasandra	15
		Benninganahalli	20
		Ganganagar	29
		J.C. Nagar	16
		Kaval Birasand	22
		Murphy Town	8
		<b>Sub-Total</b>	<b>110</b>
<b>Bengaluru Total</b>		<b>226</b>	
Bengaluru (Rural)	Hosakote	Dasarahalli	13
		Doddahullur	32
		GGMS	26
		Nandagudi	50
		Shivanapura	58
		V.V Extension	25
	<b>Hosakote Total</b>		<b>204</b>
Kolar	Kolar	Bellur	12
		Darga	24
		Harati	23
		Kyalanur	47
		Millathnagar	16
		Narasapura	27
		Rahmathnagar	22
		S.S. Makhan	17
		Sugatur	22
		Sulur	37
		Vemagal	32
		Vokkaleri	32
	<b>Kolar Total</b>		<b>311</b>
GRAND TOTAL			<b>741</b>

## Section 4: Results from the ASER Test

The results presented here pertain to the common pool of students who appeared for both the baseline and current evaluation. This figure equals 741 students. Two comparisons were undertaken:

(a) Changes in ASER scores of Karnataka's Class VI and Class VII students in 2016 with

- *Arivu students pass rates significantly better than ASER Karnataka pass rates*
- *Maximum improvement seen in sentence level, indicating that many students at word and letter levels in the baseline, have become fluent enough to read sentences.*
- *Shivajinagar, which had high baseline word and sentence scores, shows little difference in this evaluation.*

changes in ASER scores of Arivu's cohort from baseline to current evaluation

(b) Changes in scores across each component of the ASER test (i.e. letter, word and sentence level) from the baseline to the current evaluation in Arivu's cohort.

#### 4.1 Comparison of ASER Scores

Table 1 highlights the variation in student reading levels in English for Class VI and Class VII across all students in Karnataka in the year 2016. Among students in Class VI, 6 percent could not even read upper case letters. Performance improved in Class VII, with this number falling to 3 percent. Performance on other levels (i.e. those reading upper case letters, lower case letters and simple words) witnessed minor improvements, with more students clearing the lower levels of the test. Improvement was highest in the sentence level, with a 6 percent increase.

Table 1

Reading Parameters	Class VI (%)	Class VII (%)	Difference (% points)
Not even upper case letters	5.8	3.5	-2.30
Able to read upper case letters	8.6	8.1	-0.50
Able to read lower case letters	21.6	19.6	-2.00
Able to read simple words	28.6	27.3	-1.30
Able to read easy sentences	35.5	41.6	6.10

Table 2 (below) provides details on Class VI (baseline) and Class VII (current evaluation) performance of the sample students in the Arivu schools. What we find is that improvements among Arivu school students are higher than the changes in the reading levels of Class VI and Class VII students across Karnataka (rural) across the upper case, lower case and sentence level. That is, a higher

percentage of students passed the reading levels. For example, in the sentence category, an improvement of 13 percent points was seen, as against the 6 percent points increase under the Karnataka results. The word level showed the least improvement, of only two percent points (from 10 to 12 percent points in the baseline and current situation respectively). However, this probably reflects the increase in number of students who moved from letter levels to the word level, and still reflects the overall significantly better performance of the Arivu cohort over the Karnataka average.

Table 2

Reading Parameters	Baseline (%)	Current evaluation (%)	Difference (% points)
Not even upper case letters	7	2	-5.00
Able to read upper case letters	6	2	-4.00
Able to read lower case letters	32	26	-6.00
Able to read simple words	10	12	2
Able to read easy sentences	45	58	13.00

#### 4.2 Overall Results: Comparisons between Baseline and Current Evaluation among Arivu Schools

Salient features of the baseline performance include:

- Students performed extremely well on both the upper and lower case letter component. An average of 93 percent completed the level.
- Of the students who passed the letter level, 63 percent completed the word component, correctly identifying four or more out of the eight words provided. Students in Shivajinagar performed the best (75 percent completed

the level). However, for the rest of the blocks, the average pass rate was 61 percent.

- What is observed is that once students pass the word level, passing the sentence level was less problematic. Here too, Shivajinagar schools led the sample, with 89 percent completing the level.
- There is almost a 100 percent pass rate in the upper case and lower case letter levels.
- Of those who passed the letter levels, 73 percent completed the word level, a 10

percent points improvement from the baseline. Largest improvements were seen in the Kolar schools, followed by K.R. Puram. Little change was seen in schools in Hosakote.

- Largest increments were observed in the sentence level. K.R. Puram and Kolar had the highest pass rates of 95 and 96 percent respectively, thereby exhibiting the maximum positive change from the baseline.

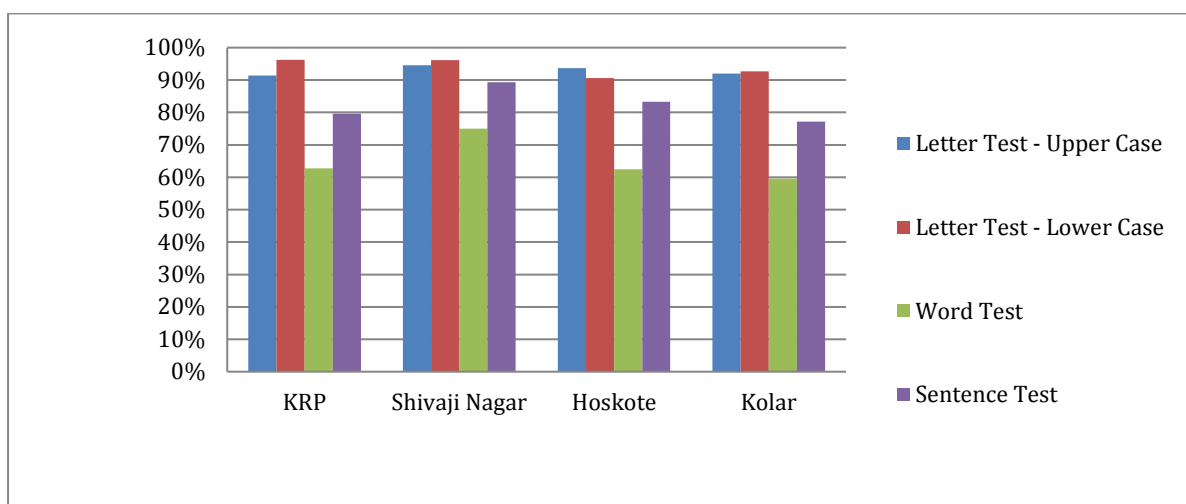


Figure 4.2 (a): Block-wise Baseline performance in the ASER test

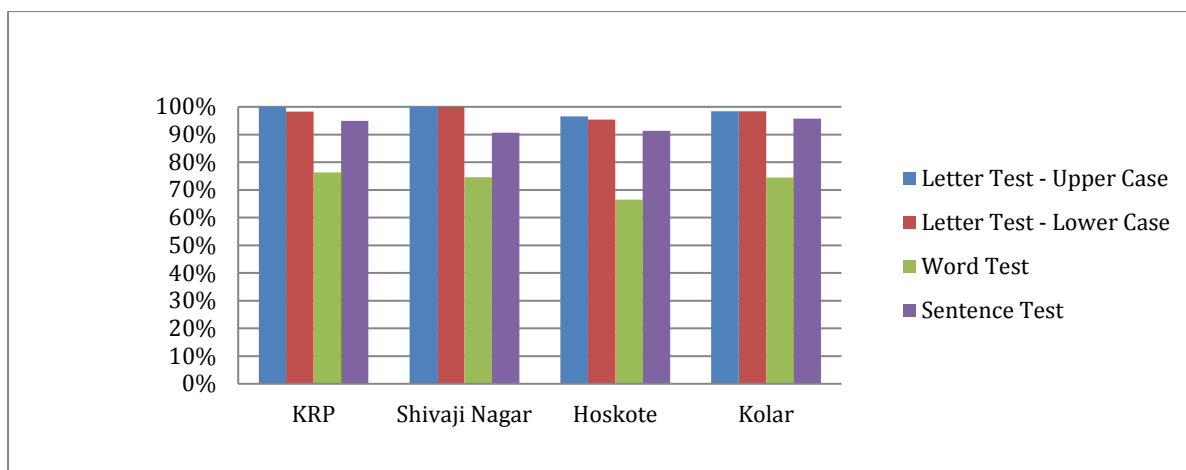


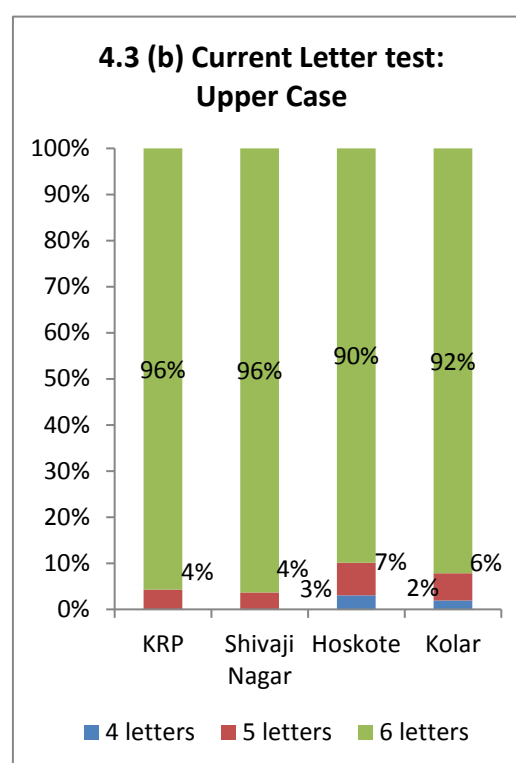
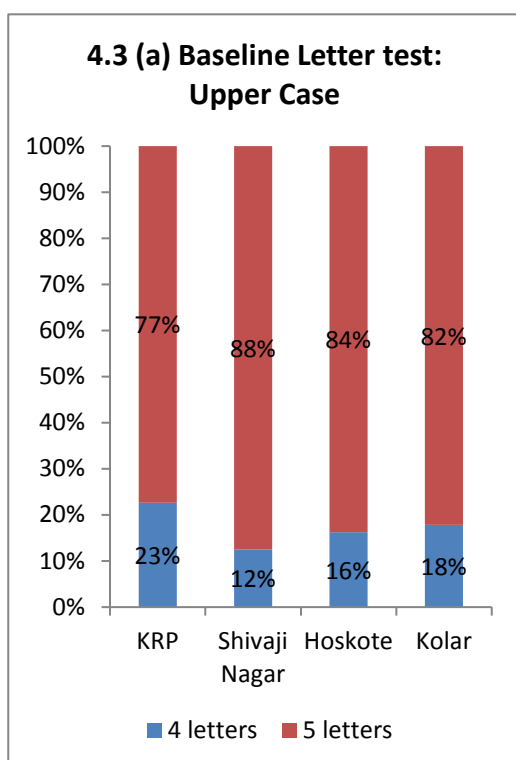
Figure 4.2 (b): Block-wise Current performance in the ASER test

### 4.3 Component-wise Results: Comparisons between Baseline and Current Evaluation among Arivu Schools

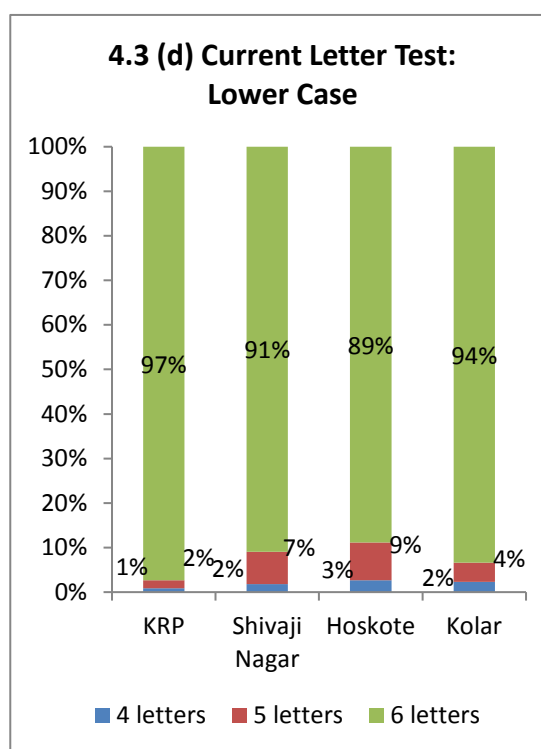
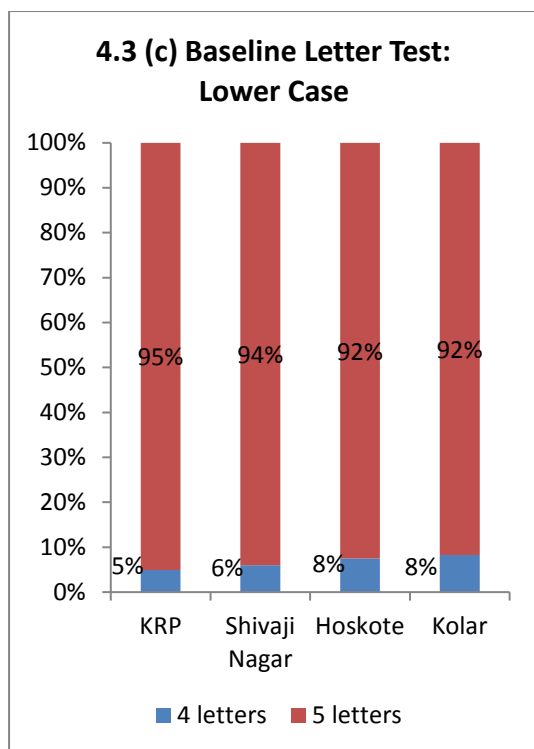
- *Increase in number of upper case and lower case letters read across all four blocks.*
- *Number of students reading all eight words increased by 5 percent points.*
- *Increase in number of students reading all four sentences from 50 % to 77%.*

The following is a component-wise comparative summary of baseline and current results:

- In the upper case test, there is a significant increase in the correct identification of the maximum count of letters, i.e. from 4 to 5 and 6 letters (Figures 4.3 a and b). In the baseline evaluation, on average, while 17 percent of students could answer upto the 4 letter level correctly, just enough to pass the
- A similar situation is seen with regard to the lower case component. In the baseline, around 93 percent of students could identify 5 letters (out 8 letters) correctly, with no student being able to read 6 letters. In the current scenario, 92 percent, again an overwhelming majority, read 6 letters! (Figures 4.3 c and d).



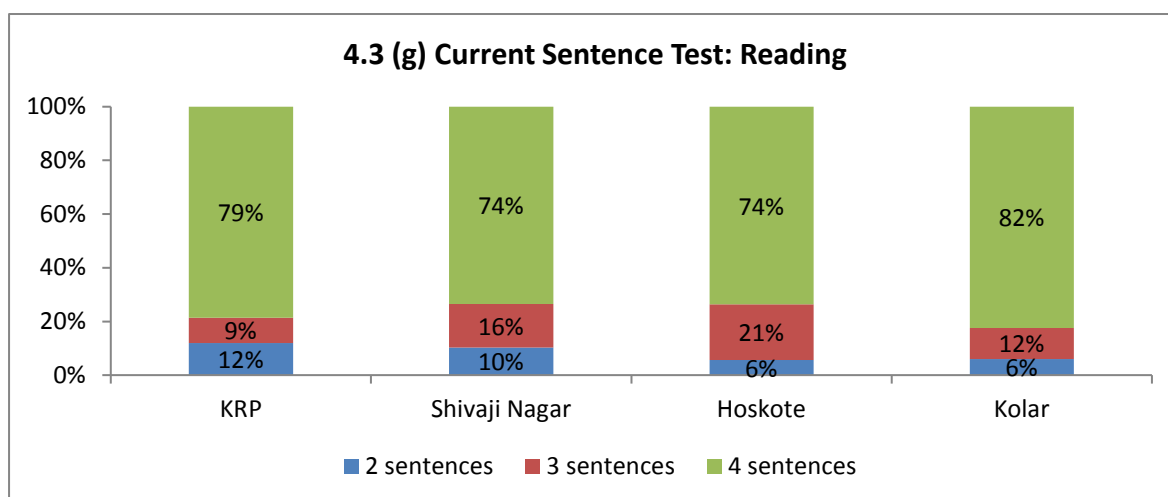
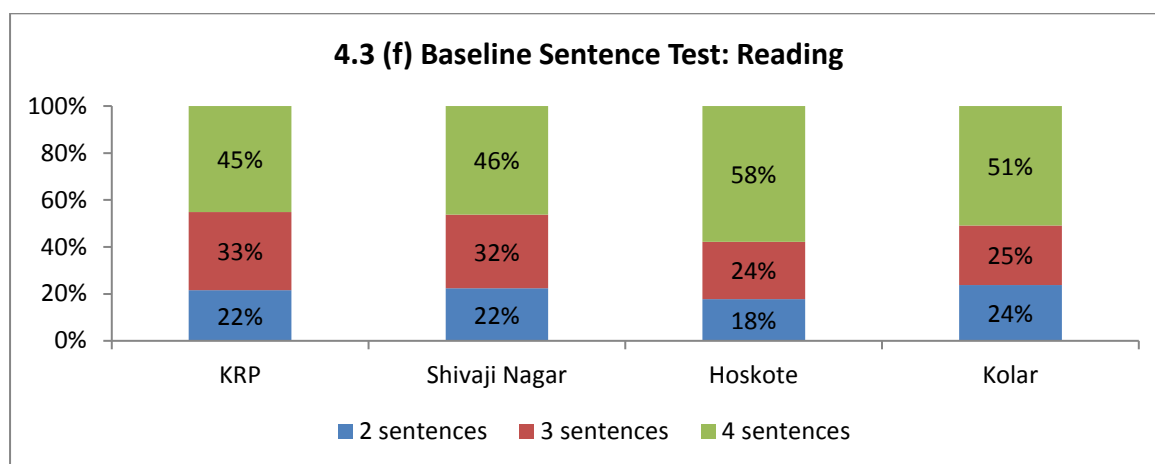
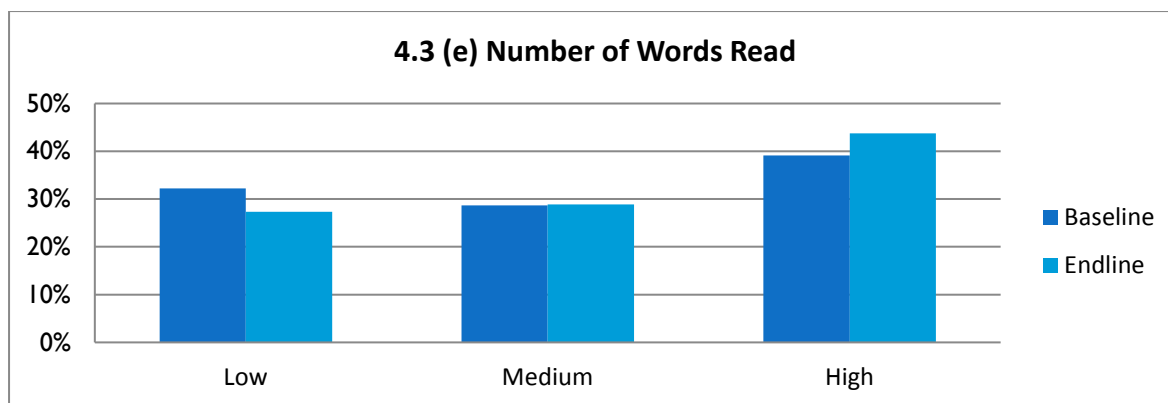




- In order to understand changes in the number of words read, it was decided to categorise responses into 'low' (reading 4 words correctly), 'medium' (5 to 7 words), and 'high' (all 8 words correctly). We find that the percent in the low category seems to fall (32 percent in the baseline to 27 percent in the current evaluation). However, this can easily be explained in the increase in the number of students reading all words correctly, which rose from 39 to 44 percent! So students who were able to read only 4 words a couple of years ago, are now comfortable reading many more words. The number of students reading 5-7 words remained the at 29 percent, suggesting both movement of students from this category to the reading-all-words-correctly category and movement from the reading-only-4-words category into this medium category. Figure 4.3 (e) illustrates this.

- In the sentence level, in the baseline, we find that 21 percent could read 2 sentences, 28 percent could read 3 sentences and 50 percent could read all four sentences correctly. In the current situation, we find decreases in the percentages of students reading 2 and 3 sentences correctly (8 percent and 14 percent respectively) and a massive increase of 27 percent points in students reading all four sentences correctly (77 percent). See Figure 4.3 (f and g) below. Once again, these numbers reflect the movement of students as they become more accomplished in using English Language Skills. The decreases in the students reading 2 and 3 sentences correctly is because students who could do this earlier are now reading four or more sentences correctly!





#### 4.4 Changes in Comprehension

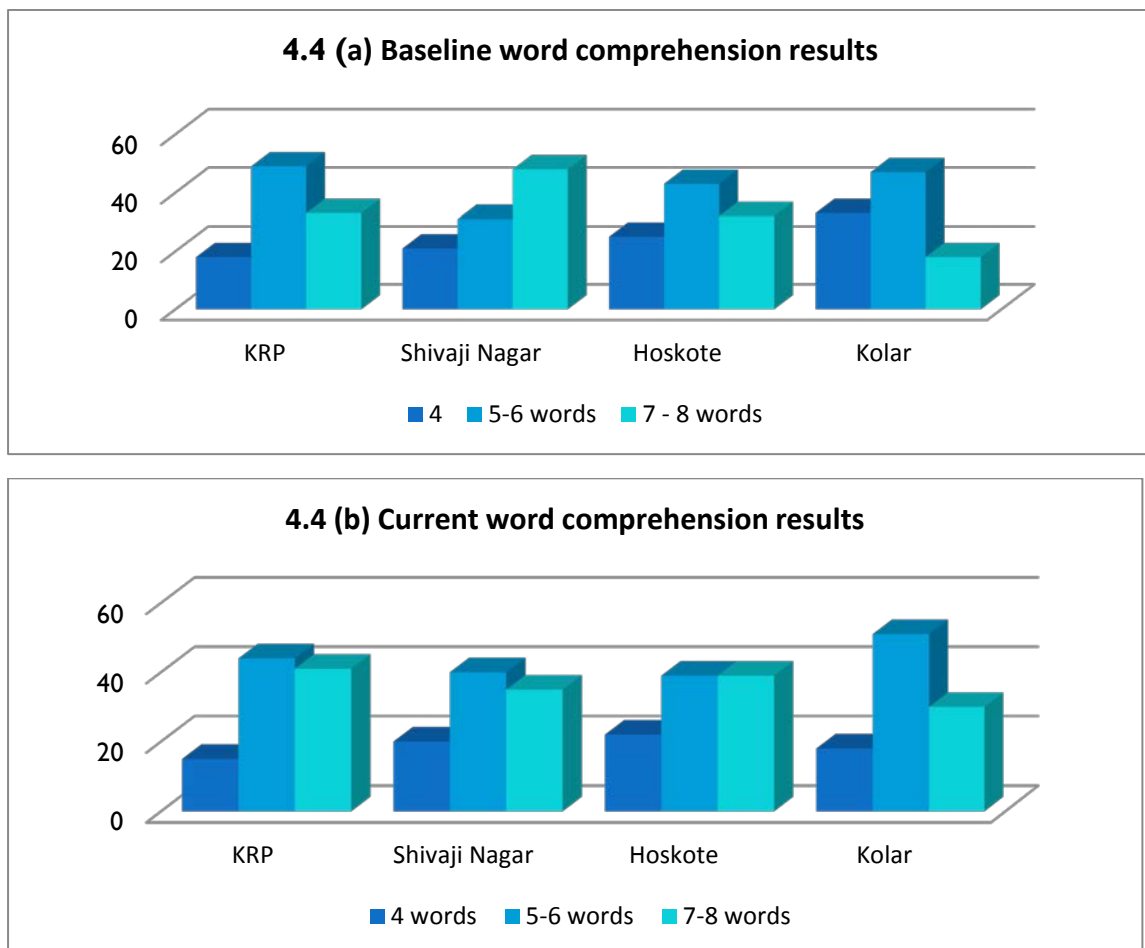
- *Movement in ability to provide meanings for words, from 4 words to 5-6 words in Shivajinagar and Kolar; from 5-6 words to >7 words in K.R. Puram, Hosakote and Kolar.*
- *Increase in number of students providing the meaning of 3 and 4 sentences.*

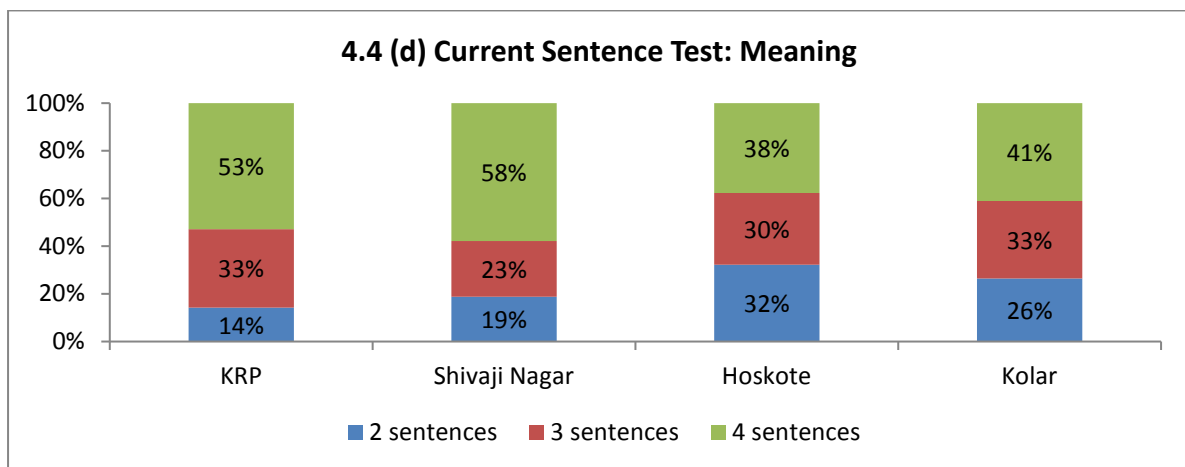
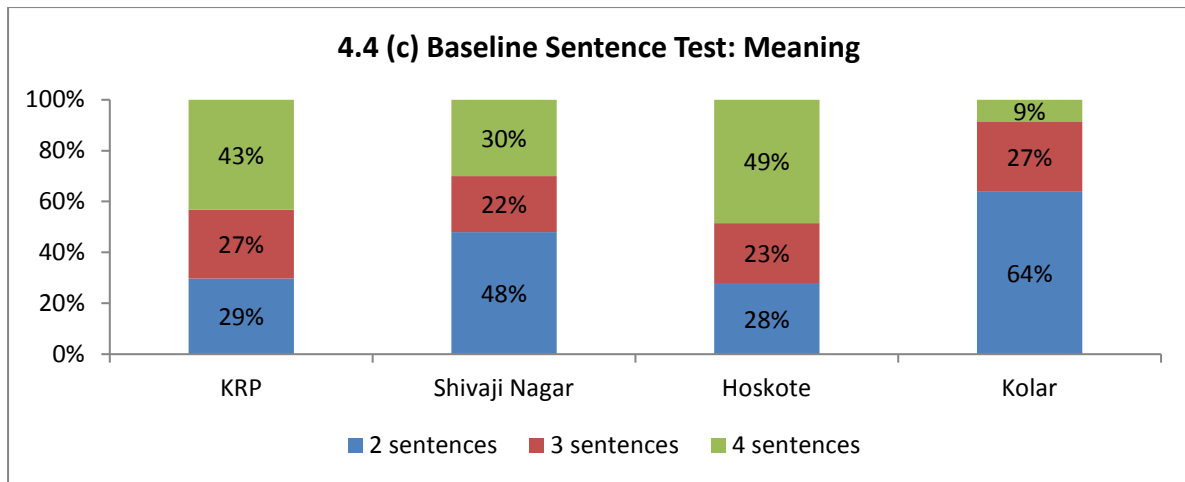
Section 4.3 indicates an increase in the total number of letters, words and sentences correctly identified from the baseline. However, it is important to know whether comprehension levels of the students

changed, i.e. how the ability to provide meanings of the words and sentences read differed from the baseline. For both the word and the sentence level, students were asked to provide or explain the meaning (in Kannada or English) that they had correctly read out in the baseline.

The responses of correct meaning provided were categorised into 'low' (4 words), 'medium' (5- 6 words), and 'high' (7 and above words). Figure 4.4 (a and b) shows that the overall performance in providing correct meanings has gone up for the higher number of words (medium and high) in all the blocks.

Figure 4.4 (c &d) represent the improvement over baseline performance in giving the correct meanings of the sentences read. Across all four blocks, there is an increase in the number of students providing correct meanings of 3 and 4 sentences with a concomitant decrease in the number of students providing the meaning of only 2 sentences correctly. Largest increases were registered in Kolar, where in the baseline nine percent students provided correct meanings of 4 sentences while in the current test it has risen to 41 percent.





## SECTION 4: SUMMARY & KEY TAKEAWAYS

- ✓ Improvements among Arivu school students was significantly higher than those of Class VI and Class VII students across Karnataka (rural) at the letter and sentence levels (in the sentence category, an improvement of 13 percent points as against 6 percent points).
- ✓ Overall improvements in the ASER test for Arivu school students from baseline to current evaluation with near perfect scores in the letter component, 10 percent points improvement in the word component, and highest increments in the sentence level.
- ✓ The number of students reading 5-8 letters and 3-4 sentences increased across all blocks.
- ✓ Comprehension of words and sentences also showed significant improvements. However, these increments were varied across blocks, with Kolar leading the way on both counts.

*Table 4.4: Summary performance: Baseline versus Current*

Test Component	Baseline	Current
<b>Letter test - Upper case</b>	93%	98%
<b>Letter test - Lower case</b>	93%	98%
<b>Word test</b>	63%	73%
<i>Meaning</i>	58%	89%
<b>Sentence test</b>	81%	94%
<i>Meaning</i>	61%	88%

- The Arivu project seems extremely promising in facilitating English Language Skills, enabling reading and comprehension abilities. However, for true proficiency to set in, it is necessary that the students continue to have the environment of learning that Arivu provides. Steps to enable and sustain this would be a worthy challenge.
- The Arivu project is helping students become familiar with words – listening and reading. Greater attention can now be devoted to comprehension of words and sentences.

## Section 5: Results from the Listening and Speaking Test

As mentioned in the introduction, a test was introduced to the students to test their listening and speaking skills. As outlined before, the modules focused on:

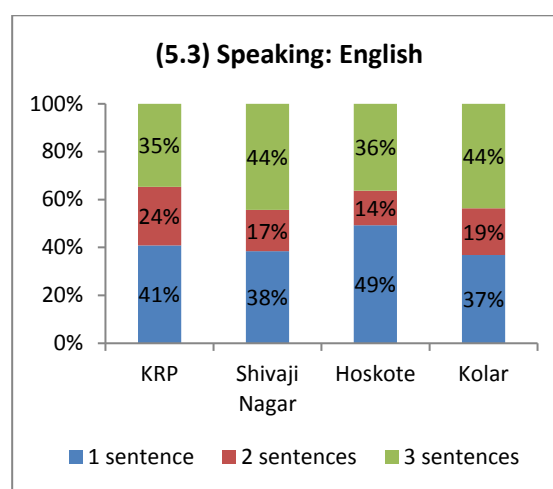
- Improving listening & comprehension of simple, common, oft-used words in everyday conversation
- Ability to follow simple instructions and conversations in English, and have confidence in using English to respond

### 5.1 Results from the Listening Comprehension and Speaking Test

In this component, students are asked to speak three sentences on a topic given to them in English. The facilitator provides instructions to the student in English, asking him/her a question (e.g. “I would like to know what you do on a holiday – a day when you do not have school. Can you tell me three things that you do?” or “What is your favourite food? Can you tell me three things about your favourite food?”). The facilitator then gives the student 10 seconds to respond. In case the student does not respond, he/she is asked whether the question should be repeated in

Kannada. If yes, a note is made of this. A note is also made of whether each sentence is said in (a) complete English (b) partial/mix of English and Kannada and (c) only Kannada.

Data revealed that 100 percent of the students could understand the questions and instructions given to them by the facilitator in English! An average of 37% were able to respond in grammatically correct English sentences. Of these, 41 percent spoke one sentence completely in English, 18 percent and 40 percent spoke two and three sentences in English respectively (Figure 5.3).



## SECTION 5: SUMMARY & KEY TAKEAWAYS

- ✓ Critically, 100 percent of students could understand the questions and instructions framed by the facilitator, which were all in English.
  - ✓ On an average thirty seven percent of students responded only in English! Shivajinagar and Kolar led the way here!
  - ✓ A very low share of students (15 percent) attempted all three sentences in a mix of English and Kannada. Kolar tops this category with 24 percent of students.
- 
- **Akin to the ASER results, the listening comprehension and speaking module also reveals that the project is helping students become familiar with words.**
  - **The facilitators administering the project speak to the students only in English, through a series of questions and answers. This seems to have helped students pick up the basic of conversational skills.**

## **Section B**

### **HIGHLIGHTING LIFE SKILLS OUTCOMES IN ARIVU SCHOOL STUDENTS IN KARNATAKA**

DR. RAJANI KONANTAMBIGI

## Section 6: Introduction

Arivu is a four-year English learning, digital literacy, and life skills enhancement project for Class VI, VII and VIII students in select government schools in Hosakote taluk of Bengaluru Rural district, Kolar block of Kolar district and Shivajinagar and K.R.Puram blocks of Bengaluru Urban districts of Karnataka. It is an initiative of Headstreams, a not-for-profit organisation based in Bengaluru, working towards triggering holistic, positive changes in the school education space in association with Mphasis. The work of Headstreams is actuated by the belief that students learn best when they observe, explore and engage actively with that which is to be learned. Therefore, Arivu's project content is designed to spark curiosity and engagement among its students and its delivery is through play-based modules and the use of digital technology (tablet-based modules and applications). The project was rolled out in September 2015, with approximately 1300 Class VI students in 30 schools across three districts (6 schools in Bengaluru Rural and 12 each in Kolar and Bengaluru Urban districts). In 2016, in addition to the students who transitioned from Class VI to Class VII, the project worked with the new incoming Class VI batch in the same schools, taking the reach of Arivu to approximately 2600 students.

This part of the report seeks to comprehend the learnings w.r.t. **engagement levels and life skills acquired** by Class VII students (formerly Class VI) in 10 select schools where the *Arivu* project has been in use for the past two years. Under the project, the purpose of incorporating elements of life skills is to:

- 1) *Enhance emotional awareness of students*
  - a) Improve self-awareness/ability to identify emotions
  - b) Improve emotional regulation skills
- 2) *Enhance interpersonal skills*
  - a) Increase communication/self-expression
  - b) Improve empathic skills

- c) Inculcate peer-to-peer learning, and enhance teamwork capacities

Arivu sessions are held by resource personnel of Headstreams (facilitators) during regular class hours. To achieve the above-mentioned outcomes, Arivu incorporates pictorial illustrations, team activities (games, music, dance, skits) and props into project sessions with the students. Classroom activities are followed by digital sessions, where students use age-appropriate games and applications on a tablet to reinforce classroom learning. Additionally, take home assignments are also provided to students. Each Arivu module incorporates a combination of these innovative methodologies and devotes attention to the parameters outlined above.

This approach adopted by Headstreams is driven by evidence that shows that people learn better when they are intrinsically motivated, and explore the world interactively and creatively on their own terms. Concretely, what this leads to is (a) better retention and recall of information/concepts presented (b) better grasp of complex academic content and (c) greater confidence to discuss the subject matter.

## Section 7: Mid-term Evaluation

In 2017, a mid-term evaluation of the Arivu project was proposed to understand changes in English language skills, curiosity & engagement levels, and life skills. A qualitative enquiry through Focus Group Discussions (FGDs) was undertaken (one FGD per school), whereby students conveyed their opinions on aspects relating to the project, and their experiences. Such a deep-dive information gathering exercise is critical to garner a nuanced understanding of how the project affected students' life.

### 7.1 Methods

A semi-structured interview module was designed, for administration in FGDs with students. The interview design focused on



garnering perspectives and experience of students regarding play-based learning and the use of digital modules. In addition, **issues of emotional and cognitive awareness, creativity, engagement, peer-to-peer learning, and self-awareness** were broached.

Each of these FGDs comprised 10-11 students. The FGDs were facilitated by two external facilitators. The students were apprised about the FGD format and the purpose for which it was being conducted. Students also consented to an audio recording of the discussions.

Audio recording was transcribed into Kannada and then English. Careful scrutiny of the data threw up some common emerging themes. These include changes in:

- The academic domain (grasp of the English language and increased curiosity and engagement about other academic subjects)
- Emotional awareness
- Interpersonal skills

Data was then arranged under these overarching themes and further analysis was done and presented.

## Section 8: Changes in the Academic Domain

- *Improvements in ability to understand English*
- *Students showed the confidence to speak in English during the FGD, albeit grammatically incorrect at times*
- *Enhanced reading ability – through provision of storybooks as part of the programme*
- *Increased capacity to read has a multiplier effects on learning across other subjects*
- *Application of activities undertaken as part of Arivu modules (e.g. drawing of maps) used in other*

### 8.1 Improved Grasp of the English Language

One of the primary motives of the Arivu project is to equip school students with English language skills – listening, comprehension, following simple instructions and questions and responding (as far as possible) in English. Students unanimously agreed that they had learnt to speak and write better English through activities undertaken as part of the Arivu sessions. They were able to identify various objects in the classroom, and state the English names for the same. As one of the students voiced, *“I was in a private school earlier. There was no English there. Then I came to this school where Arivu lessons are taught, and now I know both Kannada and English.”*

Another child spoke of how their English reading abilities had also been enhanced through the project.

*“At first we did not know how to read English. Now they give us storybooks, and we are able to read that. Now we read many books.”*

Contiguously, several students stated that they did not read too many books earlier; after the project, they had started reading books in their free time.

Their enhanced ability, and also eagerness to speak the English language, was demonstrated in the FGDs as well. In most schools, the students at once agreed that they would speak in English for the discussion, and were seen to attempt speaking in complete sentences in the language, albeit with a smattering of Kannada. Some students even mentioned not liking English before the initiation of the project, but the that the project had changed that aspect for them. As one of the students voiced:

*“I couldn’t talk in English before, now I can. ...Keep coming to our school so that we can keep learning English.”*

The students opined that English was essential to secure a career, and that the

activities had helped them in learning the same. One of the students illustrated the process which was used by the project facilitators to teach them English words:

*“Akka (referring to Headstreams facilitator in Kannada) explains the English words in Kannada. For example, in Kaverinagar, she points out ‘ka’, she explains it as ‘ka’ (written in Kannada).”*

## 8.2 Enhanced Digital Literacy

The Arivu project’s second important motive is promoting digital literacy and learning among students through the usage of tablets. In a typical Arivu session, an activity class is followed by a digital-learning class, where each student has access to a tablet wherein they explore and experience different age-appropriate applications, games, puzzles and videos which reinforce the learning in class. The students said that they enjoyed the sessions with the tablet greatly. They added that it not only developed a better comprehension of the concepts taught to them through classroom activities, but also helped develop technology-related skills like sending electronic messages.

## 8.3 Influence on Other Academic Subjects

Interestingly, the students put forth the observation that they had improved in almost all the subjects owing to a better capability to read English. One of the students explained:

*“Now, learning is easy for all the subjects. ...We are able to read well, and hence study well. Our grades have improved.”*

This was corroborated in informal discussions that Arivu team members had with the teachers on student performances, where teachers said that students’ scores had improved across subjects, particularly English and Maths. Another child spoke of how his interest in studying had been kindled by Arivu: *“Arivu makes us happy... Earlier I did not study. After Arivu has come, I have started studying.”*

Through the focus group discussions, it was found that the influences of the Arivu project were felt on other subjects taught at school. Some of the students explained that they were able to transfer learning from Arivu activities to other areas. For example, activities relating to maps helped them in social studies, and drawing activities aided in science subjects.

## 8.4 Influence on Creativity

In the course of the focus group discussions, students were given some activities to perform. One example is when students were asked to put up a short skit. It was observed that the students worked together as a group to develop the characters and a storyline for the skit in a very short span of time. In one instance, they even performed a skit without any preparation. Furthermore, when the students were given activities like finding multiple uses for an object excluding what it was originally used for, students were able to come up with myriad uses for the same. For example, when given a duster, the students used it as an iron, a scrubber to clean vessels, a talcum powder applier, and a bar of soap, among others.

## Section 9: Changes in Emotional Awareness

- **Greater cognisance of emotion and ability to regulate emotion, especially anger.**
- **Stories as part of Arivu module have a significant impact on emotional awareness and subsequent behaviour of students.**
- **Greater awareness on how to channel anger and diffuse a situation of conflict (persuasion, humour, working together).**
- **Communicating with friends and siblings to deal with emotions better.**

### 9.1 Identification of Emotions

Students were able to identify emotions as and when they experienced them. They were able to recount a host of instances where they felt a particular emotion. For example, happiness, when they went for movies with their families, went for picnics with friends, or won a prize; sadness, when they were scolded by their parents or obtained low scores on a test; scared, when they were alone at home or when it was dark; and angry, when someone fought with them, scolded them without reason, or even for reasons like disturbing them while they were watching television. As can be seen in the following section, this ability to identify emotions has helped students tailor appropriate, healthier responses to the same.

### 9.2 Emotional Regulation

Students reported to being able to manage negative emotions, especially anger. For example, one of the students elaborated on how they dealt with a situation where someone provoked them:

*"If someone is going to hit me, I tell them, 'Please don't do that, it will hurt.' I don't shout or beat them. ... then they stop."*

Some of the students mentioned alternative ways to channelize anger, such as through laughter, and even through working with one another:

*"We get less angry now because we work together. We do our homework together, and teach each other. And so we are less angry."*

Another child mentioned:

*"Now whenever we get angry, we count to five. But we do not beat. ...If someone makes a mistake, don't get angry and beat them; call them and talk to them... we should learn to forgive."*

One of the songs that the students had learnt through the Arivu digital session was about counting one to five when one felt angry. It was interesting to note that the child had imbibed the message of the song and shared it as a response to an emotional challenge.

Students also mentioned positive ways of coping with anger, and even sadness, for example, by speaking to close ones like friends or siblings.

### 9.3 Stories, as Part of Arivu Curriculum, are Powerful Agents of Change

It was brought forth that the stories narrated to students had had a significant impact on them. The students not only retained the stories in their memories, but also reflected upon them. They thought about the various characters, how they were similar or different to them, and what they could learn from them. In the focus group discussions, students exemplified this by recounting the instances which taught them various aspects. For example, one of the students recalled:

*"I like a girl in one of the stories. She does not get angry or shout at anyone, and loves and supports her brothers. ... I am trying to be like her. I love and support my brothers too."*

Another child spoke of how a story about animals in the jungle had helped him become assertive; he had learnt to say "No" when he perceived something to be wrong and did not wish to do it. Yet another spoke about how corporal punishment was wrong, and he

would not engage in it; this is of special importance as students referred to it multiple times:

*"I do not beat others. When I help other students in studies, I speak to them patiently. If they become frightened that I may beat them, they will not learn. If they learn without fear, they will learn easily. Otherwise they will be afraid of making mistakes or getting punished, and not be able to learn well."*

Students also mentioned that the activities had inculcated the quality of helpfulness within them. They spoke of how they would work upon the homework activities together, and hence would end up helping each other, a virtue which had grown to remain with them. Students also spoke of helping peers, and even students from lower grades, in completing their homework:

*"Especially when we are doing homework, they (students from lower grades) come to us and ask us (for help). We help them... We also write for them on paper sometimes."*

Another child narrated:

*"A girl studying in third standard came and told me that she did not know maths. I helped her. Now she comes to me whenever she has doubts."*

## Section 10: Changes in Interpersonal Skills

- ***Sense of confidence owing to knowledge and skills in various domains enhanced through Arivu activities.***
- ***Increase in number of friends made and bonds forged .***
- ***Use of play (stories and poems) in helping younger sibling with homework.***
- ***Transfer of learning to students from non-Arivu schools.***
- ***Practise of what is learnt during sessions at home. E.g. trying new recipes, gardening.***
- ***Greater teamwork between students.***

### 10.1 Enhanced Confidence

Students illustrated examples of where they experienced a boost in the sense of accomplishment, and hence, self-confidence, owing to their knowledge and skills in various domains enhanced through Arivu activities. For example, one of the students narrated in the focus group discussion:

*"I didn't know how to (speak English) earlier. Now, I have learnt it. My teacher tells me that I know so much now, I can even teach others. ... (It makes me feel) very happy."*

The Arivu project also has a facility where students can give missed calls on a given phone number and listen to songs. It was brought to fore that almost all the students had called on the number, and continued to be eager to call on the same; they did not feel shy. This may also be attributed to the anonymity provided by the medium, which allows students to use it for their enjoyment without having their names or identities revealed. Some students said that after the project, they had developed the self-reliance and courage to fight for what they felt was right, or if they saw someone doing something wrong. One of the students even mentioned that she had been scared to ride a bicycle earlier, but had now found the self-assurance to do so.

### 10.2 Interpersonal Skills

The influence of Arivu activities on interpersonal and social skills was palpable to all the students interviewed, and they articulated the same in the focus group discussions. A vast majority of students responded that they had **made more friends** following the commencement of the Arivu program. They mentioned various learnings from the project which had aided them in achieving the same. For example, one child said he had learnt that one must not disturb while others were speaking:

*"If you laugh at others, they will not like it. They will stop talking. So we should allow others to talk."*

Another child said that he had begun helping his friends more after partaking in the project activities. Some students **mentioned that sharing stories they heard in Arivu sessions with their peers helped form bonds with them.** To quote a child:

*"I have a lot of friends because I now know a lot of stories I can tell them. Last year I had a few (friends)... now many. Earlier two, now ten, more than ten... maybe 30..."*

The said aspects had helped students cement better relationships with peers, and hence forge greater number of friendships.

Some project activities were used to illustrate the point. For example, one activity required the students to state their own opinion, and then interview others to collect their opinions. All the students mentioned enjoying this activity, and stated that it assisted them in learning to ask questions and starting conversations. They mentioned how they now felt confident to approach others in order to strike a conversation with them, like in a child's words:

*"Earlier, others would come to talk to us; now we can go and talk to others."*

### 10.3 Sharing of Knowledge and Transfer of Learning Across Contexts

Students stated that they shared what they learnt during Arivu sessions with parents, grandparents, siblings, friends and even neighbours. Many students brought forth the aspect of teaching a younger sibling by narrating stories and reciting poems to them. This is an important finding when studying it from the perspective of knowledge acquisition for the younger sibling. An older sibling is perhaps just the right age to assist the younger one to accomplish tasks in their zone of proximal development. This is as opposed to a parent or an adult, who operates at a vastly different cognitive level as compared to the younger child, and teaches this child from that plane of cognition. Further, students also transferred learnings to their classmates and peers, hence also strengthening social ties.

Arivu activities had generated interest among students on other schools where Arivu was not implemented. This made them approach students from Arivu schools to glean more information about the same, as a child elaborates:

*"I speak to them (students from other schools) now. They come and talk to us... to ask us about the learning in the sessions."*

The students also reported practising what they learnt in the project sessions back at home. For example, in some sessions, students were provided recipes, which they noted down in their notebooks. Many students said that they went home and made the dish along with their mothers. In the process, they also helped in other household tasks. One of the students said that after completing a worksheet on 'home gardens', she too had begun a small garden in front of her house.

### 10.4 Teamwork Capabilities

Since a great number of Arivu activities involve teamwork, students undividedly agreed that they had improved in terms of working as one unit, a team. Moreover, they also enjoyed and looked forward to team activities now.

Students spoke of the teamwork process, how it had evolved over the project sessions. Earlier, they would fight with one another when they were given a task to perform co-operatively; however, now they had learnt to work with each other, breaking gender differences. One child explained the same:

*"Earlier we used to fight. Girls used to work separately and boys separately... But now we work together."*

They also realized the benefits of working in a team: one could learn from another, one received help from another, and one could also help another to attain a common goal. For example, one of the activities where students had to work in unison to accomplish a task was wherein they had to build a tower out of pipes and tapes. Here, one of the students explained:



*"It was not possible for one person to do it alone (build a tower). It is just not possible. But a group, a group can do it together."*

They opined that teamwork also provided them with a sense of accomplishment and enjoyment, as articulated by one child:

*"We learnt to do it (make a tower of straws) ourselves... (We learnt) team work and got joy from doing the activity, because we did it ourselves... We learnt to do it and had fun."*

This teamwork can also be said to have percolated to their lives outside school as derived from some students's narratives. On being asked if they engaged in teamwork even outside of school, one child spoke of looking after pigeons along with a group of friends:

*"I keep pigeons as pets with a group of friends. There are ten to twelve of us... We look after the pigeons together, for enjoyment."*

## Section 11: Conclusions

From the findings through the focus group discussions, it may be concluded that students had gained much from the life skills intervention. There were enhancements across domains: social, personal, interpersonal, and academic. Hence, it may be said that the objectives of the interventions were met to a fairly large degree. However, executing such a project in schools to foster learning through play comes with its own set of challenges. Firstly, the project unfolds within a particular sociocultural context. It is a context wherein strict disciplinary measures

are employed to teach and discipline students, and where students must follow certain invariable regulations. Not only are these habits imbibed and practised by the students themselves through conscious or unconscious imitation, it also makes it difficult for the project to function optimally.

Additionally, for any learning to be reiterated until it is internalized, it becomes of importance to expose the child to the aspect being taught in multiple environments. This is of great importance as the project undertakes to teach students a language which is effectively alien to them. This means that learning must occur not only in schools, but also at home. Though the project does take into its ambit home-based activities and homework, it cannot be ascertained how much of input the child receives outside the classroom. Importantly, as English is not the native language of the households the students come from, emphasizing teaching from the sessions within homes could prove to be difficult. These are some of the factors to be addressed while considering future directions for the project.

### Overall Responses towards the Arivu Project

Students stated that they greatly enjoyed the Arivu activities as it was unlike their regular classes, and encompassed learning through enjoyable activities, and were downcast that the sessions may not continue after class 8. They also enjoyed the homework activities given to them, and ensured they completed them. They considered the Arivu facilitators to be their role models, and reported "wanting to become like them." The facilitators expressed love and care, and did not use any punitive methods, which was of great appeal, and was appreciated by the students. Some students said that they wished to join the "Arivu Disha Program" when they grew up.

## Annexures

## ANNEX 1

### Researcher Profiles

#### KADAMBARI ANANTRAM

With degrees in Environmental Economics, Development Studies and Sociology, Kadambari Anantram began her career working on projects in the natural resource sustainability space. While working in TERI, New Delhi, and IFMR LEAD, Chennai, she combined evidence-based, grass-roots research with data analysis to design, evaluate and monitor projects implemented by government departments, funding agencies and community based organisations.

Over time, Kadambari's interests took on a more varied hue to encompass issues of health and hygiene, education and skilling, infrastructure and women's empowerment. Over the last five years, as an independent consultant, she has worked largely with corporates and corporate foundations in monitoring and evaluating large-scale social impact projects. Kadambari's core interest lies in working with diverse stakeholder groups to design and deploy prototypes that trigger replicable social impact.

#### DR. RAJANI KONANTAMBIGI

A Professor at the Centre for Human Ecology, School of Human Ecology, Tata Institute of Social Sciences (TISS), Mumbai, India, Dr. Rajani Konantambigi's areas of teaching, research and outreach have been broadly in child development and socialization and research methodology. Major areas of research have been role of fathers in creating learning environments for students ( a cross-cultural study in four countries lead by Dr. Rita Chawla-Duggan of the University of Bath, England), ethnographic methods in researching child care settings in India, socialization of emotions, emotion regulation, child care and socialization in varied settings, play in students, Child Friendly Spaces, Mumbai, India: A collaborative, project, with the Students's Environment Research Group, New York, and TISS, issues in teaching-learning, learning disability, school based counselling and guidance, mental health issues surrounding students and meaning making of mental illness by care givers of persons with mental illness. Interventions at the community and school levels are ongoing and interventions for non-formal education was done in tribal areas of the Madhya Pradesh, a central state on India along with a CBO partner. Research methodology interest has taken her into the forays of qualitative methodology and mixed methods. Two workshops on qualitative research methods were organised (at TISS) in 2003 and 2005 when qualitative methodology training was yet rare in the Indian Universities. Subsequently she has participated in the training of research scholars in and outside TISS on various topics related to qualitative methodology.

She is involved in intervention/out-reach projects, one on play in students (International Play Association – India) and the other on advocacy and networking for the care and education of young students (Association for Early Childhood Education and Development and Maharashtra Forces - Forum for Crèche and Child Care Services during 2000-2008). In this regard she has participated in the formulation of quality assessment tools and advocacy materials. She is an office bearer, President and Secretary of International Play Association – India and Association for Early Childhood Education and Development (AECED) respectively and has been a part of the team organising conferences for these associations and representing them at various national forums and government bodies. She also has a US Government's Fulbright Post-Doctoral Fellowship (completed from Georgia State University, Atlanta, 2001-02) and the Rockefeller's Team Residency Fellowship to edit a book (at the Bellagio Study Center, Italy) in 2000.



**ASER TEST – SAMPLE 1**  
**INTERVIEWER COPY**

<p><b>LEVEL 1</b></p> <div style="text-align: center; margin-top: 20px;"> <span>J                      Q</span>  <span>N                      E</span>  <span>B                      L</span> </div> <p><b>NO. CORRECT:</b> _____</p> <p>*Student must identify at least 4 upper case letters correctly to move to Level 2.</p>	<p><b>LEVEL 2</b></p> <div style="text-align: center; margin-top: 20px;"> <span>s                      o</span>  <span>k                      m</span>  <span>r                      x</span> </div> <p><b>NO. CORRECT:</b> _____</p> <p>*Student must identify at least 4 lower case letters correctly to move to Level 3.</p>
<p><b>LEVEL 3</b></p> <p>KING : _____</p> <p>CROW : _____</p> <p>CLAP : _____</p> <p>COLD : _____</p> <p>HAT : _____</p> <p>NEW : _____</p> <p>SUN : _____</p> <p>WET: _____</p>  <p><b>NO CORRECT:</b> _____</p> <p>*Student must read 4 words correctly. If not stop the test. If the student reads 4 words correctly, ask him/her to provide the meaning. Even if he/she cannot provide meaning, proceed to Level 4.</p>	<p><b>LEVEL 4</b></p> <p>What is the time?</p> <hr/> <p>Where is your house?</p> <hr/> <p>I like to climb trees.</p> <hr/> <p>Rani has a book and a pencil.</p> <hr/>  <p><b>NO CORRECT:</b> _____</p> <p>*Student must read 2 sentences correctly. If not stop the test. If the student reads 2 sentences correctly, ask him/her to provide meaning.</p>

**ASER TEST – SAMPLE 2**  
**INTERVIEWER COPY**

Student Name	
School Name & district	
Test date	
Interviewer name	

<p><b>LEVEL 1</b></p> <div style="text-align: center; margin-top: 20px;"> <span>B                                  Z</span>  <span>H                                  M</span>  <span>W                                  L</span> </div> <p><b>NO. CORRECT:</b> _____</p> <p>*Student must identify at least 4 upper case letters correctly to move to Level 2.</p>	<p><b>LEVEL 2</b></p> <div style="text-align: center; margin-top: 20px;"> <span>h                                  y</span>  <span>r                                  k</span>  <span>x                                  t</span> </div> <p><b>NO. CORRECT:</b> _____</p> <p>*Student must identify at least 4 lower case letters correctly to move to Level 3.</p>
<p><b>LEVEL 3</b></p> <p>RING : _____</p> <p>WISH : _____</p> <p>CLAP : _____</p> <p>GIRL : _____</p> <p>CAT : _____</p> <p>NEW : _____</p> <p>BUN : _____</p> <p>WET: _____</p>  <p><b>NO CORRECT:</b> _____</p> <p>*Student must read 4 words correctly. If not stop the test. If the student reads 4 words correctly, ask him/her to provide the meaning. Even if he/she cannot provide meaning, proceed to Level 4.</p>	<p><b>LEVEL 4</b></p> <p>What is your name?</p> <hr/> <p>Where is your mother?</p> <hr/> <p>I like to play games.</p> <hr/> <p>Raju has a big house.</p> <hr/>  <p><b>NO CORRECT:</b> _____</p> <p>*Student must read 2 sentences correctly. If not stop the test. If the student reads 2 sentences correctly, ask him/her to provide meaning.</p>

**ASER TEST – SAMPLE 3**  
**INTERVIEWER COPY**

Student Name	
School Name & district	
Test date	
Interviewer name	

<p><b>LEVEL 1</b></p> <div style="text-align: center; margin-top: 20px;"> <span>F                      Y</span>  <span>B                      N</span>  <span>W                      P</span> </div> <p><b>NO. CORRECT:</b> _____</p> <p>*Student must identify at least 4 upper case letters correctly to move to Level 2.</p>	<p><b>LEVEL 2</b></p> <div style="text-align: center; margin-top: 20px;"> <span>j                      g</span>  <span>u                      k</span>  <span>r                      t</span> </div> <p><b>NO. CORRECT:</b> _____</p> <p>*Student must identify at least 4 lower case letters correctly to move to Level 3.</p>
<p><b>LEVEL 3</b></p> <p>MOON : _____</p> <p>RING : _____</p> <p>BABY : _____</p> <p>BOAT : _____</p> <p>COW : _____</p> <p>NEW : _____</p> <p>FAN : _____</p> <p>PEN : _____</p>  <p><b>NO CORRECT:</b> _____</p> <p>*Student must read 4 words correctly. If not stop the test. If the student reads 4 words correctly, ask him/her to provide the meaning. Even if he/she cannot provide meaning, proceed to Level 4.</p>	<p><b>LEVEL 4</b></p> <p>What is in the bag?</p> <hr/> <p>Where is your house?</p> <hr/> <p>I have a small dog.</p> <hr/> <p>Ram likes to eat sweets.</p> <hr/>  <p><b>NO CORRECT:</b> _____</p> <p>*Student must read 2 sentences correctly. If not stop the test. If the student reads 2 sentences correctly, ask him/her to provide meaning.</p>

**ASER TEST – SAMPLE 4**  
**INTERVIEWER COPY**

Student Name	
School Name & district	
Test date	
Interviewer name	

<p><b>LEVEL 1</b></p> <div style="text-align: center; margin-top: 20px;"> <span>J                      E</span>  <span>W                      N</span>  <span>A                      H</span> </div> <p><b>NO. CORRECT:</b> _____</p> <p>*Student must identify at least 4 upper case letters correctly to move to Level 2.</p>	<p><b>LEVEL 2</b></p> <div style="text-align: center; margin-top: 20px;"> <span>s                      c</span>  <span>t                      v</span>  <span>f                      g</span> </div> <p><b>NO. CORRECT:</b> _____</p> <p>*Student must identify at least 4 lower case letters correctly to move to Level 3.</p>
<p><b>LEVEL 3</b></p> <p>HAND : _____</p> <p>STAR : _____</p> <p>BOOK : _____</p> <p>COLD : _____</p> <p>OLD : _____</p> <p>FEW : _____</p> <p>DAY : _____</p> <p>BUS: _____</p>  <p><b>NO CORRECT:</b> _____</p> <p>*Student must read 4 words correctly. If not stop the test. If the student reads 4 words correctly, ask him/her to provide the meaning. Even if he/she cannot provide meaning. proceed to Level 4.</p>	<p><b>LEVEL 4</b></p> <p>What is the time?</p> <hr/> <p>Where is the cap?</p> <hr/> <p>I have many friends.</p> <hr/> <p>Ravi does not like to sing.</p> <hr/>  <p><b>NO CORRECT:</b> _____</p> <p>*Student must read 2 sentences correctly. If not stop the test. If the student reads 2 sentences correctly, ask him/her to provide meaning.</p>

### ANNEX 3

#### ENGLISH TEST – SAMPLE 1

#### SPEAKING

*Instruction to the interviewer:*

- The student should speak three sentences on the topic that is given in English.
- Tell the student the following, **“I want to know what you do on a holiday– a day when you do not have school. Can you tell me what you do, in English? Can you tell me three things that you do?”**
- Give the student the topic in English. Give the student 10 seconds to respond. If the student does not, ask him/her, “Do you want me to tell you the question in Kannada”. If yes, say the question in Kannada. Please make a note of this immediately. After saying this, reiterate to the student, that you want him/her to talk to you in English.
- Then ask the student to start talking to you. If the student says the first sentence **COMPLETELY** in English, i.e. **NO KANNADA/HINDI/URDU** words, then tick the column **ENGLISH** ( ✓ ) under Sentence 1.
- Give the child a few seconds to think between sentences.
- If the student **DOES NOT** starting talking, ask them whether they would be more comfortable using a mix of Kannada and English, or only in Kannada.
- If the student starts talking, and uses a mix of Kannada and English, then tick the column **MIXED** ( ✓ ) under Sentence 1. If the student responds **COMPLETELY** in Kannada, then tick the column **KANNADA** ( ✓ ) under Sentence 1.
- If the student **DOES NOT TALK AT ALL**, after you have given the question, even after 10 seconds, tick under the column **NO RESPONSE** ( ✓ ) and stop the test. If the student speaks Sentence 1 and/or Sentence 2 and then does not respond, tick the column **NO RESPONSE**, ( ✓ ) and stop the test.

**Question: “I want to know what you do on a holiday– a day when you do not have school. Can you tell me three things that you do on a holiday? Please tell me in English”**

	ENGLISH	MIXED	KANNADA	NO RESPONSE
Sentence 1				
Sentence 2				
Sentence 3				

# SPEAKING

Instruction to the interviewer:

- The student should speak three sentences on the topic that is given in English.
- Tell the student the following, **“I want to know about your school. Can you tell three things about your school or what you do in school in English?”**
- Give the student the topic in English. Give the student 10 seconds to respond. If the student does not, ask him/her, **“Do you want me to tell you the question in Kannada”**. If yes, say the question in Kannada. Please make a note of this immediately. After saying this, reiterate to the student, that you want him/her to talk to you in English.
- Then ask the student to start talking to you. If the student says the first sentence **COMPLETELY** in English, i.e. **NO KANNADA/HINDI/URDU** words, then tick the column **ENGLISH ( ✓ )** under Sentence 1.
- Give the child a few seconds to think between sentences.
- If the student **DOES NOT** starting talking, ask them whether they would be more comfortable using a mix of Kannada and English, or only in Kannada.
- If the student starts talking, and uses a mix of Kannada and English, then tick the column **MIXED ( ✓ )** under Sentence 1. If the student responds **COMPLETELY** in Kannada, then tick the column **KANNADA ( ✓ )** under Sentence 1.
- If the student **DOES NOT TALK AT ALL**, after you have given the question, even after 10 seconds, tick under the column **NO RESPONSE ( ✓ )** and stop the test. If the student speaks Sentence 1 and/or Sentence 2 and then does not respond, tick the column **NO RESPONSE, ( ✓ )** and stop the test.

**Question: “I want to know about your school. Can you tell three things about your school or what you do in school. Please tell me in English?”**

	ENGLISH	MIXED	KANNADA	NO RESPONSE
Sentence 1				
Sentence 2				
Sentence 3				

## SPEAKING

Instruction to the interviewer:

- The student should speak three sentences on the topic that is given in English.
- Tell the student the following, **“I want to know about your favourite food – what do you like to eat most. Can you tell three things about your favourite food in English?”**
- Give the student the topic in English. Give the student 10 seconds to respond. If the student does not, ask him/her, **“Do you want me to tell you the question in Kannada”**. If yes, say the question in Kannada. Please make a note of this immediately. After saying this, reiterate to the student, that you want him/her to talk to you in English.
- Then ask the student to start talking to you. If the student says the first sentence **COMPLETELY** in English, i.e. **NO KANNADA/HINDI/URDU** words, then tick the column **ENGLISH ( ✓ )** under Sentence 1.
- Give the child a few seconds to think between sentences.
- If the student **DOES NOT** starting talking, ask them whether they would be more comfortable using a mix of Kannada and English, or only in Kannada.
- If the student starts talking, and uses a mix of Kannada and English, then tick the column **MIXED ( ✓ )** under Sentence 1. If the student responds **COMPLETELY** in Kannada, then tick the column **KANNADA ( ✓ )** under Sentence 1.
- If the student **DOES NOT TALK AT ALL**, after you have given the question, even after 10 seconds, tick under the column **NO RESPONSE ( ✓ )** and stop the test. If the student speaks Sentence 1 and/or Sentence 2 and then does not respond, tick the column **NO RESPONSE, ( ✓ )** and stop the test.

**Question: ““I want to know about your favourite food. Can you tell three things about your favourite food? Please tell me in English?”**

	ENGLISH	MIXED	KANNADA	NO RESPONSE
Sentence 1				
Sentence 2				
Sentence 3				

# SPEAKING

Instruction to the interviewer:

- The student should speak three sentences on the topic that is given in English.
- Tell the student the following, **“I want to ask you about your favourite festival. Can you tell three things about your favourite festival in English?”**
- Give the student the topic in English. Give the student 10 seconds to respond. If the student does not, ask him/her, **“Do you want me to tell you the question in Kannada”**. If yes, say the question in Kannada. Please make a note of this immediately. After saying this, reiterate to the student, that you want him/her to talk to you in English.
- Then ask the student to start talking to you. If the student says the first sentence **COMPLETELY** in English, i.e. **NO KANNADA/HINDI/URDU** words, then tick the column **ENGLISH ( ✓ )** under Sentence 1.
- Give the child a few seconds to think between sentences.
- If the student **DOES NOT** starting talking, ask them whether they would be more comfortable using a mix of Kannada and English, or only in Kannada.
- If the student starts talking, and uses a mix of Kannada and English, then tick the column **MIXED ( ✓ )** under Sentence 1. If the student responds **COMPLETELY** in Kannada, then tick the column **KANNADA ( ✓ )** under Sentence 1.
- If the student **DOES NOT TALK AT ALL**, after you have given the question, even after 10 seconds, tick under the column **NO RESPONSE ( ✓ )** and stop the test. If the student speaks Sentence 1 and/or Sentence 2 and then does not respond, tick the column **NO RESPONSE, ( ✓ )** and stop the test.

**Question: “I want to ask you about your favourite festival. Can you tell three things about your favourite festival? Please tell me in English?”**

	ENGLISH	MIXED	KANNADA	NO RESPONSE
Sentence 1				
Sentence 2				
Sentence 3				



## ANNEX 4

### SUMMARY RESULTS: ASER BASELINE\*

S.No	Description	Overall		K.R.Puram		Shivaji Nagar		Hosakote		Kolar	
		Number	%	Number	%	Number	%	Number	%	Number	%
1	Sample Size	741	100	116	16%	110	15%	204	28%	311	42%
2	Passed the upper case letters test (4 or more letters)	687	93%	106	91%	104	95%	191	94%	286	92%
2a	Read 4 letters correctly	119	17%	24	23%	13	13%	31	16%	51	18%
2b	Read 5 letters correctly	568	83%	82	77%	91	88%	160	84%	235	82%
3	Passed the lower case letters test (4 or more letters)	640	93%	102	96%	100	96%	173	91%	265	93%
3a	Read 4 letters correctly	46	7%	5	5%	6	6%	13	8%	22	8%
3b	Read 5 letters correctly	594	93%	97	95%	94	94%	160	92%	243	92%
4	Passed the word reading test (5 or more words)	405	63%	64	63%	75	75%	108	62%	158	60%
4a	Read 5 words correctly	69	17%	7	11%	12	16%	20	19%	30	19%
4b	Read 6 words correctly	60	15%	11	17%	10	13%	13	12%	26	16%
4c	Read 7 words correctly	44	11%	9	14%	3	4%	11	10%	21	13%
4d	Read 8 words correctly	64	16%	9	14%	11	15%	16	15%	28	18%
4e	Read 9 words correctly	80	20%	13	20%	17	23%	22	20%	28	18%
4f	Read all 10 words correctly	88	22%	15	23%	22	29%	26	24%	25	16%
5	Could provide meanings for at least 5 out of 10 words	234	58%	39	61%	58	77%	68	63%	69	44%
5a	Correct meanings for 5 words	59	25%	7	18%	12	21%	17	25%	23	33%
5b	Correct meanings for 6 words	56	24%	7	18%	12	21%	16	24%	21	30%
5c	Correct meanings for 7 words	43	18%	12	31%	6	10%	13	19%	12	17%
5d	Correct meanings for 8 words	43	18%	7	18%	14	24%	10	15%	12	17%
5e	Correct meanings for 9 words	20	9%	4	10%	10	17%	5	7%	1	1%
5f	Correct meanings for all 10 words	13	6%	2	5%	4	7%	7	10%	0	0%
6	Could read at least 2 out of 4 sentences	330	81%	51	80%	67	89%	90	83%	122	77%
6a	Read 2 sentences correctly	71	22%	11	22%	15	22%	16	18%	29	24%
6b	Read 3 sentences correctly	91	28%	17	33%	21	31%	22	24%	31	25%
6c	Read all 4 sentences correctly	168	51%	23	45%	31	46%	52	58%	62	51%
7	Could provide meanings for at least 2 out of 4 sentences	202	61%	37	73%	50	75%	68	76%	47	39%

<b>7a</b>	Correct meanings for 2 sentences	84	42%	11	30%	24	48%	19	28%	30	64%
<b>7b</b>	Correct meanings for 3 sentences	50	25%	10	27%	11	22%	16	24%	13	28%
<b>7c</b>	Correct meanings for all 4 sentences	68	34%	16	43%	15	30%	33	49%	4	9%

#### SUMMARY RESULTS: ASER CURRENT

S.No	Description	Overall		K.R.Puram		Shivaji Nagar		Hosakote		Kolar	
		Number	%	Number	%	Number	%	Number	%	Number	%
<b>1</b>	Sample Size	741	100	116	16%	110	15%	204	28%	311	42%
<b>2</b>	Passed the upper case letters test (4 or more letters)	729	98%	116	100%	110	100%	197	97%	306	98%
<b>2a</b>	Read 4 letters correctly	12	2%	0	0%	0	0%	6	3%	6	2%
<b>2b</b>	Read 5 letters correctly	41	6%	5	4%	4	4%	14	7%	18	6%
<b>2c</b>	Read 6 letters correctly	676	93%	111	96%	106	96%	177	90%	282	92%
<b>3</b>	Passed the lower case letters test (4 or more letters)	713	98%	114	98%	110	100%	188	95%	301	98%
<b>3a</b>	Read 4 letters correctly	15	2%	1	1%	2	2%	5	3%	7	2%
<b>3b</b>	Read 5 letters correctly	39	5%	2	2%	8	7%	16	9%	13	4%
<b>3c</b>	Read 6 letters correctly	659	92%	111	97%	100	91%	167	89%	281	93%
<b>4</b>	Passed the word reading test (4 or more words)	518	73%	87	76%	82	75%	125	66%	224	74%
<b>4a</b>	Read 4 words correctly	50	10%	6	7%	3	4%	17	14%	24	11%
<b>4b</b>	Read 5 words correctly	67	13%	7	8%	16	20%	21	17%	23	10%
<b>4c</b>	Read 6 words correctly	89	17%	22	25%	7	9%	23	18%	37	17%
<b>4d</b>	Read 7 words correctly	113	22%	15	17%	23	28%	25	20%	50	22%
<b>4e</b>	Read 8 words correctly	199	38%	37	43%	33	40%	39	31%	90	40%
<b>5</b>	Could provide meanings for at least 4 out of 8 words	460	89%	79	91%	75	91%	116	93%	190	85%
<b>5a</b>	Correct meaning for 4 words	88	19%	12	15%	15	20%	26	22%	35	18%
<b>5b</b>	Correct meanings for 5 words	99	22%	8	10%	13	17%	28	24%	50	26%
<b>5c</b>	Correct meanings for 6 words	109	24%	27	34%	17	23%	17	15%	48	25%
<b>5d</b>	Correct meanings for 7 words	112	24%	17	22%	19	25%	32	28%	44	23%
<b>5e</b>	Correct meanings for 8 words	52	11%	15	19%	11	15%	13	11%	13	7%
<b>6</b>	Could read at least 2 out of 5 sentences	431	94%	75	95%	68	91%	106	91%	182	96%

<b>6a</b>	Read 2 sentences correctly	33	8%	9	12%	7	10%	6	6%	11	6%
<b>6b</b>	Read 3 sentences correctly	61	14%	7	9%	11	16%	22	21%	21	12%
<b>6c</b>	Read 4 or more sentences correctly	337	78%	59	79%	50	74%	78	74%	150	82%
<b>7</b>	Could provide meanings for at least 2 out of 5 sentences	378	88%	70	93%	64	94%	93	88%	151	83%
<b>7a</b>	Correct meanings for 2 sentences	92	24%	10	14%	12	19%	30	32%	40	26%
<b>7b</b>	Correct meanings for 3 sentences	115	30%	23	33%	15	23%	28	30%	49	32%
<b>7c</b>	Correct meanings for 4 or more sentences	171	45%	37	53%	37	58%	35	38%	62	41%

#### SUMMARY RESULTS – ARIVU LISTENING COMPREHENSION AND SPEAKING

S.No	Description	Overall		K.R.Puram		Shivaji Nagar		Hosakote		Kolar	
		Number	%	Number	%	Number	%	Number	%	Number	%
<b>1</b>	Sample Size	741	100	116	16%	110	15%	204	28%	311	42%
<b>1a</b>	Speaking – English	273	37%	49	42%	52	47%	69	34%	103	33%
<b>1ai</b>	Speak 1 sentence	112	41%	20	41%	20	38%	34	49%	38	37%
<b>1aii</b>	Speak 2 sentences	51	19%	12	24%	9	17%	10	14%	20	19%
<b>1aiii</b>	Speak 3 sentences	110	40%	17	35%	23	44%	25	36%	45	44%

\* difference in % totals due to rounding off decimal points

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