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headstreams
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Impact Assessment Study of Headstreams' ARIVU DISHA Program

Final Report

Date: 17th March, 2020

OVERVIEW OF ARIVU DISHA

Introduction to the program

Outreach of the program

Introduction to Headstream's Arivu Disha Program

- **Headstreams** is a non-profit organization based in Bengaluru, working since 2008 in bringing about positive change in different sections of society using play to promote psycho-social well-being. It focuses on promoting self-reliance and facilitating community development through promotion of creative learning skills to enhance positive mental health.

- **Arivu Disha** is Headstream's digital literacy and life skills program designed for students from grade 6th to 10th. It aims to improve English learning outcomes and career prospects of school children in Karnataka. As the name suggests, the program has two significant components- 'Arivu' and 'Disha'. Arivu Disha was initiated in 2015 through a MoU with the Department of State Education, Research and Training (DSERT), Government of Karnataka.

- The program has been supported by **Mphasis** since its inception. The program design has also undergone changes owing to the experience of the Headstreams team and their work across the three blocks of Karnataka including Bangalore, Hoskote and Kolar. Individuals from diverse background came together to design the program in its current shape and format. This included experts from design school, specialists running learning-based organizations and art-based therapy schools as well as school teachers.

- The focus of the program has been to help children **learn though play** by using blended teaching approaches using different mediums and formats including elements such as digital and activity space, missed call service called DIAL-TO-LEARN and a bi-lingual comics in English and Kannada, also available on the Arivu Disha app.

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Outreach of the Arivu Disha Program

Arivu-Disha

6000 students

Impacted over 4 years of the program

500 Digital Tablets

Used for the implementation of the program

100 Tackle Caravan

Sessions organized every year

5200 sessions

Delivered to students from grade 6 to 9

32000 comics

Bi-lingual comic distributed among students

15000 missed calls

From students on the Dial-to-Learn service

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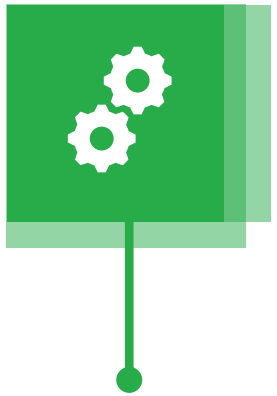
METHODOLOGY

Introduction and Objectives



Study Framework and Approach

Sampling Approach

Key Research Question

Data Collection and Ethical Considerations

Introduction and Objectives of the Impact Assessment Study

Headstreams engaged with Sattva for executing a **longitudinal** (baseline and end line) **impact assessment exercise** across Karnataka, where the Arivu Disha program has been executed for Grade 6 to 9 students. The study had the following objectives:

To assess the **Arivu Disha Program** through: :

- Relevance, and Effectiveness, of the program model
- English learning levels and entrepreneurial skills among students
- Comparative analysis between Arivu Disha and students belonging to other schools

Provide insights and recommendations on:

- The rigour of implementation on ground to bring the intended result on time
- To identify gaps and challenges on the ground
- Provide recommendations to strengthen the program

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Impact Assessment Framework

Sattva adopted the **Development Assistance Committee's (DAC)** framework developed by Organization for Economic Cooperation and Development (OECD) as an anchor to conduct the impact assessment study

Areas of Evaluation	Description
Relevance	Assess the extent to which the program ensures suitability to the needs of the target group, pertinence to the market conditions and maximization of impact as part of design and execution.
Effectiveness	Assess the extent to which the objectives of the program have been achieved; Identification of supporting processes and systems influencing the achievement/non-achievement of objectives
Impact	The positive and negative changes produced by the development intervention in terms of local, social, economic and other development Indicators

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Approach for the Impact Assessment Study

PHASE 1
Design and alignment

- Understand objective, activities and outcomes of the program
- Methodology and approach for Impact Assessment study
- Design quantitative and qualitative data collection tools
- Planning for field visits and execution

PHASE 2
Field visits
(Baseline and End Line)

- Discussion with NGO team
- Review program monitoring and evaluation documents
- Conduct surveys and FGDs with primary stakeholders
- Conduct interviews with secondary stakeholders

PHASE 3
Synthesis and documentation
(Baseline and End Line)

- Consolidate qualitative discussions
- Quantitative data analysis
- Synthesis observations, insights and recommendations
- Prepare PPT report and present key insights to the Headstreams team

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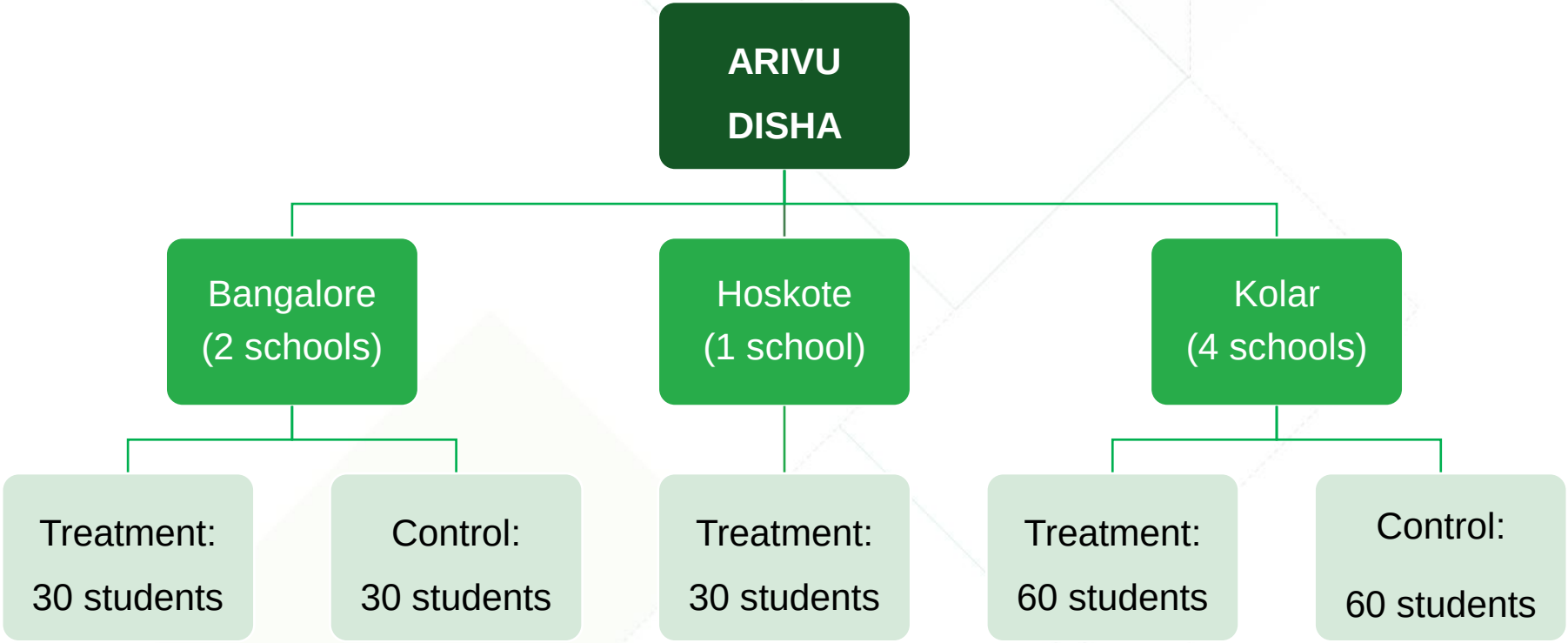
Sampling Approach

- Sattva conducted a **comparative study** to measure the impact of the Arivu Disha (AD) programs on the students
- Sattva adopted a multistage stratified **random sampling approach** to survey the AD and Non-AD students (grade 6 to 9)



Note: 30 is the minimum statistically relevant number of responses required to measure the impact of any intervention

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Key Research Questions (1/2)

Area of Evaluation	Key Research Questions
Relevance	• What are the needs of the target group that have been identified? • Are the program objectives and activities aligned to the needs identified for the target group? • Was a systematic method followed to select the target group to maximize the impact?
Effectiveness	• Are the systems and processes for implementing the program defined? • Does a well-qualified program implementation team improve the quality of implementation and helps in achieving the program goals? • Is a well-defined LFA or theory of change available? • Is the M&E Framework system built and institutionalized within the organization? • What are the program team's visibility of the key risks influencing the achievement or non-achievement of quality and predictability of delivery?

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Key Research Questions (2/2)

Area of Evaluation	Key Research Questions	Indicators
Impact: ARIVU	Have the students' English learning outcomes improved due to the Arivu Disha program?	• Listening accuracy and comprehension • Reading fluency and comprehension • Speaking fluency and comprehension
Impact: DISHA	Have the students' developed entrepreneurial mindset skills due to the Arivu Disha program?	• Idea Generation • Detailed Observation • Evaluation of a solution

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Data Collection (1/2)

Sattva adopted **a mixed-method approach** consisting of quantitative (survey) and qualitative research techniques (focus group discussion, one-on-one interview) using primary and secondary data collection methods

Primary Source of data

The data collected from various stakeholders during the study using data collection tools designed for this study will be treated as primary data.

- *Quantitative data collection:* Assessment, with a representative sample size, to be conducted with the key stakeholder for the interventions.
- *Qualitative data collection:* Interviews and focused group discussions (FGDs) with the different stakeholders

Secondary Source of data

The data pertaining to comparing the planned targets, with regards to the actual, will help us to establish the extent to which processes were documented, and followed.

- *Program documents maintained by the NGO:* The documents defining the program's progress processes, periodic status reports, etc.

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Data Collection (2/2)

Stakeholder	In-Depth Interview			FGD			Assessment		
	Planned	Baseline Actual	Endline Actual	Planned	Baseline Actual	Endline Actual	Planned	Baseline Actual	Endline Actual
Arivu Disha Students	-	-	-	16	13	8	120	132	127
Non-Arivu Disha Students	-	-	-	-	-	-	90	95	94
Headmasters	7	5	2	-	-	-	-	-	-
Teachers	4	2	4	-	-	-	-	-	-
Warden	4	1	1	-	-	-	-	-	-
Headstreams Team (Facilitators)	8	8	8	-	-	-	-	-	-
Total	**23**	**16**	**15**	**16**	**13**	**8**	**210**	**227**	**221**

Note:

- Arivu Disha Students refer to students who are part of the AD program.
- Non- Arivu Disha Students refer to students who are part of the AD program.
- **6 students who were assessed in baseline were absent during the period of endline assessment. For overall assessment, we have removed those 6 respondents**

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Ethical consideration for the Impact Assessment Study

- As part of data collection, team members ensured ethical data collection by explaining the **purpose of the study** and ensuring informed consent from the participants
- The interview sessions were conducted in an **environment** that ensured the privacy of the respondents as per their convenience and comfort
- Only the respondents who gave **consent** for being part of the study were considered i.e. the participation of respondents were ensured to be voluntary and they were not compelled to answer any question
- The respondents were assured about the **confidentiality** of their information and the usage of data

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RESULTS AND FINDINGS - ARIVU PROGRAM

Profile of Respondents

Assessment Levels for Arivu Program

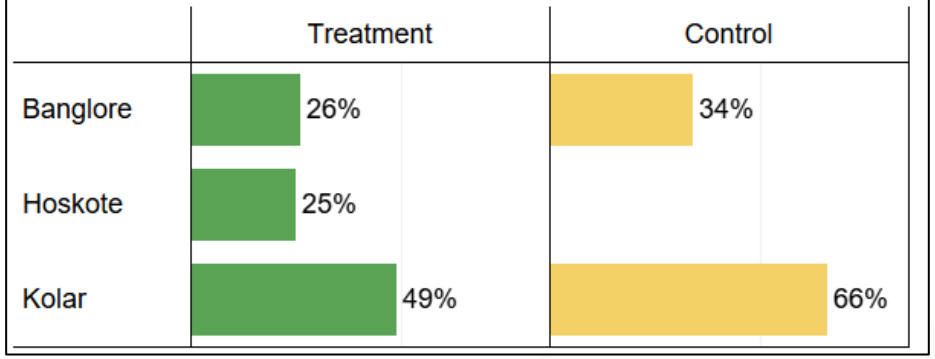
Analysis using different lenses

Key Insights and Recommendations

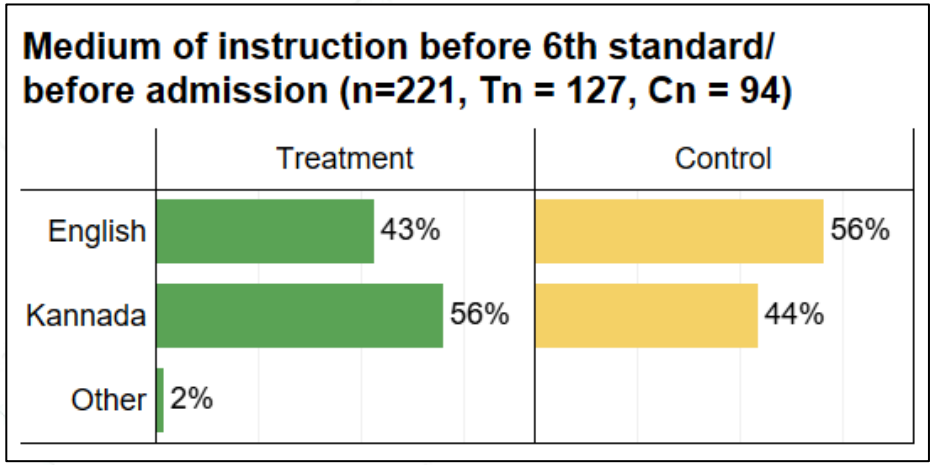
Profile of Respondents

- Students from 4 Treatment and 3 Control schools from Grade 6-9 were considered for the study across
- Same 127 Girls and 94 boys were assessed in baseline and endline for longitudinal and comparative analysis
- Assessment was done across 3 locations: Bangalore, Hoskote, and Kolar
- Students who were part of the study had three kinds of medium of instruction before 6th standard – English, Kannada, Other (Urdu)

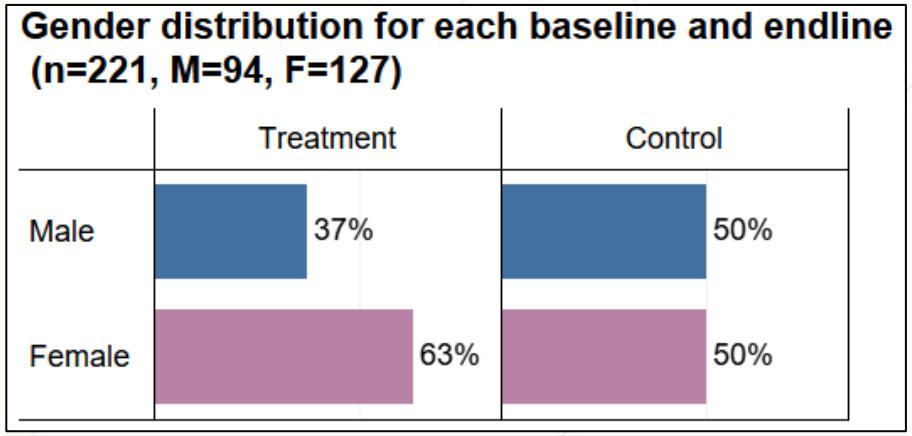
Location wise distribution for each baseline and endline (n=221)



Medium of instruction before 6th standard/ before admission (n=221, Tn = 127, Cn = 94)



Gender distribution for each baseline and endline (n=221, M=94, F=127)



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Assessment of students has been done as per the levels defined by Headstreams

Level 0: Able to respond to greetings.

Level 1: Able to use basic phrases in English meaningfully.

Level 2: Able to hold a coherent conversation in English using simple sentences and words in contexts.

Level 3: Able to discuss the pros and cons or debate on a theme in English on complex and unfamiliar topics.

Level 0: Able to respond to/ follow basic instructions

Level 1: Able to re-tell accurately in any language main point(s) of a story or standard speech in English with familiar words and basic phrases when people speak slowly and clearly

Level 2: Able to summarize clearly in any language a story or short dialogues regarding everyday or school related topics

Level 3: Able to answer questions in any language accurately concerning a piece or story narrated in English or about abstract complex or unfamiliar topics such as broadcasts and reviews

Level 0:
A: Able to recognize lower case letters
B: Able to recognize upper case letters
C: Able to read up to three letter words

Level 1:
A: Able to recognize/string together letters so as to read 4 letter words

B: Able to recognize/string >4 letters in known topics

Level 2:
A: Able to recognize/string together words to read a small paragraph in English

B: Able to summarize the main points accurately about every day or school related topics

Level 3:
A: Able to read multiple paragraph piece or small story on complex and unfamiliar topics in English with proper punctuation effects

B: Able to summarize it accurately

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Analysis Lens: Overall

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Method of calculation in the following slides

For each of the following slides, analysis is done in two step: Baseline versus Endline and Treatment versus Control. Percentage difference is calculated using the following mathematics:

Baseline Versus Endline

1. Increase in % of students at level 3 from baseline to endline = **% of students at level 3 in Endline - % of students at level 3 in Baseline.**

Treatment Versus Control

1. Difference in % of students at level 3 between treatment school and control school in Endline = **% of students at level 3 in endline in treatment school - % of students at level 3 in endline in control school**

2. Difference in % of students at level 3 between treatment school and control school in baseline = **% of students at level 3 in baseline in treatment school - % of students at level 3 in baseline in control school**

3. Change in the difference of % of students at level 3 between treatment school and control school from baseline to endline = **Difference in % of students at level 3 between treatment school and control school in Endline - Difference in % of students at level 3 between treatment school and control school in baseline**

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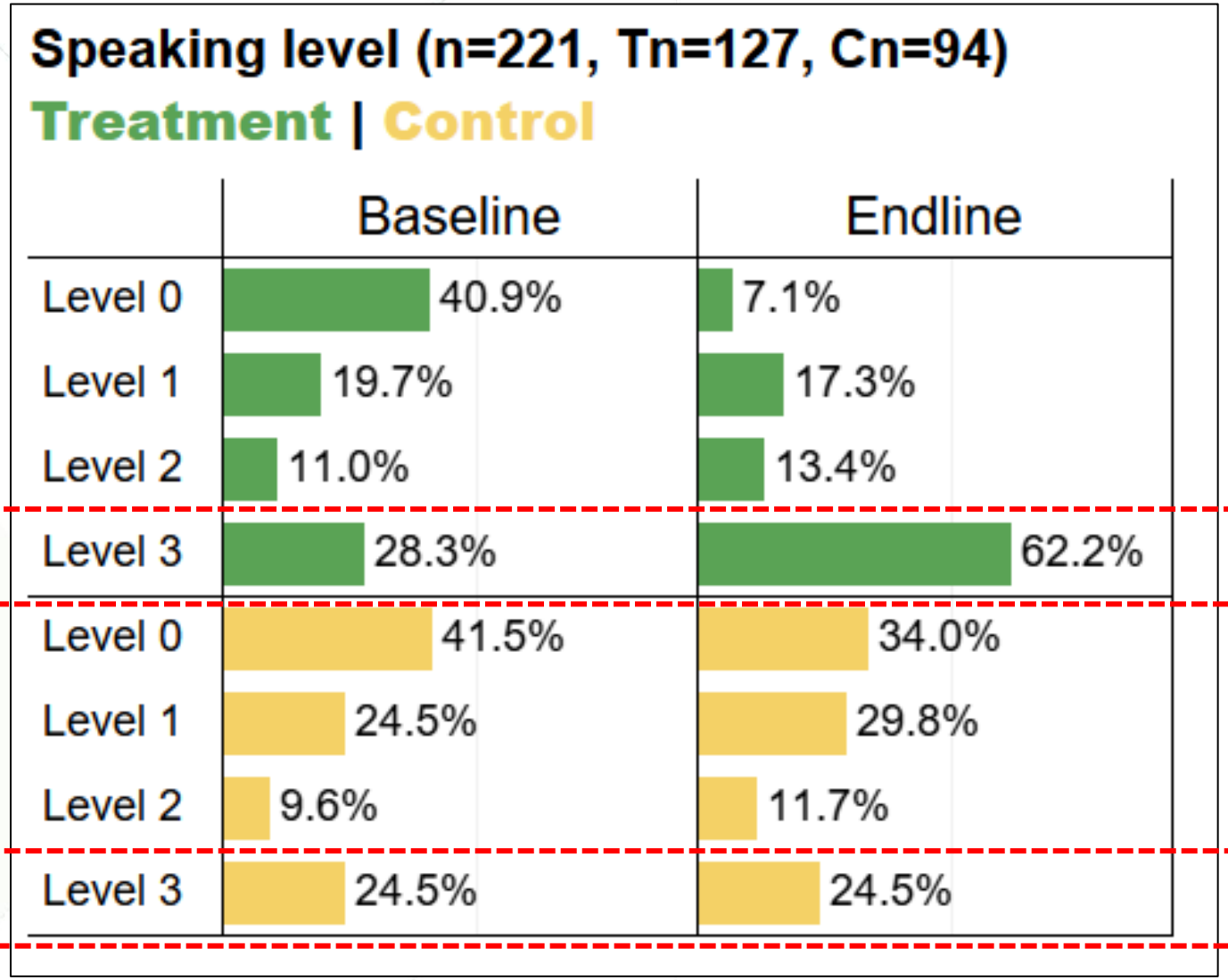
Overall Insights

1. Baseline vs. Endline

- For treatment school, there has been a increase of 33.9% of students in level 3 from baseline to endline
- For control school, there is negligible change in the percentage of students for level 3 from baseline to endline

2. Treatment vs. Control

- Difference in the percentage of students at level 3 between treatment and control has increased from 3.8% in baseline to 37.8% in endline



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Overall Insights

1. Baseline vs. Endline

- For treatment school, there has been a average increase of 12.6% of students who possessed different speaking quality from baseline to endline
- For control school, there has been a average increase of 4.04% of students who possessed different speaking quality from baseline to endline

2. Treatment vs. Control

- Difference in the percentage of students with different speaking quality between treatment and control has increased from -0.48% in baseline to 8.08% in endline

Speaking Quality (n=221, Tn=127, Cn=94)

Treatment | Control

	Baseline	Endline
Audible	55.1%	73.2%
Eye Contact	41.7%	29.1%
Fluent Pronunciation	29.9%	59.1%
No Hands/ Legs shivering	80.3%	98.4%
No Stammering	69.3%	79.5%
Audible	60.6%	69.1%
Eye Contact	56.4%	23.4%
Fluent Pronunciation	25.5%	48.9%
No Hands/ Legs shivering	73.4%	92.6%
No Stammering	62.8%	64.9%

Note: Possible reason for decrease in the percentage of students who could make eye contact is due to the administration of Disha Tool in the endline study. This made student think about the different observation, ideas or solution leading to loss to eye contact.

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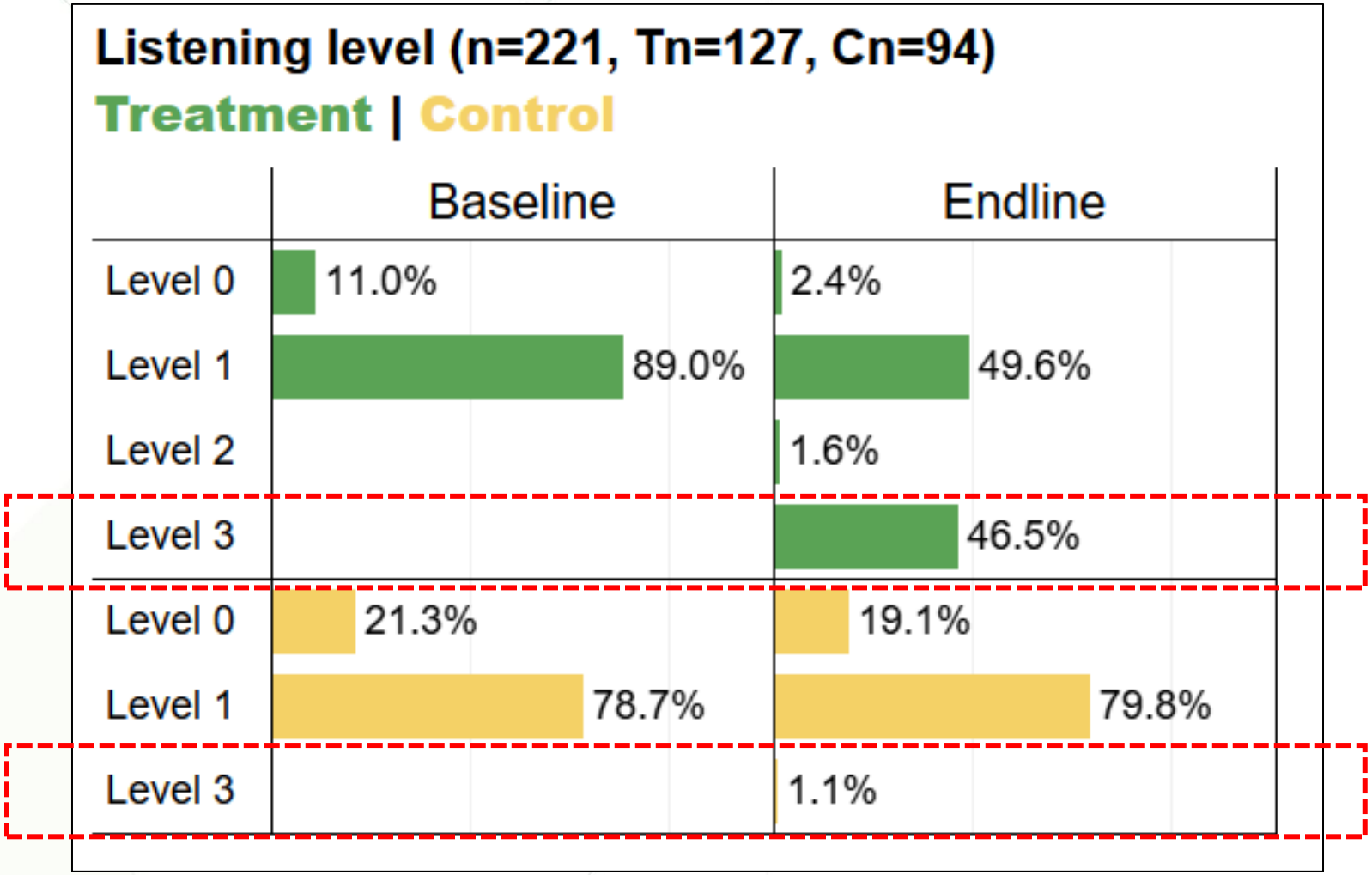
Overall Insights

1. Baseline vs. Endline

- For treatment school, there has been a increase of 46.5% of students in level 3 from baseline to endline
- For control school, there is negligible change in the percentage of students for level 3 from baseline to endline

2. Treatment vs. Control

- Difference in the percentage of students at level 3 between treatment and control has increased from 0% in baseline to 45.4% in endline



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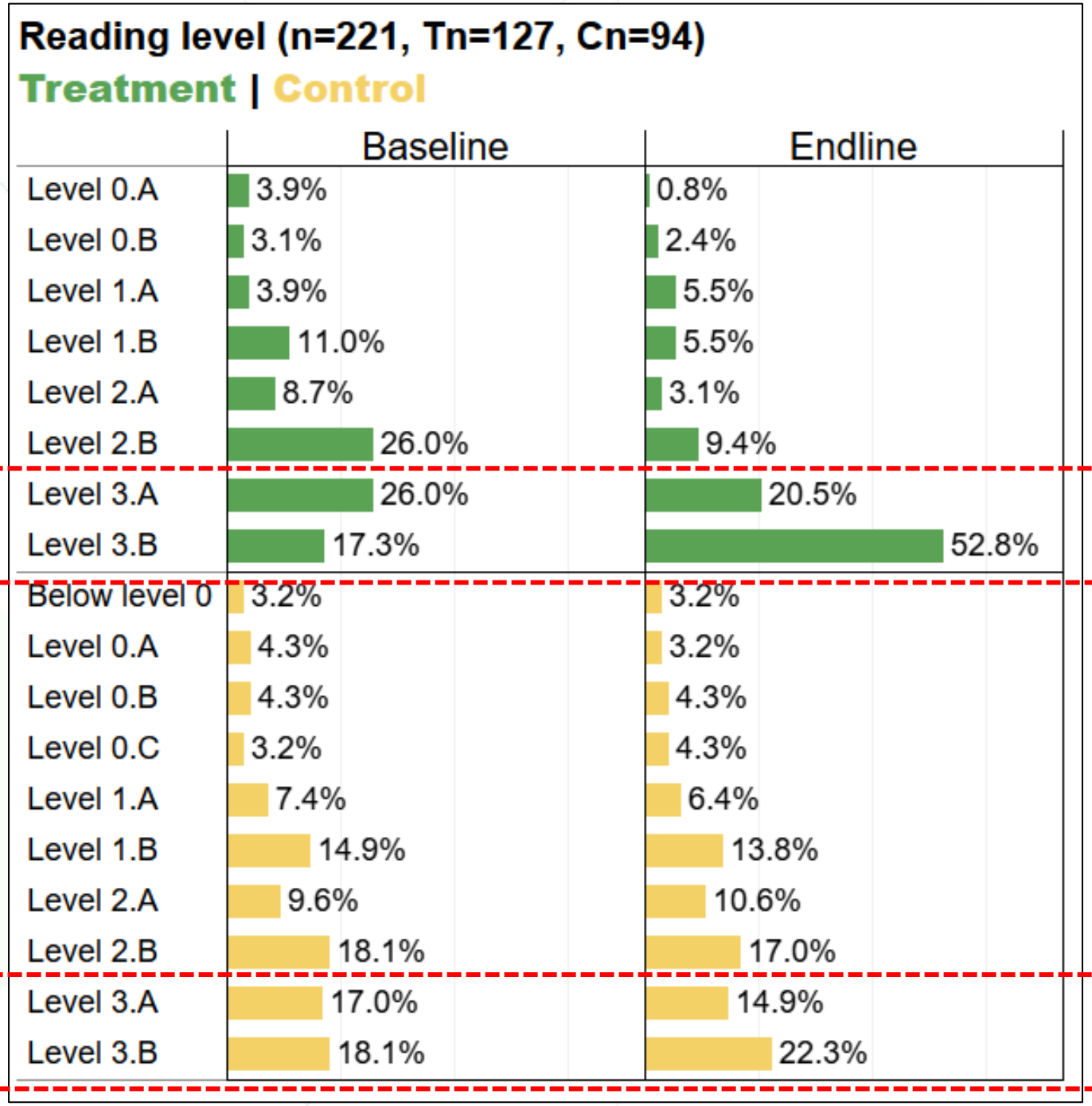
Overall Insights

1. Baseline vs. Endline

- There has been a increase of 30% of students in level 3 from baseline to endline for treatment school
- There is negligible change in the percentage of students for level 3 from baseline to endline for control school

2. Treatment vs. Control

- Difference in the percentage of students at level 3 between treatment and control has increased by 8.2% in baseline to 36.1% in endline



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Analysis Lens: Medium of instruction before 6th grade

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Overall Insights

1. Baseline vs. Endline

- For treatment school, there has been a increase of 38.9% and 29.6% of students in level 3 from baseline to endline for English and Kannada medium respectively.
- For control school, there is no change in the percentage of students for level 3 from baseline to endline at different grades.

2. Treatment vs. Control

- Difference in the percentage of students at level 3 between treatment and control has increased by 38.9% and 29.6% from baseline to endline for English and Kannada medium respectively.

Speaking level (n=221, Tn=127, Cn=94)

Treatment | Control

		Baseline	Endline	Baseline	Endline
English	Level 0	27.8%		26.4%	22.6%
	Level 1	13.0%	5.6%	28.3%	30.2%
	Level 2	16.7%	13.0%	11.3%	13.2%
	Level 3	42.6%	81.5%	34.0%	34.0%
Kannada	Level 0	52.1%	12.7%	61.0%	48.8%
	Level 1	25.4%	26.8%	19.5%	29.3%
	Level 2	5.6%	14.1%	7.3%	9.8%
	Level 3	16.9%	46.5%	12.2%	12.2%

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Overall Insights

1. Baseline vs. Endline

- For treatment school, there has been a increase of 75.9% and 23.9% of students in level 3 from baseline to endline for English and Kannada medium respectively.
- For control school, there is negligible change in the percentage of students for level 3 from baseline to endline at different grades.

2. Treatment vs. Control

- Difference in the percentage of students at level 3 between treatment and control has increased by 74% and 23.9% from baseline to endline for English and Kannada medium respectively.

Listening level (n=221, Tn=127, Cn=94)

Treatment | Control

		Baseline	Endline	Baseline	Endline
English	Level 0	5.6%		11.3%	9.4%
	Level 1	94.4%	22.2%	88.7%	88.7%
	Level 2		1.9%		
	Level 3		75.9%		1.9%
Kannada	Level 0	15.5%	4.2%	34.1%	31.7%
	Level 1	84.5%	70.4%	65.9%	68.3%
	Level 2		1.4%		
	Level 3		23.9%		

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Overall Insights

1. Baseline vs. Endline

- For treatment school, there has been a increase of 33.3% and 28.1% in level 3 from baseline to endline for English and Kannada medium respectively.
- For control school, there is negligible change in the percentage of students for level 3 from baseline to endline at different grades.

2. Treatment vs. Control

- Difference in the percentage of students at level 3 between treatment and control has increased by 33.3% and 23.2% from baseline to endline for English and Kannada medium respectively.

Reading level (n=221, Tn=127, Cn=94)

Treatment | Control

		Baseline	Endline	Baseline	Endline
English	Level 0.A			1.9%	1.9%
	Level 0.B	1.9%		3.8%	3.8%
	Level 0.C			3.8%	3.8%
	Level 1.A		1.9%	1.9%	1.9%
	Level 1.B	5.6%		15.1%	15.1%
	Level 2.A	7.4%		9.4%	9.4%
	Level 2.B	22.2%	1.9%	17.0%	17.0%
	Level 3.A	35.2%	18.5%	20.8%	17.0%
	Level 3.B	27.8%	77.8%	26.4%	30.2%
Kannada	Below level 0			7.3%	7.3%
	Level 0.A	7.0%	1.4%	7.3%	4.9%
	Level 0.B	4.2%	4.2%	4.9%	4.9%
	Level 0.C			2.4%	4.9%
	Level 1.A	7.0%	8.5%	14.6%	12.2%
	Level 1.B	14.1%	9.9%	14.6%	12.2%
	Level 2.A	9.9%	4.2%	9.8%	12.2%
	Level 2.B	29.6%	15.5%	19.5%	17.1%
	Level 3.A	18.3%	21.1%	12.2%	12.2%
	Level 3.B	9.9%	35.2%	7.3%	12.2%

Analysis Lens: Grade wise

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Overall Insights

1. Baseline vs. Endline

- For treatment school, there has been a increase of 25%, 40.7%, 38.7%, 31.2% of students in level 3 from baseline to endline for grades 6, 7, 8 and 9 respectively.
- For control school, there is no change in the percentage of students for level 3 from baseline to endline at different grades.

2. Treatment vs. Control

- Difference in the percentage of students at level 3 between treatment and control has increased by 25%, 40.7%, 38.7%, 31.2% for grades 6, 7, 8 and 9 respectively from baseline to endline

Speaking level (n=221, Tn=127, Cn=94)

Treatment | Control

		Baseline	Endline	Baseline	Endline
Grade 6	Level 0	46.9%	12.5%	51.9%	40.7%
	Level 1	18.8%	21.9%	25.9%	33.3%
	Level 2	9.4%	15.6%	11.1%	14.8%
	Level 3	25.0%	50.0%	11.1%	11.1%
Grade 7	Level 0	46.9%	6.3%	52.0%	40.0%
	Level 1	28.1%	25.0%	24.0%	36.0%
	Level 2	9.4%	12.5%	4.0%	4.0%
	Level 3	15.6%	56.3%	20.0%	20.0%
Grade 8	Level 0	35.5%	6.5%	30.8%	26.9%
	Level 1	22.6%	16.1%	23.1%	26.9%
	Level 2	16.1%	12.9%	11.5%	11.5%
	Level 3	25.8%	64.5%	34.6%	34.6%
Grade 9	Level 0	34.4%	3.1%	25.0%	25.0%
	Level 1	9.4%	6.3%	25.0%	18.8%
	Level 2	9.4%	12.5%	12.5%	18.8%
	Level 3	46.9%	78.1%	37.5%	37.5%

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Overall Insights

1. Baseline vs. Endline

- For treatment school , there has been a increase of 31.3%, 34.4%, 54.8%, 65.6% of students in level 3 from baseline to endline for grades 6, 7, 8 and 9 respectively.
- For control school , there is negligible change in the percentage of students for level 3 from baseline to endline at different grades.

2. Treatment vs. Control

- Difference in the percentage of students at level 3 between treatment and control has increased by 31.3%, 30.4%, 54.8%, 65.6% for grades 6, 7, 8 and 9 respectively from baseline to endline

Listening level (n=221, Tn=127, Cn=94)

Treatment | Control

		Baseline	Endline	Baseline	Endline
Grade 6	Level 0	21.9%	3.1%	37.0%	33.3%
	Level 1	78.1%	65.6%	63.0%	66.7%
	Level 3		31.3%		
Grade 7	Level 0	9.4%	3.1%	24.0%	20.0%
	Level 1	90.6%	59.4%	76.0%	76.0%
	Level 2		3.1%		
	Level 3		34.4%		4.0%
Grade 8	Level 0	12.9%	3.2%	3.8%	3.8%
	Level 1	87.1%	38.7%	96.2%	96.2%
	Level 2		3.2%		
	Level 3		54.8%		
Grade 9	Level 0			18.8%	18.8%
	Level 1	100.0%	34.4%	81.3%	81.3%
	Level 3		65.6%		

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Overall Insights

Reading level (n=221, Tn=127, Cn=94)

Treatment | Control

	Grade 6		Grade 7		Grade 8		Grade 9	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Level 0.A	12.5%	3.1%			3.2%			
Level 0.B	6.3%	3.1%	6.3%	3.1%		3.2%		
Level 1.A	9.4%	18.8%	3.1%	3.1%	3.2%			
Level 1.B	9.4%	9.4%	3.1%	6.3%	22.6%	6.5%	9.4%	
Level 2.A	6.3%	3.1%	12.5%	3.1%	3.2%	3.2%	12.5%	3.1%
Level 2.B	21.9%	3.1%	31.3%	9.4%	25.8%	16.1%	25.0%	9.4%
Level 3.A	28.1%	15.6%	31.3%	25.0%	16.1%	19.4%	28.1%	21.9%
Level 3.B	6.3%	43.8%	12.5%	50.0%	25.8%	51.6%	25.0%	65.6%
Below level 0	3.7%	3.7%	4.0%	4.0%	3.8%	3.8%		
Level 0.A	11.1%	11.1%	4.0%					
Level 0.B	7.4%	3.7%	4.0%	8.0%	3.8%	3.8%		
Level 0.C	3.7%	7.4%	4.0%	4.0%	3.8%	3.8%		
Level 1.A	14.8%	11.1%	12.0%	12.0%				
Level 1.B	7.4%	11.1%	28.0%	24.0%	11.5%	7.7%	12.5%	12.5%
Level 2.A	14.8%	11.1%	8.0%	12.0%	3.8%	7.7%	12.5%	12.5%
Level 2.B	22.2%	25.9%	12.0%	12.0%	23.1%	15.4%	12.5%	12.5%
Level 3.A	7.4%	3.7%	16.0%	12.0%	34.6%	38.5%	6.3%	
Level 3.B	7.4%	11.1%	8.0%	12.0%	15.4%	19.2%	56.3%	62.5%

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Overall Insights: Reading Level Grade Wise

1. Baseline vs. Endline

- For treatment school , there has been a increase of 37.5%, 12.5%, 25.8%, 40.6% of students in level 3 from baseline to endline for grades 6, 7, 8 and 9 respectively.

- For control school, there is negligible change in the percentage of students for level 3 from baseline to endline at different grades.

2. Treatment vs. Control

- Difference in the percentage of students at level 3 between treatment and control has increased from **-1.1%,** 4.5%, 10.4%, **-31.3%** in baseline to **32.7%**, 38%, 32.4%, **3.1%** in endline for grades 6, 7, 8 and 9 respectively.

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Analysis Lens: Gender wise

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Overall Insights

1. Baseline vs. Endline

- For treatment school , there has been a increase of 46.9%, 26.2% of students in level 3 from baseline to endline for male and female respectively.
- For control school, there is no change in the percentage of students for level 3 from baseline to endline at different grades.

2. Treatment vs. Control

- Difference in the percentage of students at level 3 between treatment and control has increased by 46.9%, 26.2% for male and female respectively from baseline to endline

Speaking level (n=221, Tn=127, Cn=94)

Treatment | Control

		Baseline	Endline	Baseline	Endline
Male	Level 0	46.8%	6.4%	29.8%	25.5%
	Level 1	17.0%	17.0%	27.7%	31.9%
	Level 2	17.0%	10.6%	6.4%	6.4%
	Level 3	19.1%	66.0%	36.2%	36.2%
Female	Level 0	37.5%	7.5%	53.2%	42.6%
	Level 1	21.3%	17.5%	21.3%	27.7%
	Level 2	7.5%	15.0%	12.8%	17.0%
	Level 3	33.8%	60.0%	12.8%	12.8%

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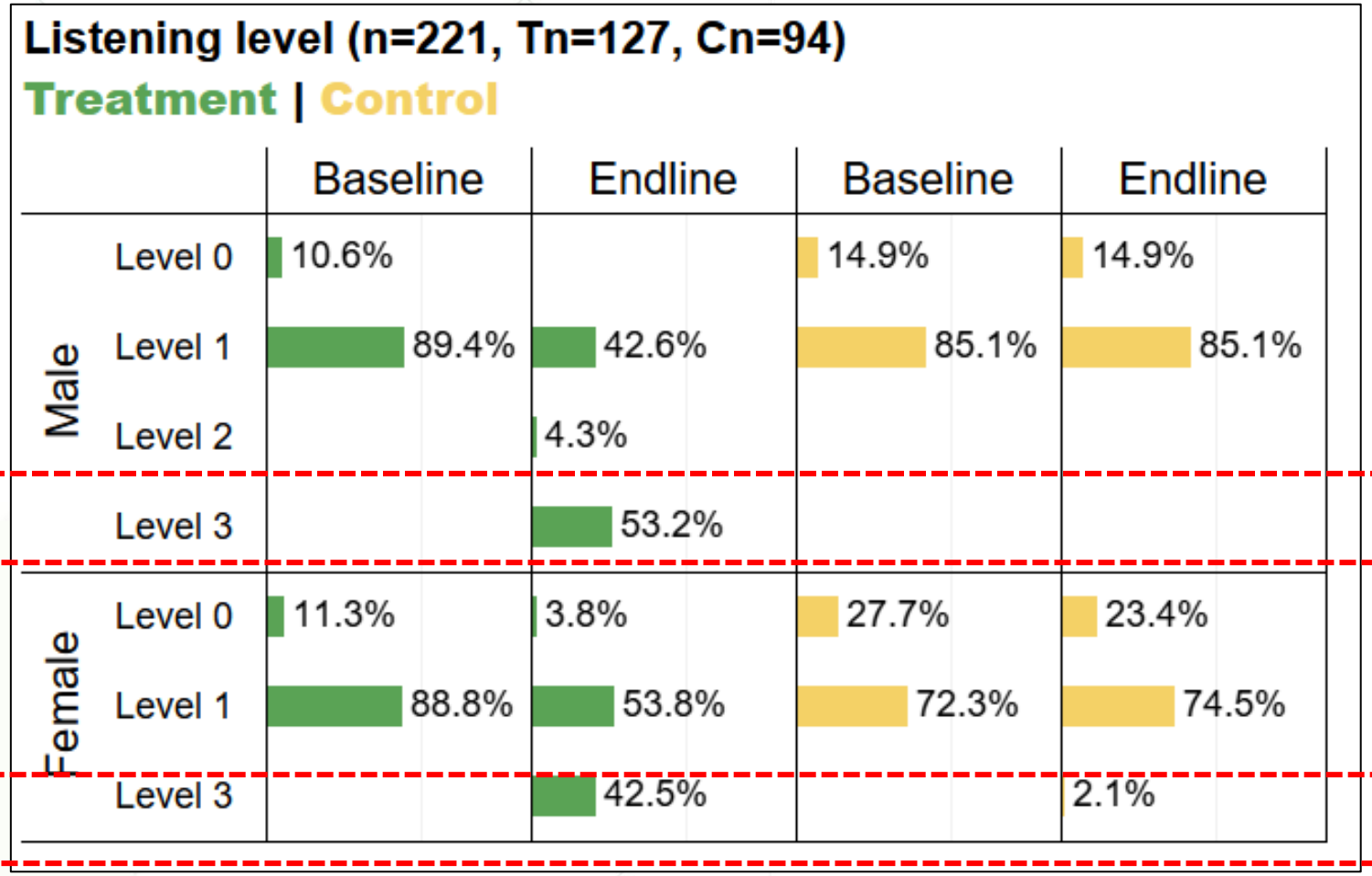
Overall Insights

1. Baseline vs. Endline

- For treatment school , there has been a increase of 53.2%, 42.5% of students in level 3 from baseline to endline for male and female respectively.
- For control school , there is negligible change in the percentage of students for level 3 from baseline to endline at different grades.

2. Treatment vs. Control

- Difference in the percentage of students at level 3 between treatment and control has increased by 53.2%, 40.4% for male and female respectively from baseline to endline



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Overall Insights

1. Baseline vs. Endline

- For treatment school , there has been a increase of 32%, 28.7% of students in level 3 from baseline to endline for male and female respectively.
- For control school, there is negligible change in the percentage of students for level 3 from baseline to endline at different grades.

2. Treatment vs. Control

- Difference in the percentage of students at level 3 between treatment and control has increased by 32%, 24.5% for male and female respectively from baseline to endline

Reading level (n=221, Tn=127, Cn=94)

Treatment | Control

		Baseline	Endline	Baseline	Endline
Male	Below level 0			2.1%	2.1%
	Level 0.A	2.1%		4.3%	4.3%
	Level 0.B	2.1%		4.3%	2.1%
	Level 0.C			2.1%	4.3%
	Level 1.A	6.4%	8.5%	4.3%	4.3%
	Level 1.B	8.5%		10.6%	8.5%
	Level 2.A	12.8%	4.3%	4.3%	6.4%
	Level 2.B	23.4%	10.6%	19.1%	19.1%
	Level 3.A	25.5%	14.9%	19.1%	14.9%
	Level 3.B	19.1%	61.7%	29.8%	34.0%
Female	Below level 0			4.3%	4.3%
	Level 0.A	5.0%	1.3%	4.3%	2.1%
	Level 0.B	3.8%	3.8%	4.3%	6.4%
	Level 0.C			4.3%	4.3%
	Level 1.A	2.5%	3.8%	10.6%	8.5%
	Level 1.B	12.5%	8.8%	19.1%	19.1%
	Level 2.A	6.3%	2.5%	14.9%	14.9%
	Level 2.B	27.5%	8.8%	17.0%	14.9%
	Level 3.A	26.3%	23.8%	14.9%	14.9%
	Level 3.B	16.3%	47.5%	6.4%	10.6%

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Analysis Lens: Location wise

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Overall Insights

1. Baseline vs. Endline

- For treatment school, there has been a increase of 37.1%, 30.8% of students in level 3 from baseline to endline for rural and urban respectively.
- For control school, there is no change in the percentage of students for level 3 from baseline to endline at different grades.

2. Treatment vs. Control

- Difference in the percentage of students at level 3 between treatment and control has increased by 37.1%, 30.8% for rural and urban respectively from baseline to endline

Speaking level (n=221, Tn=127, Cn=94)

Treatment | Control

		Baseline	Endline	Baseline	Endline
Rural	Level 0	50.0%	6.5%	53.2%	43.5%
	Level 1	25.8%	22.6%	21.0%	27.4%
	Level 2	4.8%	14.5%	11.3%	14.5%
	Level 3	19.4%	56.5%	14.5%	14.5%
Urban	Level 0	32.3%	7.7%	18.8%	15.6%
	Level 1	13.8%	12.3%	31.3%	34.4%
	Level 2	16.9%	12.3%	6.3%	6.3%
	Level 3	36.9%	67.7%	43.8%	43.8%

Rural: Kolar- 2 schools **Urban:** Bangalore- 2 schools

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Overall Insights

1. Baseline vs. Endline

- For treatment school, there has been a increase of 30.7% and 29.4% of students in level 3 from baseline to endline for rural and urban respectively.
- For control school , there is negligible change in the percentage of students for level 3 from baseline to endline at different grades.

2. Treatment vs. Control

- Difference in the percentage of students at level 3 between treatment and control has increased by 27.4% and 29.5% for rural and urban respectively from baseline to endline

Reading level (n=221, Tn=127, Cn=94)

Treatment | Control

		Baseline	Endline	Baseline	Endline
Rural	Below level 0			3.2%	3.2%
	Level 0.A	6.5%	1.6%	4.8%	3.2%
	Level 0.B	6.5%	4.8%	4.8%	4.8%
	Level 0.C			4.8%	6.5%
	Level 1.A	4.8%	8.1%	9.7%	8.1%
	Level 1.B	16.1%	8.1%	16.1%	14.5%
	Level 2.A	8.1%	3.2%	12.9%	14.5%
	Level 2.B	27.4%	12.9%	17.7%	16.1%
	Level 3.A	17.7%	22.6%	21.0%	21.0%
	Level 3.B	12.9%	38.7%	4.8%	8.1%
Urban	Below level 0			3.1%	3.1%
	Level 0.A	1.5%		3.1%	3.1%
	Level 0.B			3.1%	3.1%
	Level 1.A	3.1%	3.1%	3.1%	3.1%
	Level 1.B	6.2%	3.1%	12.5%	12.5%
	Level 2.A	9.2%	3.1%	3.1%	3.1%
	Level 2.B	24.6%	6.2%	18.8%	18.8%
	Level 3.A	33.8%	18.5%	9.4%	3.1%
	Level 3.B	21.5%	66.2%	43.8%	50.0%

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Overall Insights

1. Baseline vs. Endline

- For treatment school , there has been a increase of 32.3% and 60% of students in level 3 from baseline to endline for rural and urban respectively.
- For control school, there is negligible change in the percentage of students for level 3 from baseline to endline at different grades.

2. Treatment vs. Control

- Difference in the percentage of students at level 3 between treatment and control has increased by 30.7% and 60% for rural and urban respectively from baseline to endline

Listening level (n=221, Tn=127, Cn=94)

Treatment | Control

		Baseline	Endline	Baseline	Endline
Rural	Level 0	14.5%	4.8%	29.0%	25.8%
	Level 1	85.5%	62.9%	71.0%	72.6%
	Level 3		32.3%		1.6%
Urban	Level 0	7.7%		6.3%	6.3%
	Level 1	92.3%	36.9%	93.8%	93.8%
	Level 2		3.1%		
	Level 3		60.0%		

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Analysis Lens: Treatment School

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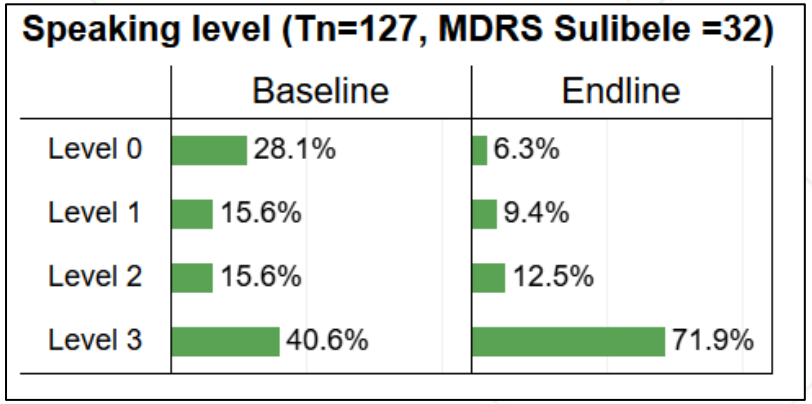
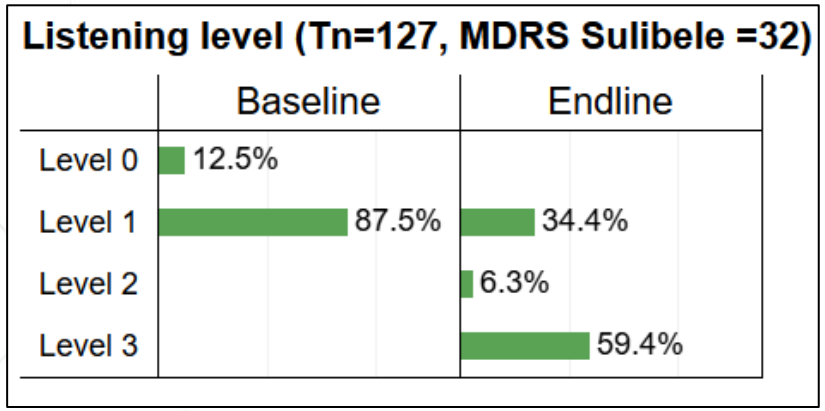
MDRS, Sulibele

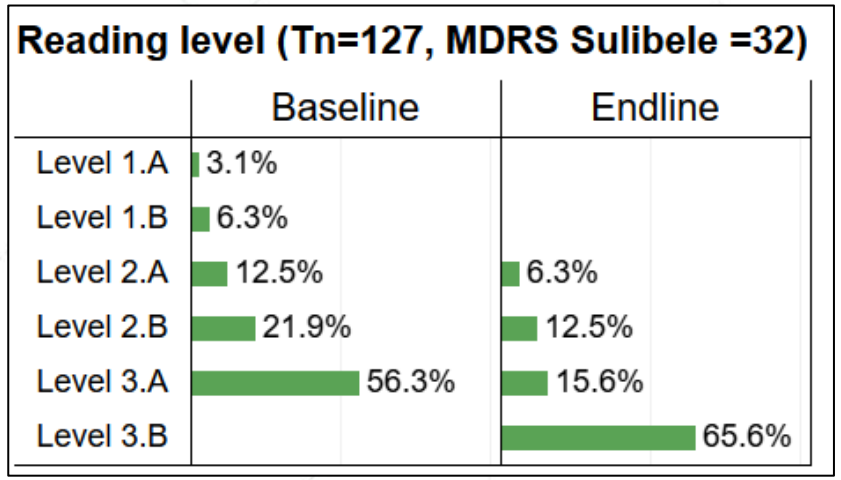
Speaking Level: There has been a increase of 31.3% of students in level 3 from baseline to endline

Listening Level: There has been a increase of 59.4% of students in level 3 from baseline to endline

Reading Level: There has been a increase of 24.9% of students in level 3 from baseline to endline







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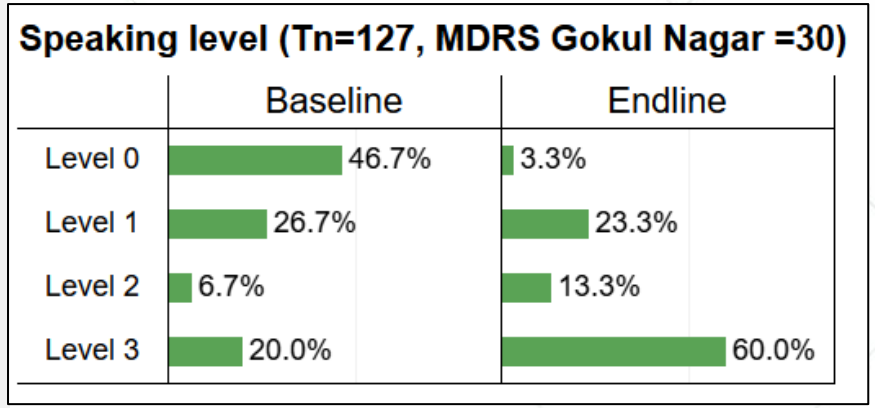
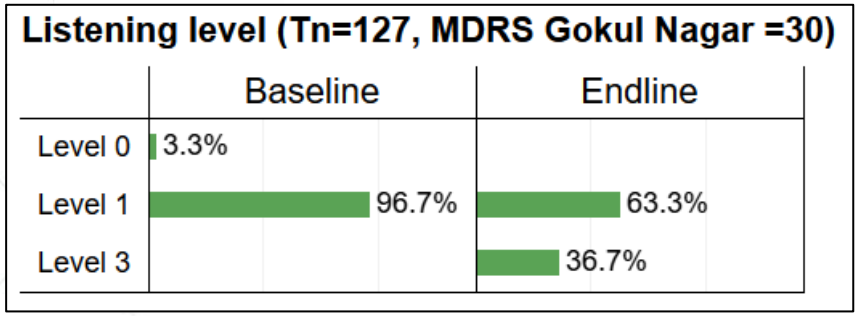
MDRS, Gokul Nagar

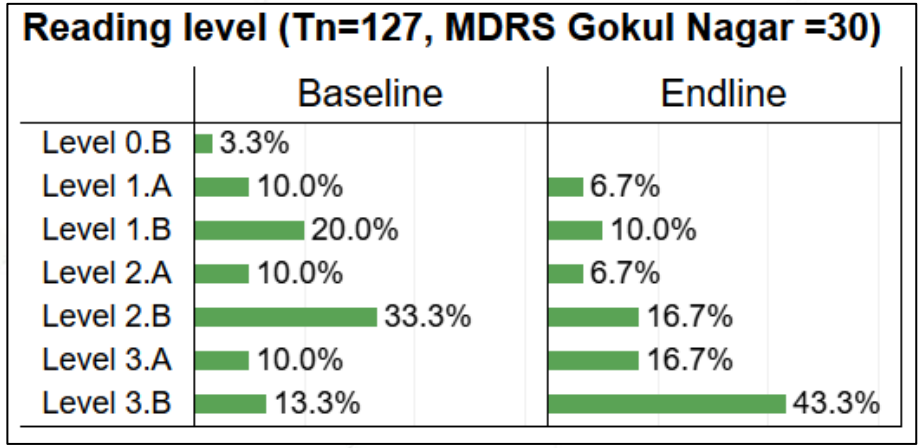
Speaking Level: There has been a increase of 40% of students in level 3 from baseline to endline

Listening Level: There has been a increase of 36.7% of students in level 3 from baseline to endline

Reading Level: There has been a increase of 36.7% of students in level 3 from baseline to endline







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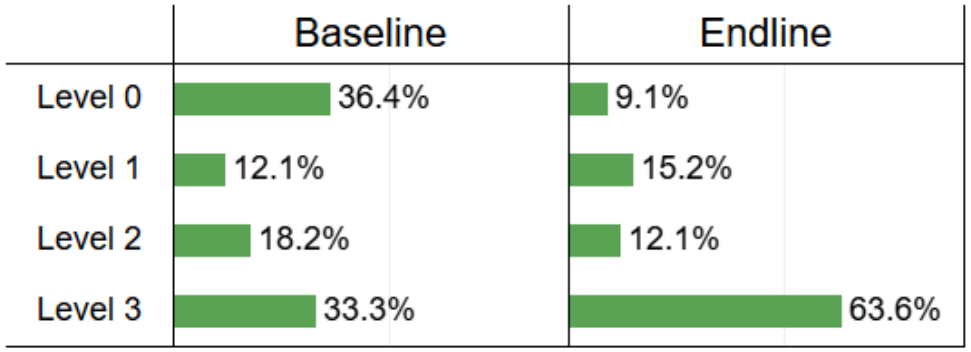
MDRS, Chamarajpete

Speaking Level: There has been a increase of 30.3% of students in level 3 from baseline to endline

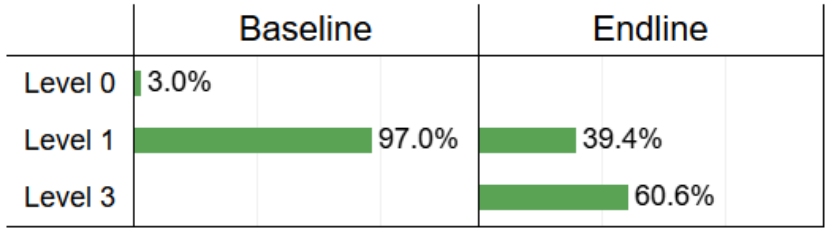
Listening Level: There has been a increase of 60.6% of students in level 3 from baseline to endline

Reading Level: There has been a increase of 33.4% of students in level 3 from baseline to endline

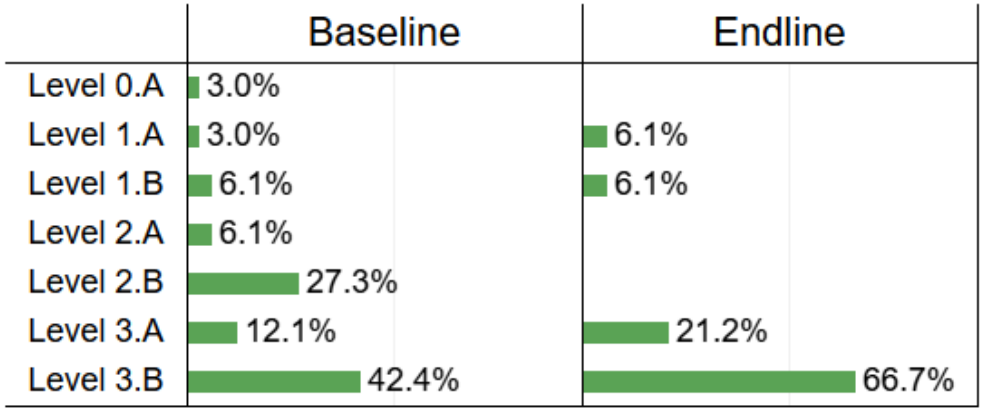
Speaking level (Tn=127, MDRS Chamarajapete =33)



Listening level (Tn=127, MDRS Chamarajapete =33)



Reading level (Tn=127, MDRS Chamarajapete =33)



> Activities conducted in the ARIVU-DISHA program revitalizes students and provides them an opportunity to learn in an engaging way - Mrs. Shakuntala, Warden and Teacher in Chamarajpete of grade 6

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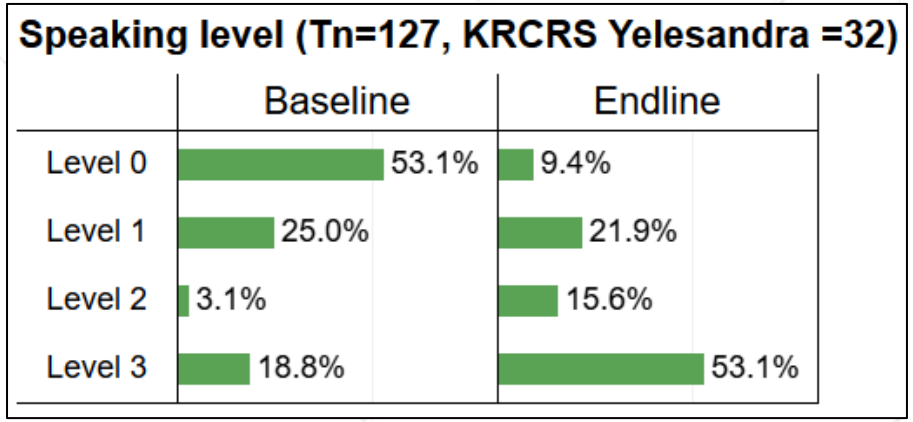
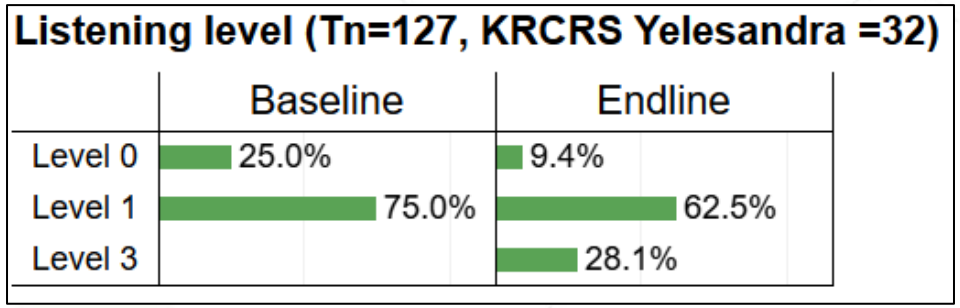
KRCRS, Yelasandra

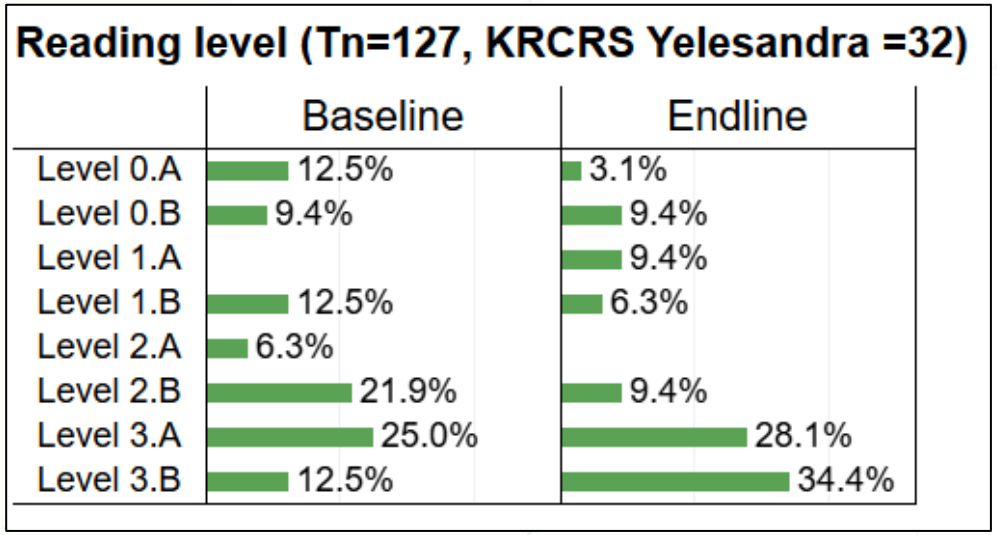
Speaking Level: There has been a increase of 34.3% of students in level 3 from baseline to endline

Listening Level: There has been a increase of 28.1% of students in level 3 from baseline to endline

Reading Level: There has been a increase of 25% of students in level 3 from baseline to endline







> English communication skill of students is improving with ARIVU-DISHA program. However, some students hesitate due to fear of being grammatically incorrect - Mr. Devraju, English Teacher of Yelasandra

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Key Insights and Recommendations

Areas	Rationale	Potential Action
Speaking	• Students fear speaking in English because they worry about being grammatically incorrect.	• Activity focused on improving grammar/highlighting grammatical mistakes in speech of students would be helpful in overcoming the fear. • Culture of conversation in English in the school premise has to be developed. This can be promoted by school staffs (HM, teachers and Headstreams facilitators)
Listening	• < 50 % of students are at level 3 in Endline in treatment school. • <35% of students are at level 3 in grade 6 & grade 7 in Endline	• Video (English news, speech) / Group based (debates) activity where student get an opportunity to hear regular conversation in English would help in improving their listening skills
Reading	• 12.7 % of treatment school students, with medium of instruction as Kannada till grade 5th, are at level 0 of reading skills in endline	• A small part of any play (stage play) can be assigned to a group of 5-6 students in every class. Each student can be assigned the character as per the play and then can read their lines and act in the class to make the reading more joyful

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RESULTS AND FINDINGS - DISHA PROGRAM

Overall Insights

Key Insights and Recommendations

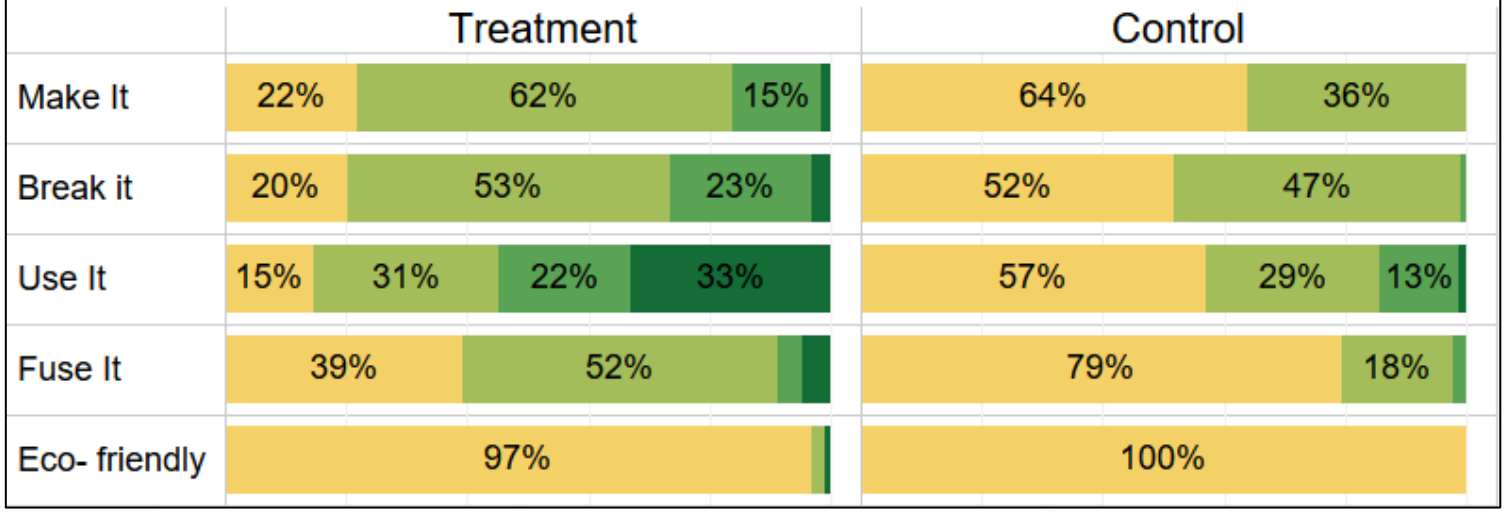
Overall Insights

- In idea generation, 75% of treatment school student are able to give at least 1 unique responses for all the category except eco-friendly. In control students are able to give only 1 solution for usage for which 50% of students have given at least 2 unique responses.

- Most of the students haven't given any responses for eco-friendly solution.

Number of ideas students could make across multiple categories to improve the sale of a particular given product (n=221, Tn = 127, Cn=94)

0 | 1 | 2 | >3



Average number of ideas given by students

	Make It	Break it	Use It	Fuse It	Eco- friendly
Treatment	1	1	2	1	0
Control	0	0	1	0	0

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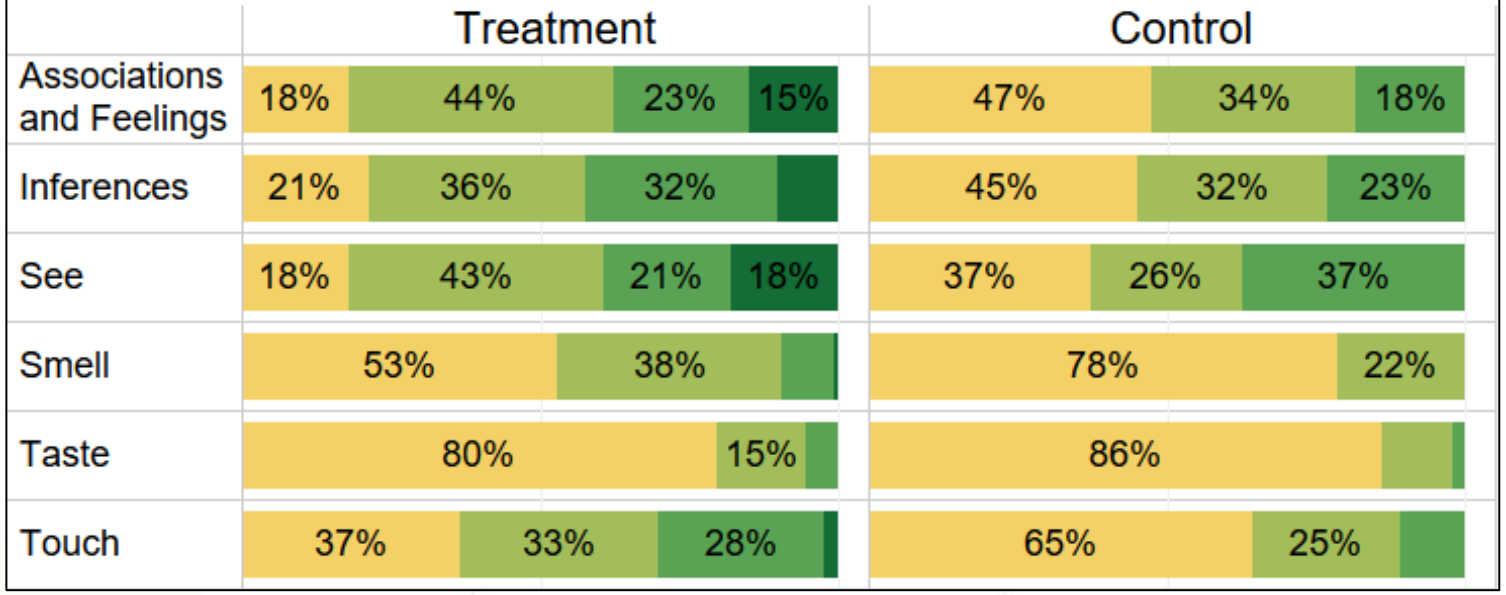
Overall Insights

- Among all the six senses, treatment student are significantly performing better than the control students. ~70% of treatment school students are able to give one unique responses for all senses except smell and taste. However, for control this rate is only around 40%
- For associations and feelings, inferencing, making observations the treatment students are able to do at least 2 unique responses.

Number of observations students could make across multiple category from set of 5 items (n=221, Tn = 127, Cn=94)

0 | 1 | 2 | >3



Average number of observation made by students

	Touch	See	Smell	Taste	Associations and Feelings	Inferences
Treatment	1	2	1	0	2	2
Control	0	1	0	0	1	1

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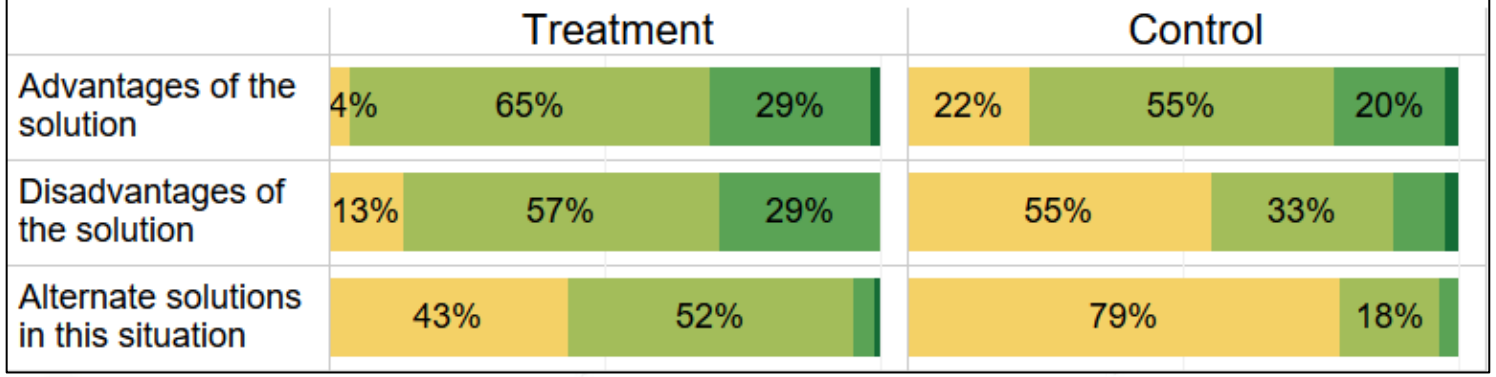
Overall Insights

- Treatment students are evaluating solution much better than control school students.
- 80% of treatment school students are able to tell at least 1 advantage, disadvantage and an alternative solution for any solution.

Number of points students could make across multiple categories for a proposed solution for a situation (n=221, Tn = 127, Cn=94)

0 | 1 | 2 | >3



Average number of answers proposed by students

	Advantages	Disadvantages	Alternative solution
Treatment	1	1	1
Control	1	0	0

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Key Insights and Recommendations

The following points were highlighted during the FGDs with students, interviews with HM, teachers and facilitators:

1. **Students value the Disha program as they feel it help them as follows:**
    - Opportunity to explore their own creative side
    - Starting their own business
    - Using the skills to gift friends and family by being innovative
    - Using the skills for waste recycling
    - Using the skills to teach their sibling and friends

> "Students think innovatively and respond to answers going beyond what they have been taught in the class after the ARIVU-DISHA program - Mr. Basawaraj, Headmaster of Sulibele"

2. Following are the **potential actions** regarding the Disha program:

    - Screening of videos of successful individuals (entrepreneurs) and how they achieved their goal will help in motivating the students to set their goal and work toward it

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INSIGHTS FROM RETROSEPCTIVE STUDY

Overall Insights

Next Steps

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Overall Insights (1/2)

The following points were highlighted during telephonic conversations with Principals and school teachers:

1. **School selected for the program:** Most of the govt. schools have limited access to resources with poor infrastructure. As an external organization is visiting the school weekly and helping children meaningfully engage with trained facilitators, is a matter of privilege for the students and school authority. The schools selected for the program did not have collaborations with Corporate Foundations, Philanthropic Organizations or NGOs which made it even more special for the students to have access to a rich pool of professionals and educational resources.

2. **Access to digital devices:** The teachers pointed out that most govt. schools lack computers and since the parents are mostly daily wage workers, the students have limited to no access to mobile phones as well. The Arivu Disha program, therefore introduced tablets which helped students get introduced to not just a digital form of learning but also provided them the exposure to what 'digital' looks and feels like.

3. **Access to facilitators:** Unlike the rapport that students share with teachers, they see facilitators as "akkas/annas" who can be approached and spoken to, without the fear of being scolded or judged.

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Overall Insights (2/2)

4. Attendance in school: The teachers said that the students would attend the school specially on the day when the sessions by the Headstreams team were being conducted. The students would always look forward to learning from the facilitators and remain curious, even today, regarding when the sessions will commence, after the program concluded in the school.

5. Spoken English improved among students: Overcoming the fear of speaking incorrect English, the students have now started attempting to speak in English, even if it is not grammatically correct. The teachers saw improvement in students' marks and willingness to learn the subject, treating is not as 'knowledge' but as a language.

6. Teachers learning from facilitators: The teachers said that by observing the sessions conducted by the facilitators as well as discussing their own experience with the facilitators, they learnt the following from the program:

- 2 way interaction for rapport building and effective classroom management by focusing on not just the syllabus but also on understanding how the students are feeling and responding to what is being taught in class
- Activity based learning is always engaging and most teachers have started using some of the teaching methods that the facilitators used in their sessions
- With the self-drive to improve themselves, some teachers also started focusing on improving their own English reading, listening and speaking and shared that from speaking mostly in Kannada, they have now moved to speaking in English as and when required in their professional and personal spheres

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Next Steps

Finalize the key focus areas for the Arivu Disha program for the next 3 - 5 years bringing in elements of sustainability by training of teachers

Map the target group for the Arivu and Disha components of the program, along with execution locations

Redesign the program to redefine activities and implementation strategy to maximize the intended outcomes of the program

Devise monitoring and evaluation systems and processes for concurrent governance of the program

Identify potential sources of funding for the program (organizations having similar vision/mission)

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