FAST-TRACK
FLN
SAMBALPUR
ODISHA

GRATITUDE

Dear Reader,

We draw inspiration from exceptional government leaders and express our sincere gratitude to all those we have collaborated with, including the principals and teachers who have played a crucial role in the success of every child.

We are immensely thankful to the Office of the Secretary, Ministry of Education, India, for granting us the opportunity to implement the ALfA (Accelerating Learning for All) pedagogy and program in Sambalpur.

Developed over eight years, ALfA revolutionizes education through a disruptive pedagogy that enables children to acquire foundational literacy and numeracy skills in an extraordinary 30-45 instructional days. We are happy to share that ALfA's impact has been recognized by the Harvard Graduate School of Education in the USA.

Since our humble beginnings in the first two Low-Performing Districts allocated to DEVI Sansthan by the Ministry of Education last year, ALfA has experienced exponential growth in India and other countries. Nothing is possible without our purpose-driven team and I thank them too for their part.

Sunita Gandhi

Founder & CEO, DEVI Sansthan
Dignity Education Vision International

Former Economist, The World Bank, USA

PhD, Physics, Cambridge University, UK

Chief Advisor, Academics, City Montessori School, World's largest school

We firmly believe that through collaboration, remarkable accomplishments can be achieved, and we extend our heartfelt gratitude for your partnership.

As we journey towards this goal of literacy for all, we are most grateful to:

IAS Sanjay Kumar	Secretary, Ministry for Education
IAS Anita Karwal	Former Secretary, Ministry of Education
IAS Jai Prakash Pandey	Director Education, MOE
IAS Aswathy S.	Commissioner-Cum-Secretary, School and Mass Education Department, Odisha
IAS Anupam Saha	State Project Director, OSEPA
IAS Ashwini Kumar Mishra	Chairman, Higher Secondary Education
IAS Narahari Sethy	Director, Higher Secondary Education
IAS Manoj Kumar Padhy	Director, SCERT
IAS Ananya Das	District Magistrate, Sambalpur
IAS Dharmendra Malik	CDO-Cum-EO
Shri Rehan Khatri	IAS Probationer
Shri Umakanta Raj	ADM Revenue
Shri Ajambar Mohanty	ADM General
Shri Minarani Mangal	District Education Officer
Shri Jayashree Dora	Assistant DEO
Shri Muralidhar Behera	Assistant DEO
Shri Purosattam Praharaj	District Coordinator
Shri Ravi Narayan Sahu	Planning Coordinator
Prof. R K Dash	Principal, DIET
Shri Sanjeev Kumar Patel	Block Development Officer
Shri Surendra Sahu	Block Education Officer, Dhankauda
Shri Ramesh Mishra	BRCC, Dhankauda
Ms Benju Rani Behera	CRCC, Dhankauda

SUPPORTERS OF ALfA

Rajnath Singh
Defense Minister
Government of India

"Dr. Sunita Gandhi's 30 hour literacy and numeracy model is highly innovative, and highly scalable, that can benefit school children, out of school children and illiterate adults"

Yogi Aditya Nath
Chief Minister,
Uttar Pradesh

"I am delighted that DEVI Sansthan is implementing its project in slums of Lucknow to enable foundational literacy and numeracy through the innovative Global Dream toolkit."

Alok Ranjan
Former Chief Secretary,
Government of Uttar Pradesh

"I have been very impressed with the toolkit developed by Dr. Sunita Gandhi, which takes less time to make a person literate, and a less educated person can also become a literacy volunteer."

Dinesh Sharma
Deputy Chief Minister,
Uttar Pradesh

"The 'Each One Teach At least One' campaign involving school children of 150 Lucknow schools, helped make an estimated 2 lakh people literate. I congratulate Dr. Sunita Gandhi."

G B Patnaik
Former Chairman,
India Literacy Board

"Global Dream Model can make it possible to scale up literacy across the state at zero to near zero additional costs per learner."

Anil Swarup
Former Education Secretary
Government of India

"Dr Sunita Gandhi has developed groundbreaking tools that have the potential to solve India's greatest education problem — Foundational Literacy and Numeracy (FLN)."

Scan the QR code to see a video of Indian Defence Minister **Rajnath Singh** discuss the program.

ALfA has been endorsed by many international experts. Scan the **QR code** to watch.

EXECUTIVE SUMMARY

This report takes stock of Accelerating Learning for All (AL*f*A) implementation in government primary schools of Sambalpur, Odisha. It draws lessons from the program's successes and challenges to make the case for scaling up this groundbreaking literacy program in schools across the country.

NIPUN Bharat set the ambitious target of achieving universal literacy among Grade 3 and above students by 2026-27. **Read an overview on p5**.

A chapter of a recent book by Harvard Graduate School of Education has discussed ALfA implementation in Shamli district, which also has important implications for Sambalpur. **Check out some powerful quotes on p6-7**.

The ALfA program is an innovative paired learning pedagogy. Children ask each other questions to learn letters via picture recognition and blend them together to form words. **The ALfA pedagogy is described on p8-9**.

Students are achieving NIPUN competencies swiftly using the ALfA process. **Check out how on p10-11**.

The Ministry of Education Secretary, requested DEVI Sansthan to implement its Accelerating Learning for All (ALfA) program in two of India's low performing districts (LPDs), including Sambalpur, Odisha. **See the detailed project timeline on p12-13**.

ALfA implementation has been designed with a scientific research basis: schools are randomly allocated to implementation and reference groups. **Explore the research and assessment design on p14-16**.

The baseline test papers were scanned using Pragati App, a customized software which provides instant, detailed feedback. **Explore the baseline assessment results more on p17-21**.

The ALfA program in Sambalpur has been documented by teachers themselves capturing footage of the learners' progress. **Explore the videos and photos on p22.**

Students in the ALfA program demonstrated impressive levels of learning gain by the time of endline testing. **Explore the data on p23-27**.

DEVI trains teachers at scale in both online and offline modalities. **Explore the ways training is conducted for ALfA teachers on p28-31.**

ALfA is powerful not just in teaching foundational literacy and numeracy, but also 21st century skills such as collaboration, critical thinking, citizenship and climate consciousness. **See how on p32-33**.

ALfA is ready to be scaled up in schools around the country. **See next steps on p34-35**.

OVERVIEW

At the invitation of the Ministry of Education, India, DEVI Sansthan began its Fast-Track FLN in two Low Performing Districts in August and November 2022: Shamli in UP and Sambalpur in Odisha. In both districts, 10 + 10 schools were taking up in the pilot stage (10 in treatment and 10 in the control group) in an Randomized Control Trial (RCT). A pre-test and post-test was given in both districts (results from Sambalpur are awaited as the post-test was delayed due to local riots).

The post-test in Shamli was conducted for both treatment and control groups after 40 days of implementation in October. The RCT results, which show a highly significant effect size from just 40 days of implementation, from this have been published by Harvard Graduate School of Education in Chapter 8 of a book released on Amazon in March 2023. The initial 20 school pilot was expanded to 290 biggest schools of Shamli which as 504 schools in 5 blocks.

EXPANSION TO 15 DISTRICTS OF UP & NATIONWIDE IN MALDIVES

An MOU with the government of Uttar Pradesh was signed in November 2022, to expand the program in 15 districts. The program was also adopted in 2022 for nationwide implementation in the Republic of Maldives.

SPEED IS OF THE ESSENCE

This report presents the Case Study of implementation of ALfA (Aceelerating Learning for All), a pedagogy-led transformation that is making 10X fast-track FLN possible.

45 DAYS TO NIPUN

National Initiative for Proficiency in reading with Understanding and Numeracy (NIPUN), has set the target of 2026-27 to reach universal literacy which is the topmost priority of India's New Education Policy. This ambitious target can be met in 90 days from the start of its implementation if we shift the pedagogy to ALfA which takes 45 days to reach NIPUN outcomes, followed by completion of the prescribed textbooks and workbooks in another 45 days. For the results of ALfA Fast-Track FLN to reflect in the National Achievement Survey (NAS) for Grades 3 and 5, a district or statewide implementation would be required as the next priority. Third-party evaluations and evidence are presented here for the schools in the implementation.

HARVARD ON ALfA FLN

Harvard Graduate School of Education, USA

Chapter 8

Policy Pathways for Improving Foundational Literacy and Numeracy in Uttar Pradesh, India

in "Rebuilding Resilient Education Systems After the COVID-19 Pandemic", March 2023, Amazon

Click here

Book By Prof. Fernando Reimers et al, Harvard Graduate School of Education

Chapter 8 of the book by Harvard Graduate School of Education (HGSE), Cambridge, USA, published in March 2023 documents the ALfA program in Shamli, and recommends its widespread adoption in UP.

Chapters 8 also documents results from the ALfA program from a Randomized Control Trial (RCT) conducted in the Shamli district of Uttar Pradesh. The RCT demonstrates a significant effect size of 0.23 for Grade 3 and 0.89 for Grade 5.

Chapter 10 of the same book is about the introduction of ALfA program at the nationwide level in the Republic of Maldives.

On this and next page are some extracts from the chapter on FLN in UP by HGSE.

We recommend the UP government (1) incorporate the promising ALfA pedagogy developed by DEVI for the first 6 weeks to quickly establish a strong FLN foundation, (2) after the ALfA program, shift to the curriculum.

Accelerated Learning for All (ALfA), helps children quickly gain FLN competencies. The pedagogical approach works as follows: students start with known words in the form of pictures, identify the sounds, and work backward to the letters.

Shamli Oral Reading Fluency
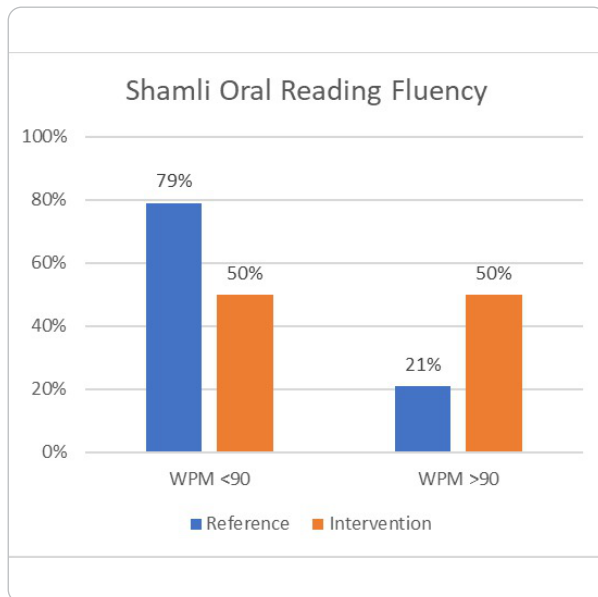
Students in the intervention groups had much higher ORF [oral reading fluency] levels than those in the reference group. For Grades 4-5, 50% of the intervention group students were able to read the passage at >90 words per minute (WPM) compared to 20% of reference group students.

The effect size* of the project was **0.23 for Grade 3** students and **0.89 for Grade 5**... the results suggest there is significant value in pursuing the ALFA model in other schools if implemented in a coherent, structured, and coordinated manner.

*Effect size is a statistical measure of how substantial the impact of an intervention is. 0.23 is considered a substantial effect size, and 0.89 very large.

HOW AL*f*A WORKS

AL*f*A is a joyful process of learning, based on years of psychological and pedagogical research into education.

Table 1: Key differences between traditional and ALfA classrooms

Traditional classroom	ALfA classroom
Transaction of learning is from teacher to student. Much rote memorisation.	Transaction of learning is from student to student. Learning is derived. No rote learning.
Children are grouped by skill level.	Random pairing ensures greater academic learning, a highly interactive environment, and development of 21st Century Skills.
Students work in whole class or groups, sit in rows facing the teacher.	Students work entirely in pairs; they face each other. Pairs are changed everyday.
Knowledge is abstract, with sometimes hands-on activities.	Children learn primarily through hands-on activities; use simple materials like matchsticks and ice cream sticks to learn entire mathematics.
Textbooks and workbooks are bulky. Designed for teachers to teach from.	Thin booklets, short modules with teacher prompts, are designed for children to learn by themselves.

Numeracy

Children use concrete objects (e.g. ice cream sticks and matchsticks) to represent tens and ones and to do operations.

Measurement, shapes, positions, etc., are taught practically, for example, 14 measurement of a tailor.

Children make questions for each other and the learning goes from concrete to abstract.
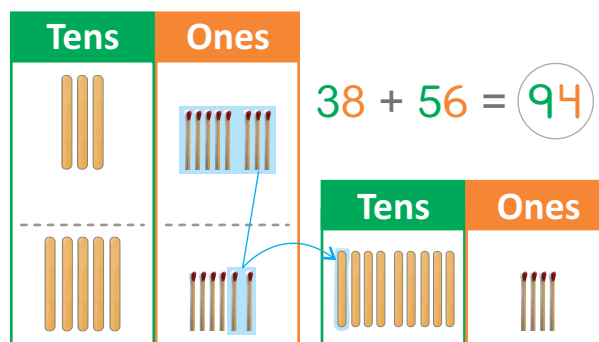
Literacy

Children derive first sounds from the known pictures. Teacher provides demonstration based on prompts provided in the ALfA books. Children take turns, ask each other questions (as shown below), and learn with their pair.

What is this **picture**?

What is its first **sound**?

What **word** do these sounds join to make?
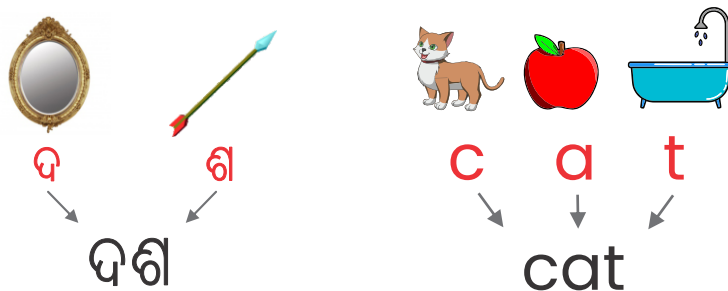
ALfA 4-STEP LEARNING

STEP 1: TEACHERS DEMONSTRATE BY PAIRING UP WITH ONE CHILD

Each module has prompts instructing how to do the activity. Children will need you to read these out (at least at early stages, before they can read). You can then demonstrate the activity along with another child.

STEP 2: TWO STUDENTS DEMONSTRATE FROM THE FRONT AS A PAIR

Next call a pair to the front to demonstrate – one child asking questions and the other responding; then swapping roles.

STEP 3: THE WHOLE CLASS LEARNS ON THEIR OWN IN PAIRS

Have everyone work through the same question in their own pairs. This helps them become confident in the process– repeating what they've already seen done. Monitor the class to see how each pair is doing.

STEP 4: STUDENTS QUIZ EACH OTHER BY MAKING QUESTIONS

Children pose many new questions for each other. The process of making new questions for each other, beyond what is given in the book, gives children a chance to exercise their creativity, and excites them as active participants.

NIPUN GOALS *Literacy*

Reading words and sentences with meaning

Answering at least 3 out of 4 questions after reading an age-appropriate unknown passage.

Writing short messages for different purposes.
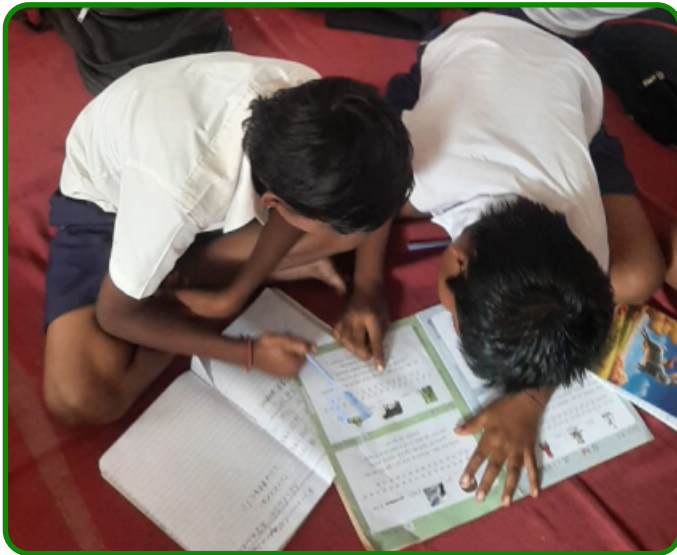
Reading at least 60 words per minute correctly and with comprehension.

NIPUN GOALS *Numeracy*

Solving sums for use in daily life, using toy money.

Telling the time and using toy clocks to demonstrate.

Understanding and representing numbers to 9,999.

Understanding measurement in metres and cm.

Handling data & understanding pictorial representations.

Understanding & representing shapes.

TIMELINE

2022

March

Anita Karwal, then Secretary, Ministry for Education, requests ALfA implementation in two low-performing districts: Shamli (UP) and Sambalpur (Odisha).

24 June

Initial MOU signed with Sambalpur District Education Officer inviting ALfA implementation in 10 schools (later revised in August 2022).

1 & 2 August

1-Day training for teachers of 10 implementation group schools in Sambalpur district, conducted in 2 batches.

4 & 5 August

Pre-testing of students' Odia and Numeracy levels conducted in 10 implementation and 10 reference schools.

2022

August

Classroom implementation begins. However, several challenges mean many teachers do not properly implement ALfA initially.

31 October - 1 November

Refresher training for teachers from 10 implementation schools. Implementation begins in earnest, with schools giving one period per day each for literacy and numeracy.

2023

March

Book 'Rebuilding Resilient Education Systems After the Covid-19 Pandemic' published by Harvard Graduate School of Education. Chapter 8 and 10 discuss ALfA implementation.
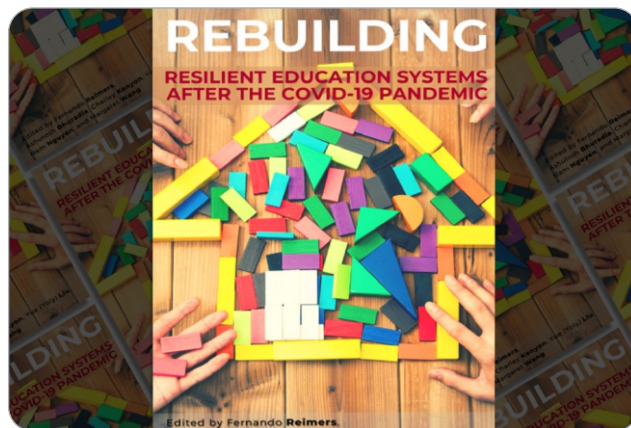
July

Endline testing conducted in both implementation and reference schools, by college student volunteers.

RESEARCH DESIGN

ALfA implementation was conducted as a randomised control trial. The 20 schools of Dhankauda Block were assigned to DEVI by the Sambalpur government. We randomly allocated 10 of these to the reference and 10 to the implementation group, as shown below in Table 2. Reference schools were not given any training or materials, but baseline and endline testing was conducted there.

Table 2: **List of implementation and reference group schools with student strength.**

IMPLEMENTATION SCHOOLS		REFERENCE SCHOOLS	
School Name	Enrolment	School Name	Enrolment
PS AINTHAPLAI	58	PS MAKHANAPADA	51
PS BHUTAPADA	69	PS BHUTAPADA (URDU)	90
PS SARLA	82	PS DEHURIPALI SEV	16
URDU UPS, SAMBALPUR	47	PS SHREE GUJURATI	119
PS BINAPANI (BENGALI)	24	PS BADBAZAR	113
PS TALBHATAPADA	145	PS GOVINDTOLA	116
PS MAYA BAGICHA	60	PS KUMBHAR PADA	63
PS SAKHIGOPINATH	110	PS BANANIGAM	108
PS BARAIPALI SEV	151	PS LAXMI DUNGRI	52
PS R P LINE	92	PS MODIPADA	147
TOTAL	**838**	**TOTAL**	**875**

ASSESSMENT TOOL

A multiple-choice question paper was designed based on the NIPUN Bharat Competencies (for Balvatika to Grade 3) and the National Achievement Survey (for Grade 5), in consultation with DIET. The paper was divided into sections based on the Grade level of the NIPUN competency being tested by each question: Section A tested Balvatika and Grade 1 competencies; Section B tested Grades 2 & 3 competencies; Section C tested Grades 4 & 5 competencies.

Grade 1 students were given a paper containing only Section A, whereas Grade 2 & 3 students were given a paper containing both Section A & B, and Grade 4 & 5 students were given a paper with Sections A, B & C.

ODIA

DEVI SANSTHAN — Dignity Education Vision International — Leave no one behind

GLOBAL DREAM — Creative Literacy

Pragati Post-Test
ODIA ଓଡ଼ିଆ

SECTION A+B+C

SURVEY CODE ▸ ☐☐☐☐☐☐

SECTION A

ନାମ | ଶ୍ରେଣୀ

ବିଦ୍ୟାଳୟ

ଶ୍ରେଣୀ ୧ ଦକ୍ଷତା ୧ — ପ୍ର୧. 'ପ' ଅକ୍ଷର ପାଇଁ ଠିକ୍‌ଚିତ୍ର ବାଛ ।

ପ
A. B. C. D. E.

ଶ୍ରେଣୀ ୧ ଦକ୍ଷତା ୧ — ପ୍ର୨. 'ଆ' ଅକ୍ଷରରୁ ଆରମ୍ଭ ହେଉଥିବା ଛବି ବାଛ ।

ଆ
A. B. C. D. E.

ଶ୍ରେଣୀ ୧ ଦକ୍ଷତା ୧ — ପ୍ର୩. 'ଦୀ' ଅକ୍ଷରରୁ ଆରମ୍ଭ ହେଉଥିବା ଛବି ବାଛ ।

ଦୀ
A. B. C. D. E.

ଶ୍ରେଣୀ ୧ ଦକ୍ଷତା ୧ — ପ୍ର୪. ଛବି ଦେଖି ଶବ୍ଦ ବାଛ ।

A. କମଳ C. କଉଓ E. କପଟ
B. କଲମ D. କଳସ

Global Dream Scaling up Literacy & Numeracy — DEVI SANSTHAN Dignity Education Vision International Leave no one behind

①

MATHS

DEVI SANSTHAN — Dignity Education Vision International — Leave no one behind

GLOBAL DREAM — Creative Literacy

Pragati Post-Test
MATHEMATICS ଗଣିତ

SECTION A

SURVEY CODE ▸ ☐☐☐☐☐☐

ନାମ | ଶ୍ରେଣୀ

ବିଦ୍ୟାଳୟ

ବାଲବାଟିକା ଦକ୍ଷତା ୧ — ପ୍ର୧- ତାରାଗୁଡ଼ିକୁ ଗଣିକରି ଠିକ୍ ସଂଖ୍ୟା ଲେଖ ।

A. ୪ B. ୭ C. ୮
D. ୯ E. ୭

ବାଲବାଟିକା ଦକ୍ଷତା ୧ — ପ୍ର୨- ଖାଲି କାଗାଗୁଡ଼ିକୁ ଠିକ୍ ସଂଖ୍ୟାରେ ପୂରଣ କର ।

୭ ☐ ☐ ୯ ୧୦

A. ୭, ୮ B. ୮, ୯ C. ୪, ୭
D. ୪, ୭ E. ୨, ୩

ବାଲବାଟିକା ଦକ୍ଷତା ୩ — ପ୍ର୩- ଅଧିକ ସେଓ ଥିବା ବାକ୍ସକୁ ଚିହ୍ନଟ କର ।

A. 🍎🍎 B. 🍎🍎🍎 C. 🍎🍎🍎🍎
D. 🍎🍎🍎 E. କଣା ନାହିଁ

ବାଲବାଟିକା ଦକ୍ଷତା ୪ — ପ୍ର୪- ଦିଆଯାଇଥିବା ଝାଞ୍ଜ କ୍ରମକୁ ପୂରା କରିବାକୁ ଆଉ ତିନିଟି ଆକୃତି ବନାଅ ।

△☐○△☐○ ____

A. △☐○ B. ○☐△ C. ☐△○
D. ○△☐ E. ○☐△

ବାଲବାଟିକା ଦକ୍ଷତା ୪ — ପ୍ର୫- ଦିଆଯାଇଥିବା ସଂଖ୍ୟାଗୁଡ଼ିକୁ ସାନରୁ ବଡ଼ କ୍ରମରେ ରଖ ।

୩, ୪, ୨, ୧, ୪

A. ୧, ୩, ୨, ୪, ୪ B. ୧, ୨, ୩, ୪, ୪ C. ୧, ୨, ୪, ୩, ୪
D. ୪, ୪, ୩, ୨, ୨ E. ୪, ୪, ୩, ୨, ୧

Global Dream Scaling up Literacy & Numeracy — DEVI SANSTHAN Dignity Education Vision International Leave no one behind
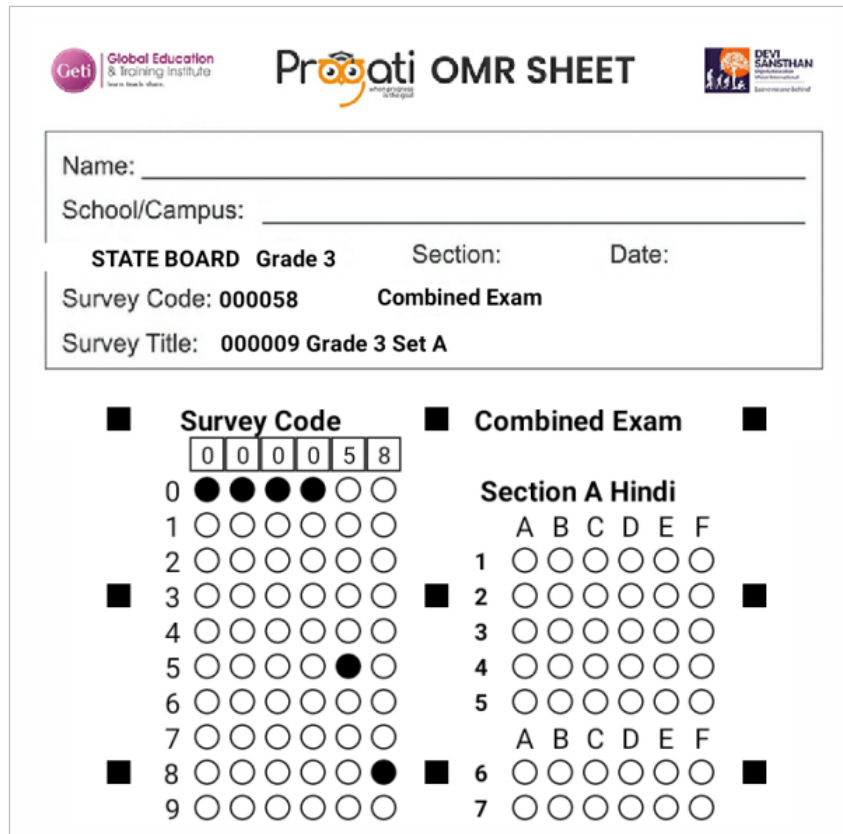
①

TESTING PROCESS

Baseline testing was conducted in Sambalpur in August 2022. Endline testing was scheduled for April 2023 but could not be conducted due to some political and religious tensions in the district. It is now scheduled for July 2023.
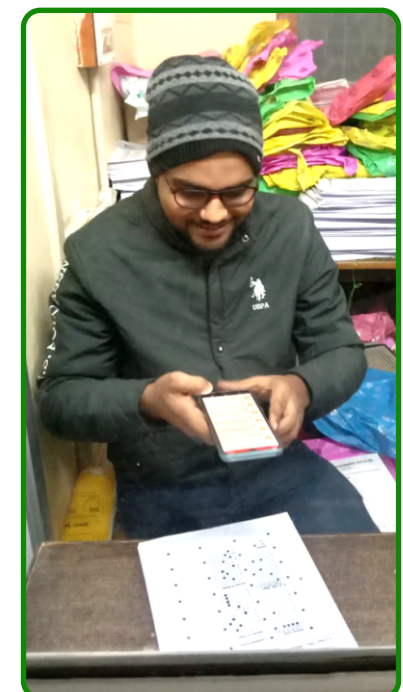
Assessment was conducted by college students, after receiving a training from the DEVI team. The surveyors requested teachers requested to remain outside the classroom during the tests, to minimise the possibility of cheating. The OMR sheets were scanned using the Pragati App, which allows instant data collation and analysis. The App generates a detailed personalized report card at multiple levels (child, class, school, district) which shows with a colour code which topics have been mastered and which need more work. Pragati report cards enable children to focus on their progress over time rather than comparing against others.

BASELINE RESULTS OVERALL

The baseline test indicated a disturbingly low level of learning, as shown in Graph 1. The overall average test scores ranged from 13% to 26%, depending on the Grade and subject.

Graph 1: Grade-wise Results from Sambalpur Baseline Testing (August 2022)
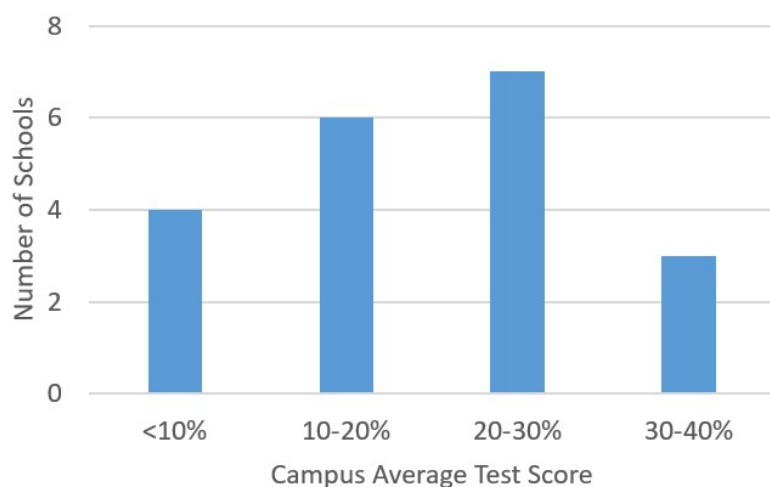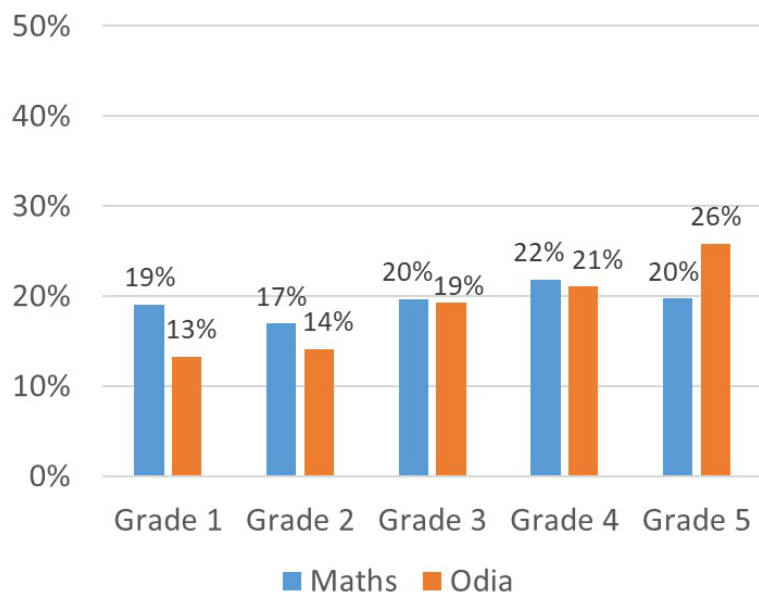
There was substantial variation between schools, with some having an average test score of less than 10%. However, none of the 20 schools scored an overall campus average of over 40%.

Graph 2: Number of schools by students' average test score

The structure of the paper allows easy comparison across the grades. The average score on, Section A of the paper, which tests Grade 1 level competencies, was under 40% even in Grade 5.

Graph 3: Grade-wise test scores on Section A of the paper
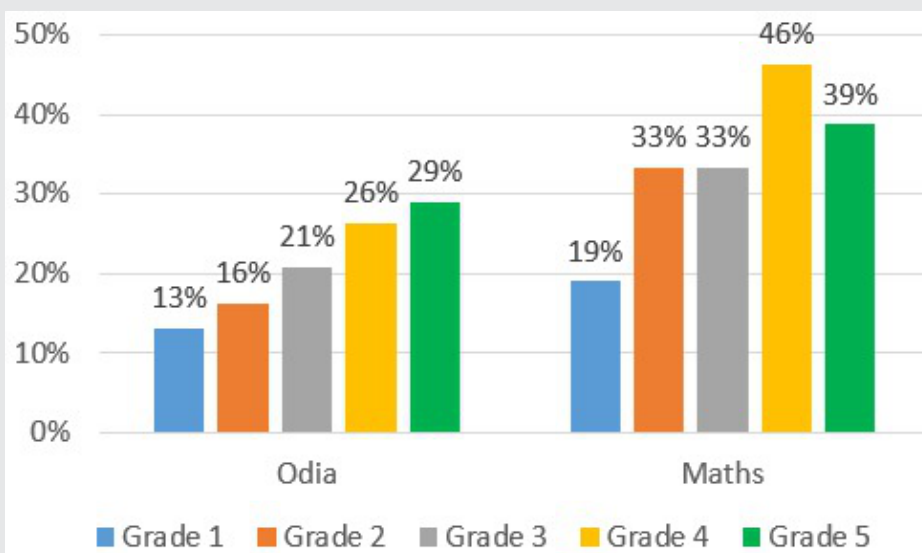
BASELINE RESULTS ITEM–WISE
NUMERACY

The Pragati App allows detailed question-wise analysis, which gives insight into which NIPUN competencies students are most struggling with.

Balvatika, Dakshata 4 Understanding and representing sequences & patterns.

ପ୍ର୪- ଦିଆଯାଇଥିବା ଢାଞ୍ଚା କ୍ରମକୁ ପୂରା କରିବାକୁ ଆଉ ତିନିଟି ଆକୃତି ବନାଅ।

△□○△□○ ___ ___ ___

A. △□○   B. ○□△

C. □△○   · ○△□

E. ○□△

Proportion answering correctly:
- Grade 1: 14%
- Grade 2: 49%
- Grade 3: 44%
- Grade 4: 52%
- Grade 5: 50%
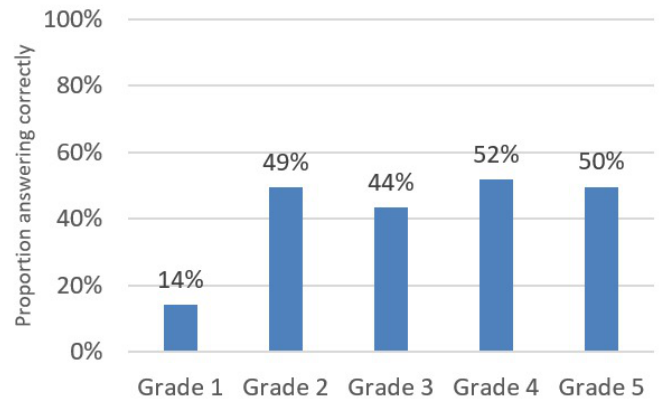
Grade 1 Dakshata 4 Observing the physical properties of 3D shapes such as the number of corners and edges.

ପ୍ର୧୦- ଦିଆଯାଇଥିବା ୩ଡି ଆକୃତିରେ କେତେଟି କଡ଼ ଅଛି, ତାହାର ସଂଖ୍ୟା ଲେଖ

A. ୪   B. ୧୨

C. ୮   D. ୬

E. ୫

Proportion answering correctly:
- Grade 1: 12%
- Grade 2: 7%
- Grade 3: 6%
- Grade 4: 15%
- Grade 5: 10%
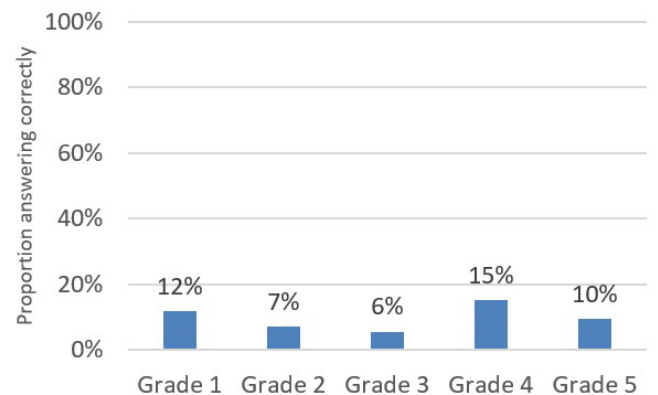
Grade 2 Dakshata 2 Addition and subtraction of numbers up to 99 in daily life.

ପ୍ର୨- ତମ ପାଖରେ ୮୭ ଟଙ୍କା ଅଛି। କେଉଁ କେଉଁ ଜିନିଷ କିଣିବ ଯେ ସବୁ ଟଙ୍କା ଖ

✏️ ₹୨୫   📗 ₹୧୫   🧽 ₹୫   🖍️ ₹୫୫

A. ଖାତା, କଲମ, ରବର
B. ବକ୍ସ, କଲମ, ରବର
C. କଲମ, ବକ୍ସ, ଖାତା
D. ଏଥିରୁ କୌଣସିଟା ନୁହେଁ
E. କଲମ ଓ ବକ୍ସ

Proportion answering correctly

- Grade 2: 7%
- Grade 3: 13%
- Grade 4: 28%
- Grade 5: 23%
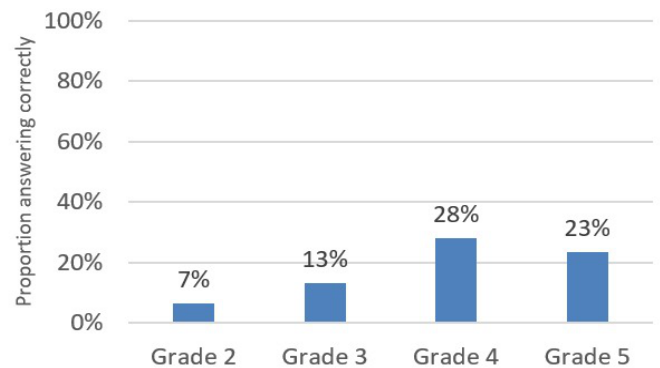
Grade 3 Dakshata 7 Identifying half, a quarter, three-quarters of a whole in a collection of items.

ପ୍ର୧୭- ଆକୃତିର ଏକ ଚଉଠ ପାଇଁ ରଙ୍ଗ ଭରିଲେ ଯେଉଁ ଚିତ୍ର ମିଳିବ ତାହା —

A.
B.
C.
D.
E.

Proportion answering correctly

- Grade 2: 7%
- Grade 3: 9%
- Grade 4: 13%
- Grade 5: 20%
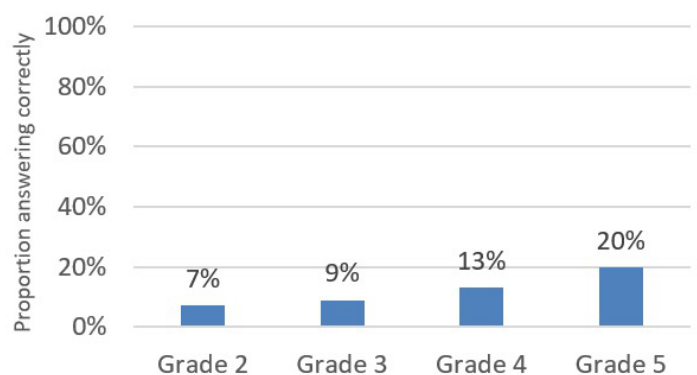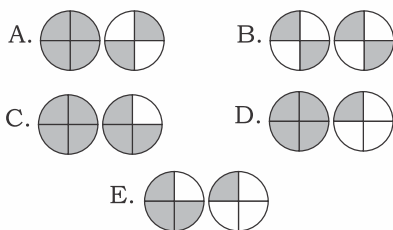
Grade 5 Dakshata 7 Measuring and calculating the area of shapes.

ପ୍ର୩- ଦିଆଯାଇଥିବା ଚିତ୍ରରେ ∆ABC ର କ୍ଷେତ୍ରଫଳ ବତାଅ ।

A. ୩୦ ବର୍ଗ ସେମି
B. ୧୫ ବର୍ଗ ସେମି
C. ୬୦ ବର୍ଗ ସେମି
D. ୭ ବର୍ଗ ସେମି
E. ଏଥିରୁ କେଉଁଟି ନୁହେଁ

D — C
A — B
୬ ସେମି
୫ସେମି

Proportion answering correctly

- Grade 4: 8%
- Grade 5: 16%
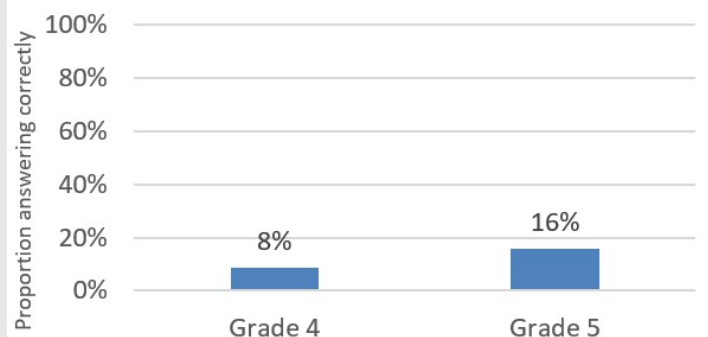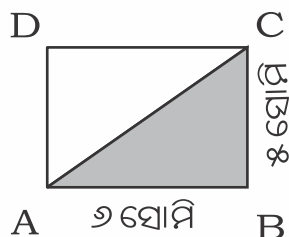
BASELINE RESULTS ITEM–WISE
LITERACY

Grade 1 Dakshata 1 Recognizing pictures and letters.

ପ୍ର୧. 'ପ' ଅକ୍ଷର ପାଇଁ ଠିକ୍‌ଚିତ୍ର ବାଛ।

ପ

A.

B.

C.

D.

E.

Grade	%
Grade 1	32%
Grade 2	27%
Grade 3	48%
Grade 4	47%
Grade 5	57%
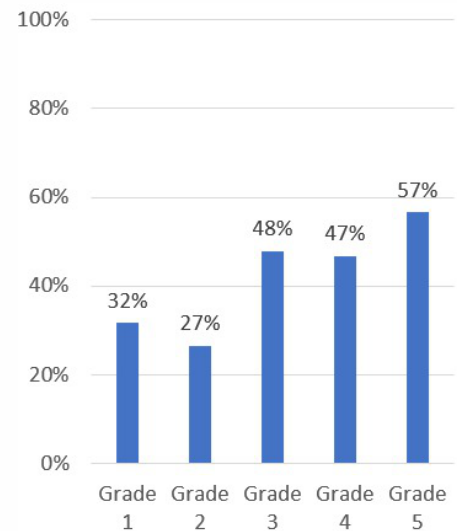
Grade 2 Dakshata 4 Reading an unseen passage and answering comprehension questions.

ଶୋଷିଲା କାଉଟିଏ ଥିଲା। ମାଠିଆରେ ପକାଇଲା।

ମାଠିଆରେ ଟିକିଏ ପାଣି ଥିଲା। ପାଣି ଉପରକୁ ଉଠିଆସିଲା।

କାଉ ଗୋଡ଼ି ଆଣିଲା। କାଉ ପାଣି ପିଇ ଉଡ଼ିଗଲା।

ପ୍ର୧୦. କାଉ କ'ଣ ଖୋଜୁ ଥିଲା ?

A. ପାଣି   B ଖାଦ୍ୟ

C. ଛାଇ   D. ବସା   E. ଗଛ

Grade	%
Grade 2	19%
Grade 3	37%
Grade 4	47%
Grade 5	53%
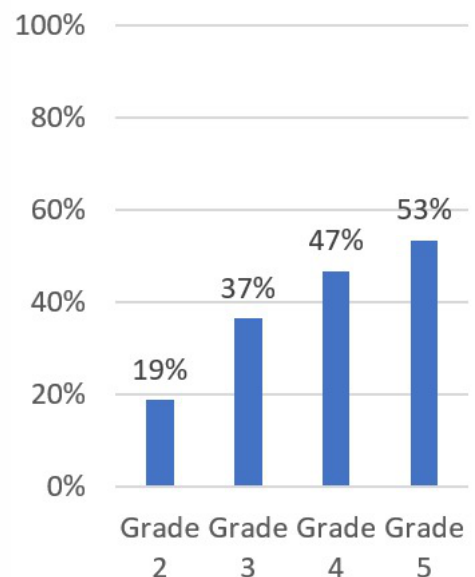
Grade 3 Dakshata 2 Answering questions on the basis of a picture.

ପ୍ର୧- ଏହି ଦୃଶ୍ୟଟି କେଉଁଠିର ?

A. ନଗରର
B. ସହରର
C. ଜମିର
D. ଗାଆଁର
E. ବଜାରର

Bar chart:
- Grade 2: 23%
- Grade 3: 44%
- Grade 4: 45%
- Grade 5: 52%
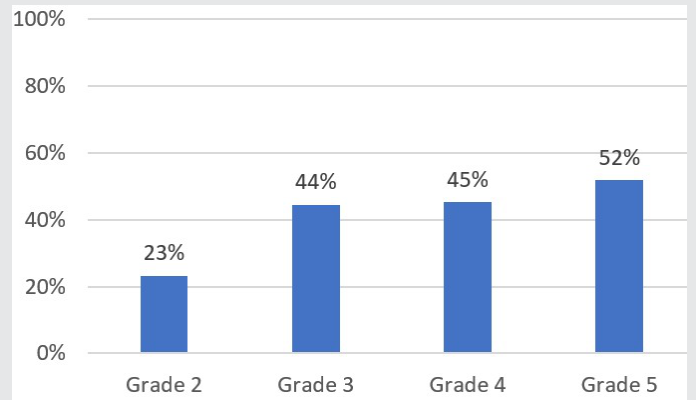
Grade 5 Dakshata 1 Answering questions on the basis of a picture.

ତଳ ଛବିଗୁଡ଼ିକୁ ଦେଖି ଦିଆଯାଇଥିବା ପ୍ରଶ୍ନଗୁଡ଼ିକର ଉତ୍ତର ଦିଅ (ପ୍ର.୧ – ୭)

ପ୍ର୧- ଆମେ ସଡ଼କରେ କେଉଁ ପଟେ ଚାଲିବା ଉଚିତ ?

A. ସଡ଼କ ମଝିରେ
B. ଗାଡ଼ି ପଛେ ପଛେ
C. ସଡ଼କ କଡ଼େ
D. ଯେ କୌଣସି ପଟେ
E. ପାଦଚଲା ରାସ୍ତାରେ

Bar chart:
- Grade 4: 37%
- Grade 5: 54%
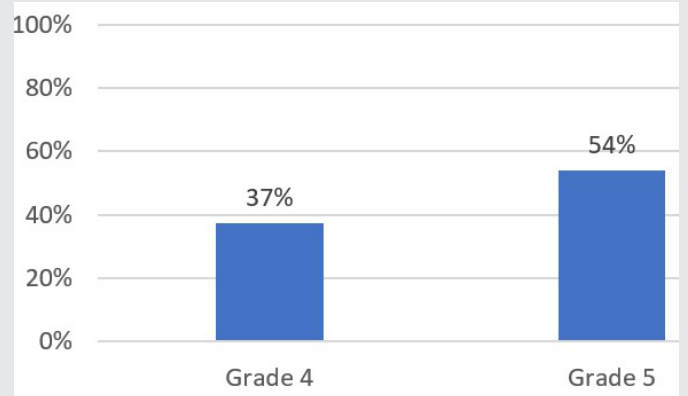
CLASSROOM IMPLEMENTATION

Click Here

to see a video showcasing the ALfA program in Sambalpur.

TEACHER INTERVIEWS & EVIDENCE

Click Here

to view a news report by the Print on ALfA implementation in Shamli.

Click Here

to watch a video of Shamli students performing above Grade Level after 45 days of ALfA implementation.

How were these video made? WhatsApp groups were set up for different blocks/districts. Teachers were encouraged to post their photos, videos and any questions in the WhatsApp groups, much of the footage in this video was shared by classroom teachers.

ENDLINE RESULTS GRADE-WISE

Baseline testing was conducted in Sambalpur in August 2022. Endline testing was scheduled for April 2023 but could not be conducted due to some political and religious tensions in the district. It was instead conducted in July 2023. As described above, college students conducted the testing under the training and supervision of DEVI staff.

Data is presented here for the intervention group schools, which showcased remarkable improvements despite the program only being implemented towards the end of the school year (November, after a series of delays). Improvements were especially stark in Grade 3 (16% to 43% improvement in Maths, 18% to 48% improvement in Odia). The tests were quite difficult compared to the tests normally given to students, as all the NIPUN competencies were covered in each test.

Graph 4: Baseline test scores and Endline progress, by Grade and Subject, for intervention group schools.
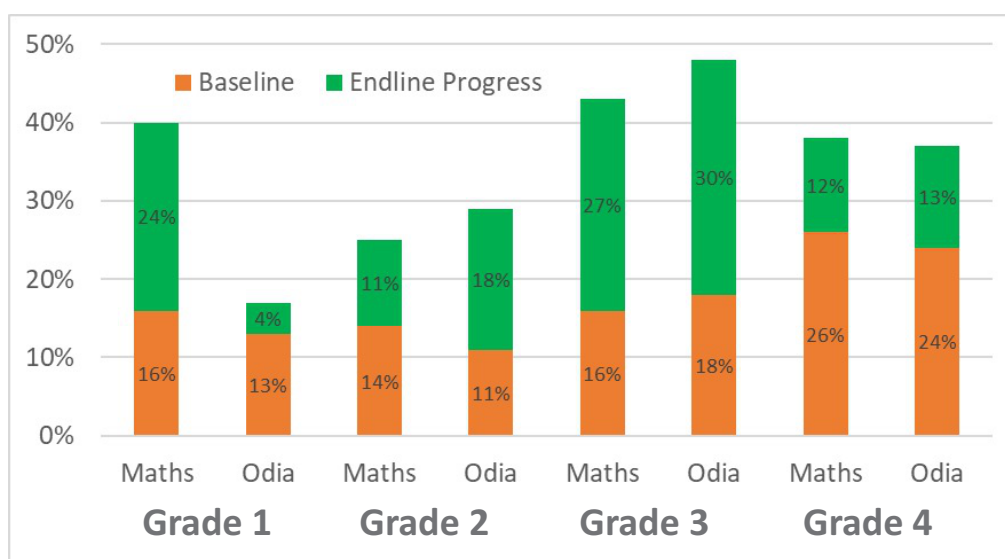
The testing and scanning software allows for detailed data analysis, as shown over the previous pages. It enables policymakers to decompose the test scores of individual students, to see exactly which questions (with corresponding competencies) they got correct. Data can also easily be aggregated to see which schools performed well compared to others, and to see which were the questions most students did well in or struggled with.

Table 3: Reports of three students, with comparison to their school's average and the overall average correct for each question.

Student	School	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Student score	School score
Sonali Munda	PS SAKHIGOPINATH	✓	✓	✓	✓	X	✓	✓	✓	X	✓	✓	✓	✓	X	✓	X	✓	X	76%	55%
Om Prakash	PS BHUTAPADA	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	X	X	X	X	69%	53%
Harapriya Sethi	PS SARLA	✓	✓	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	✓	X	X	X	✓	66%	59%
Overall Average (Percent)		89	82	75	73	67	28	82	75	50	17	37	27	23	9	18	2	9	10		

ENDLINE RESULTS NUMERACY

This section shows five sample questions from the numeracy paper, which showcased the greatest levels of student improvements. The graphs show both the baseline and the endline progress, across the different grades.

Grade 1 Dakshata 1 Counting objects up to 20.

ପ୍ରଶ– ଅଧିକ ସେଓ ଥିବା ବାକ୍ସକୁ ଚିହ୍ନଟ କର।

A. 🍎🍎🍎🍎🍎
B. 🍎🍎🍎
C. 🍎🍎🍎🍎🍎🍎
D. 🍎🍎
E. ଜଣା ନାହିଁ

Baseline / Endline improvement

Grade	Baseline	Endline improvement
Grade 1	22%	29%
Grade 2	28%	32%
Grade 3	19%	63%
Grade 4	57%	34%
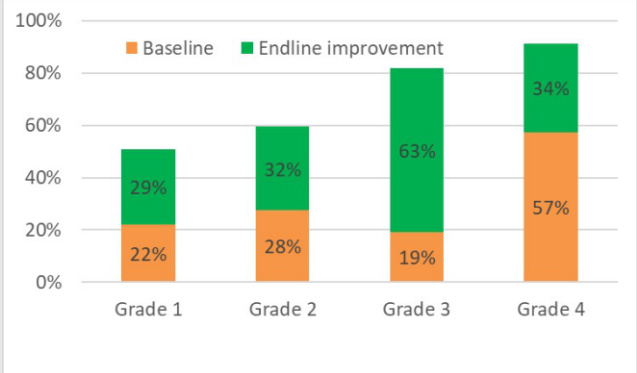
Balvatika Dakshata 2 Completing patterns and sequences.

ପ୍ର୨- ଖାଲି କାଗାଗୁଡ଼ିକୁ ଠିକ୍ ସଂଖ୍ୟାରେ ପୂରଣ କର। ୭ ☐ ☐ ୯ ୧୦

A. ୭, ୮   D. ୫, ୭
B. ୮, ୯   E. ୨, ୩
C. ୫, ୬

Baseline / Endline improvement

Grade	Baseline	Endline improvement
Grade 1	24%	42%
Grade 2	40%	34%
Grade 3	24%	58%
Grade 4	57%	22%
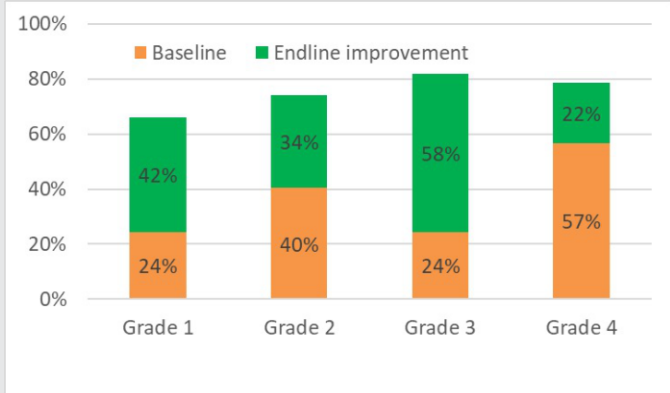
Grade 1 Dakshata 2 Reading and writing numbers up to 99.

ପ୍ର୮- ଖାଲି ଘରକୁ ଉଚିତ ସଂଖ୍ୟାରେ ପୂରଣ କର

☐ ☐ ୯୫ ☐ ୯୭

A. ୯୨, ୯୩, ୯୬   D. ୯୨, ୯୩, ୯୮
B. ୯୩, ୯୪, ୯୬   E. ୯୧, ୯୨, ୯୩
C. ୯୨, ୯୪, ୯୮
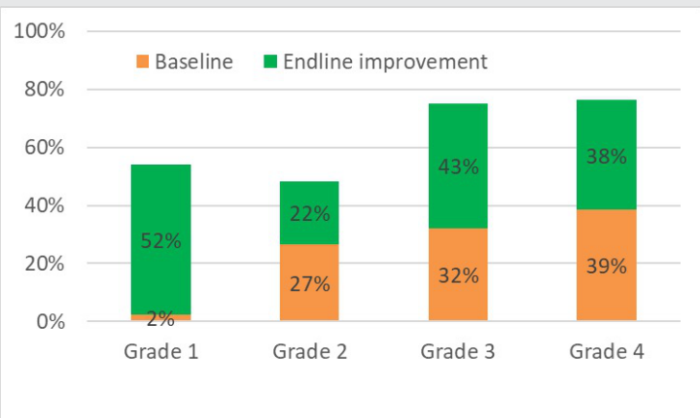
Baseline / Endline improvement

Grade	Baseline	Endline improvement
Grade 1	2%	52%
Grade 2	27%	22%
Grade 3	32%	43%
Grade 4	39%	38%

Balvatika, Dakshata 4 Understanding and representing sequences & patterns.

ପ୍ର୪- ଦିଆଯାଇଥିବା ଢାଞ୍ଚା କ୍ରମକୁ ପୂରା କରିବାକୁ ଆଉ ତିନିଟି ଆକୃତି ବନାଅ।

△□○△□○ ____ ____ ____

A. △□○   B. ○□△

C. □△○   D. ○△□

E. ○□△
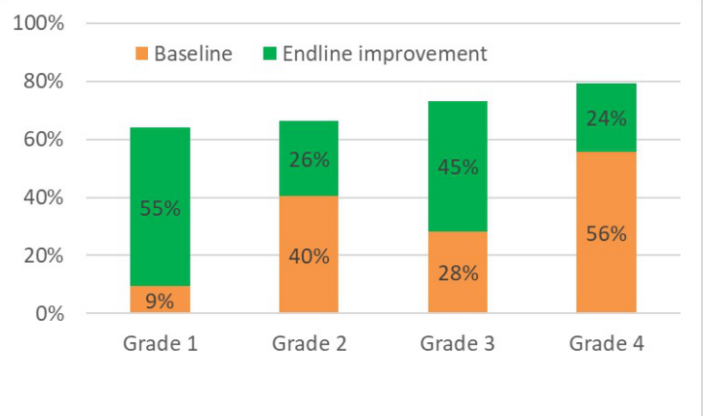
Grade 1 Dakshata 3 Addition of numbers up to 20 in daily life situations.

ପ୍ର୯- ସୋହନ ବଜାରରୁ ୧୫ କିଲୋ ଆଳୁଏ ୭ କିଲୋ ପିଆଜ ଓ ୩ କିଲୋ ତରଡ଼ା କିଣିଲା। ସେ ମୋଟ କେତେ କିଲୋ ପରିବା କିଣିଲା?

A. ୧୫   D. ୭୭
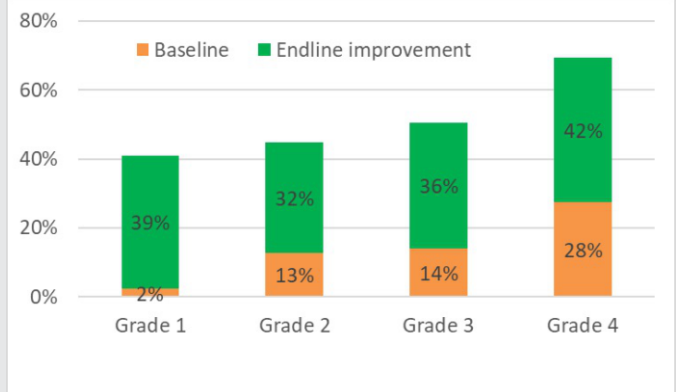
B. ୭୭   E. ୭୫

C. ୭୮

Grade 3 Dakshata 2 Answering questions on the basis of a picture.

ପ୍ର୧୩. ପାଣି ପିଇବାକୁ କାଉ କ'ଣ କଲା ?

A. ସେ ଉଡ଼ିଗଲା
B. ଗୋଡ଼ି ଆଣି ପକାଇଲା
C. ମାଠିଆ ଭାଙ୍ଗିଦେଲା
D. ମାଠିଆ ଭିତରେ ପଶିଗଲା
E. ସାଙ୍ଗକୁ ଡାକିବାକୁ ଗଲା

Baseline / Endline Improvement

Grade	Baseline	Endline Improvement
Grade 1	8%	34%
Grade 2	8%	38%
Grade 3	11%	58%
Grade 4	49%	31%
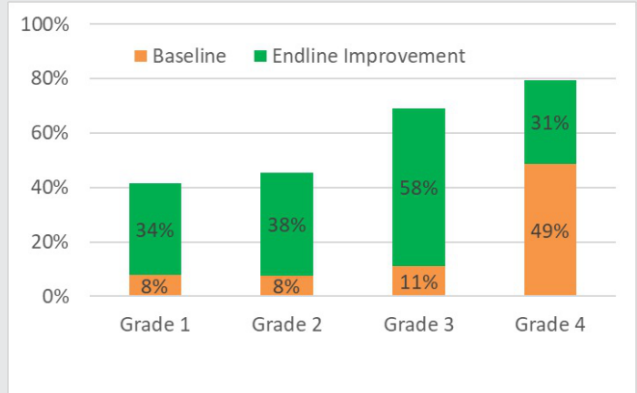
Grade 3 Dakshata 7 Completing sentences with the appropriate word.

ପ୍ର୯. ବାକ୍ୟକୁ ସଂପୂର୍ଣ୍ଣ କର।
ଶିକ୍ଷକ _____ ପଢାଉଛନ୍ତି

A. ଖେଳ   D. ମା
B. ନାଚ   E. ପାଠ
C. ଗୀତ

Baseline / Endline Improvement

Grade	Baseline	Endline Improvement
Grade 1	14%	25%
Grade 2	29%	36%
Grade 3	25%	65%
Grade 4	57%	19%
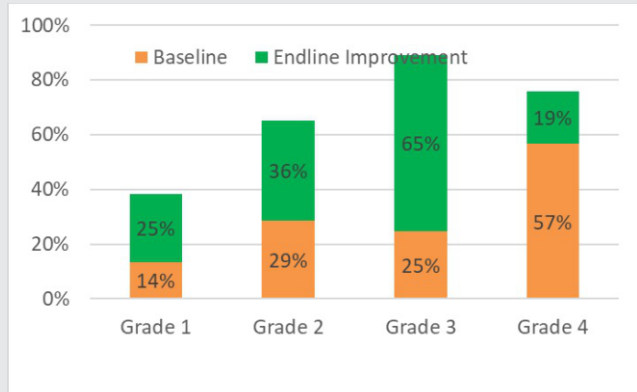
Grade 2 Dakshata 4 Reading an unseen passage and answering comprehension questions.

ପ୍ର୭. ଏଥିରୁ କେଉଁଟି ଅନ୍ୟଗୁଡ଼ିକ ଠାରୁ ଅଲଗା ଅଟେ?

A. ହାତୀ   E. ବିଲୁଆ
B. ସାରୀ   D. ବାଘ
C. ସିଂହ

Baseline / Endline Improvement

Grade	Baseline	Endline Improvement
Grade 1	8%	26%
Grade 2	24%	29%
Grade 3	17%	56%
Grade 4	38%	33%
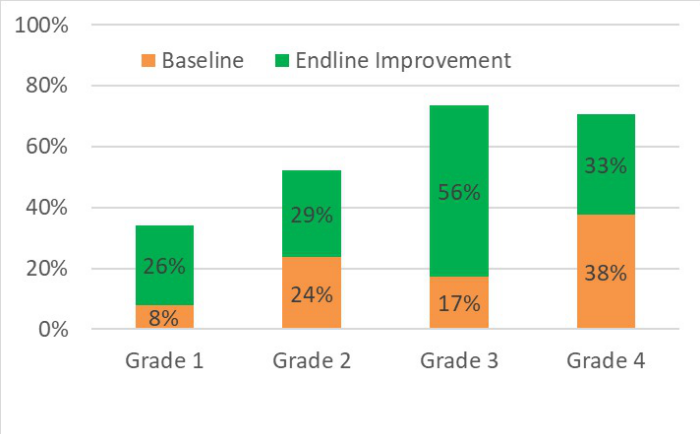
Grade 1 Dakshata 1 Recognizing pictures and letters.

ପ୍ର୪. ଛବି ଦେଖି ଶବ୍ଦ ବାଛ।

A. କମଳ   E. କପଟ

B. କଲମ   D. କଳସ

C. କଉଉ

Chart — Baseline / Endline Improvement:

	Grade 1	Grade 2	Grade 3	Grade 4
Endline Improvement	33%	31%	34%	22%
Baseline	25%	35%	37%	52%

Grade 1 Dakshata 1 Recognizing pictures and letters.

ପ୍ର୫. ଛବି ଦେଖି ଠିକ୍‌ଶବ୍ଦଟିକୁ ବାଛ।

A. ବୁଢ଼ିଆଣୀ   E. ଦିଆସିଲି

B. ମିଠେଇ   D. ମାଛ

C. ମାଛି

Chart — Baseline / Endline Improvement:

	Grade 1	Grade 2	Grade 3	Grade 4
Endline Improvement	29%	42%	44%	20%
Baseline	29%	30%	42%	65%

10 STEPS TO AN ALfA CLASS

01 — Make random pairs

02 — Normalize the class

03 — Arrange learning materials

04 — Read out the prompts

05 — A pair comes forward to give a demo

06 — All pairs solve the same question

07 — Pairs make more questions

08 — Select some questions as homework

09 — Take instant feedback

10 — Conduct regular tests & fill learning gaps

HOW TO TEACH NUMERACY

20 Page Booklet | Completion in 45 Days

Many students find maths difficult, abstract and boring; lacking relevance and connection. In contrast, ALfA numeracy brings maths to life with fun, hands-on activities. Use of concrete objects and children asking questions of each other help build a much deeper level of understanding.

Scan this QR CODE for a video on HOW TO TEACH NUMERACY

ALfA Accelerating Learning for All

GLOBAL DREAM

FLN FOUNDATIONAL Literacy & Numeracy

गणित
BOOK 3

शिक्षा का महा अभियान

GLOBAL DREAM

© Sunita Gandhi
PhD, Cambridge University, UK

SDG 4 disrupting FLN at scale · DEVI SANSTHAN · MkM FOUNDATION

TEACHERS' VIEWS ON ALfA

"We got to learn a lot new in today's training: how to build a solid foundation for children's learning. There was a great exchange of ideas between the trainers and participants."

Arif Hasan, Grade 3 teacher

Mohammadpur Rai Composite, Kairana block, Shamli

"This is an excellent method, in which children collaborate to derive the first sound from the name of a picture."
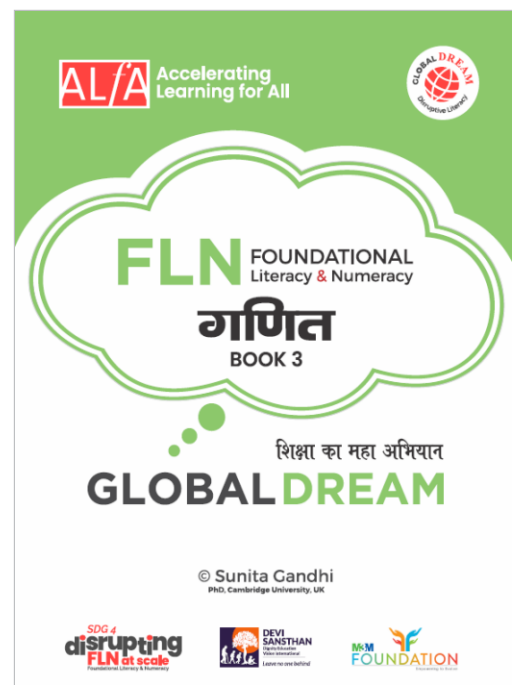
Hemlata Sahu, Government Teacher

"The training was highly effective... all the activities were great. I especially enjoyed the division activity."

Baby Saini, Grade 5 teacher

Latifgarh Primary School, Thanabhawan block

"Children are learning with each other in pairs, which is remarkable. Amazing!"

Radhe Patel, Government Teacher

MAKING TRAINING INTERACTIVE

- **Ask questions** to hear participants' thoughts; summarize what they say. Only later fill in the gaps.

- Do **hands-on activities** together (taken from the ALfA booklets)

- **Pair up** the participants (in physical trainings)

- **Use chat/comments** extensively in online training

- Use **opinion polls, quizzes**

Data Highlights 1st MOOT (March 2023)

25,660	53	93%	97%	99%
YouTube Views across 13 sessions	countries with representatives from all 6 continents participated	of participants found the online format of the training to be effective	of participants passed the quiz & were shared free access to ALfA materials	of teachers said they had new take-away points from the training

HOW TO TEACH LITERACY

20 + 32 Pages (2 Booklets)

ALfA represents a third way, beyond the whole language vs phonics reading wars. English **Book 1** introducing letters using pictures, and helping students read simple single-syllable words. Throughout Book 1, apart from a handful of sight words, all words are phonetic, with each letter making only its most common sound. ALfA focuses on the sound a letter makes, not its name.
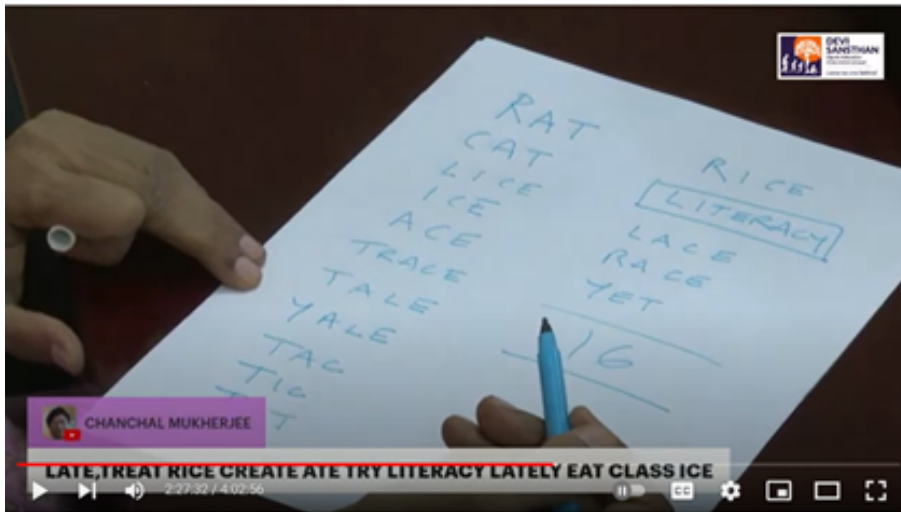
How many words can you find? Activity
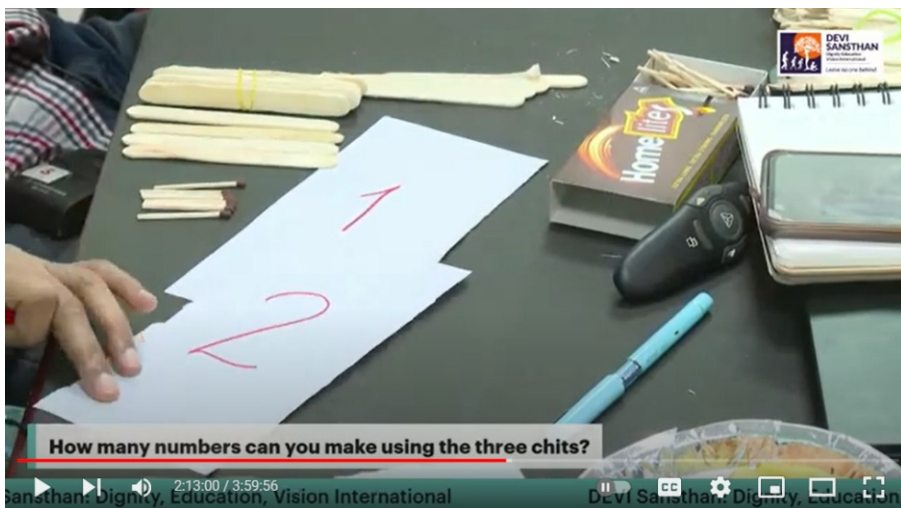
How many numbers can you make using the three chits? Activity

Scan the **QR code** to see a video of **Arvind Kumar Baliyan**, a Grade 2 Teacher from Shamli, discuss the program

Scan the **QR code** to hear international pedagogical experts endorsing ALfA

CLIMATE CHANGE & AL*f*A

Education needs to address the climate crises in new and creative ways, for example, reduce carbon footprint by saving millions of tons of paper and ink wasted each year in printing textbooks and workbooks. Learners also need to become climate actors.

Climate Footprint

Imagine if we could use 1/10th or 1/20th of the paper currently used in textbooks and workbooks! ALfA booklets are thin with 1/10th or less of carbon footprint which is further halved when two learners work as a pair. When digital media is available, ALfA resources are available for access both online and offline with no additional carbon impact

Climate Consciousness

Children avoid plastic and learn to select and use sustainable materials like pebbles, shells and leaves for hands-on activities.

Climate Action

Climate action is integrated in the activities. Further, the learners enact roleplays and read stories that inspire climate action.

"**GLOBAL WARMING CAUSES DRAMATIC INCREASE IN FOREST FIRES**" screamed the newspaper headline. Tara quickly skimmed the article and fell into deep thought. She wished she could do something to help protect forests. *Excerpt from a Climate Change short story.*

Click here *to explore our collection*

ALfA 5C SKILLS + 4C TRAITS

ALfA seamlessly integrates the 5C Skills leading to 4C Traits of a twenty-first century learner. These 9Cs cannot be taught from a textbook, but rather acquired while working with each other in the everyday context of a classroom. Pair setting further creates a safe environment in which learners feel free to share and express.

5C Skills

Competencies foundational literacy and numeracy are learnt swiftly through ALfA

Children develop their **creativity and critical thinking** through making questions for each other.

Children develop their **communication and collaboration** skills by working in pairs.

4C Traits

By working with many different children over the course of a few weeks, students develop their **citizenship and character**.

Climate **consciousness** is developed through role plays and short stories.

Connectedness with each other, which is key to broader outcomes such as social, emotional and mental wellbeing.

ALfA
5C + 4C
Education

4C Traits

Character

Climate Conciousness

Connectedness
Social-Emotional Well-Being

Citizenship

5C Skills

COLLABORATION

COMMUNI-CATION

CRITICAL THINKING

CREATIVITY

COMPETENCIES IN ACADEMICS
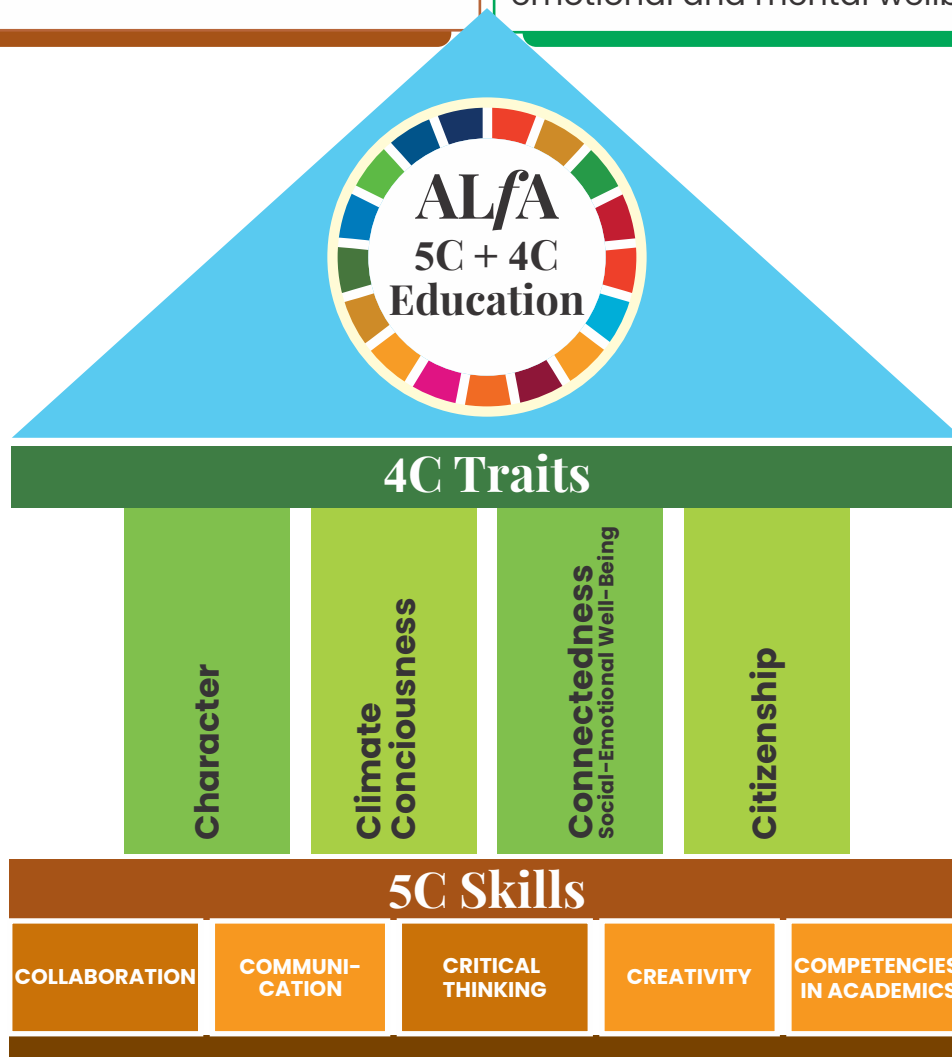
PARTNER WITH DEVI

"If 90 days could make the world literate, would you not do it?" Sunita Gandhi

ALfA, launched in 2022, is growing rapidly. Results are quick to gauge.

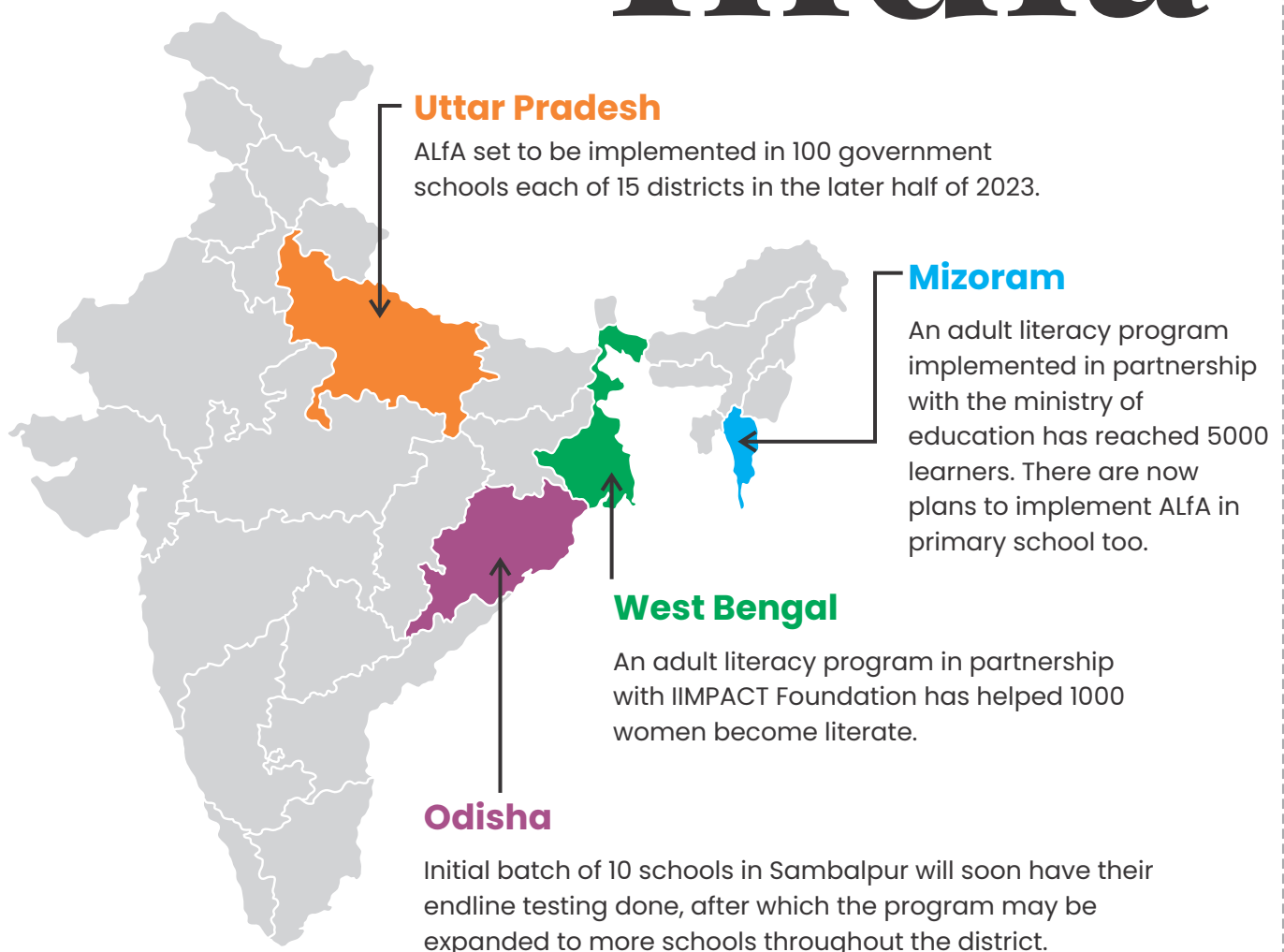We look forward to working together with all policy-makers and other stakeholders to ensure far more rapid progress towards universal FLN.

Together, we can!

Since 2022 ALfA in India

Uttar Pradesh
ALfA set to be implemented in 100 government schools each of 15 districts in the later half of 2023.

Mizoram
An adult literacy program implemented in partnership with the ministry of education has reached 5000 learners. There are now plans to implement ALfA in primary school too.

West Bengal
An adult literacy program in partnership with IIMPACT Foundation has helped 1000 women become literate.

Odisha
Initial batch of 10 schools in Sambalpur will soon have their endline testing done, after which the program may be expanded to more schools throughout the district.

A **Global** Program

ALfA is available in 30+ Indian and International languages, and is being implemented in places as diverse as adult literacy classes in Chicago and tribal schools in Peru.

International languages

Arabic
Bangladeshi
Dhivehi*
Dutch
English
Filipino
French
Nepalese

Serbian
Spanish
Swahili
Somalian*
Twi
Yoruba
Portuguese*
Persian*
Shona

Indian languages

Assamese
Bengali
Gujarati
Hindi
Kannada
Konkani*
Maithili

Marathi
Mizo
Odia
Punjabi
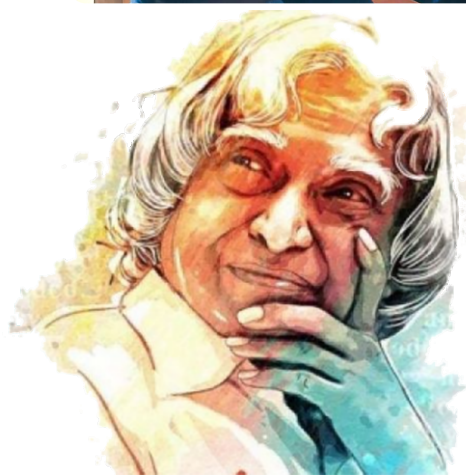Tamil
Telugu
Urdu
* in process

Peru

Chicago, USA

Guyana

Maldives

> " The purpose of education is to make good human beings, with skill and expertise. "

Dr. APJ Abdul Kalam
Former Indian President

DEVI SANSTHAN
Dignity Education
Vision International
Leave no one behind

disruptive
FLN at scale
Foundational Literacy & Numeracy

GLOBAL DREAM
Disruptive Literacy

FAST-TRACKING
FOUNDATIONAL
LITERACY
& NUMERACY
Sambalpur, Odisha

DEVI Sansthan (Dignity Education Vision International) is a small NGO with a big vision: to help India and the world achieve universal Foundational Literacy and Numeracy (FLN). DEVI is pioneering transformative pedagogies, empowering teachers, and leveraging policy change to enable rapid gains towards literacy for all.

+91 740 840 6000   info@dignityeducation.org   www.dignityeducation.org