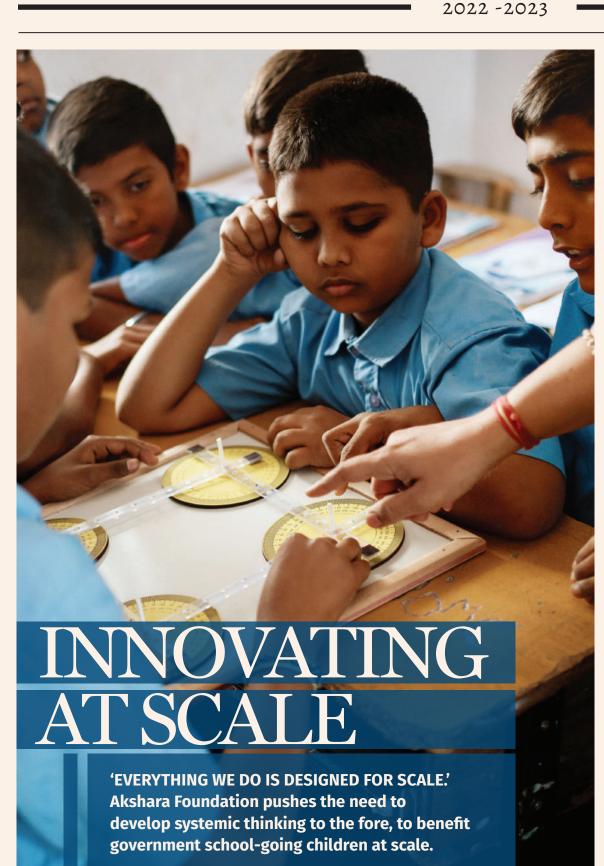




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okesh is teaching his friends Geometry and they are hovering around him and over him, trying to figure out how it all comes together. It's a very engrossed group that doesn't even look up when the teacher says 'time is up'. They just want to get the answer right. They don't care that the dismissal bell has gone off in the background.

At the same time, Ranjeeta in Odisha is busy poring over a mobile phone screen. That's right, she is in class but studying on her phone. She is a government school child, just like Lokesh. She is busy playing

games on something called the DIKSHA platform. Games that help her practice maths learnt in school.

Madam Bhagya is on her way home from school. She teaches in a Government Primary School in rural Karnataka and has a long ride home. So what does she do on her commute? She listens to podcasts or watches a video that trains her on how to teach her children maths better. Parvati in the other end of the town is listening to her child chattering away about how much fun she had in her maths class today, because she and her friends learnt how

to measure each other. Her teacher used a measuring tape and taught them how to apply it to everyday life.

Each and every one of these scenarios is a result of years of research, several pilots and a lot of working with the system to finally come to this scale.

A lot goes into ensuring these innovations reach the last child in the last village. And that's just the way Akshara Foundation has always done things, with a continued focus on maths. Maths is an abstract subject, difficult for a child to comprehend (hence the fear of maths)

unless taught through activity based experiential learning using concrete TLMs.

Akshara's innovations are designed across four verticals: pedagogy, tactile teaching-learning aids aligned to the state curricula, capacity building, and field support. The programmes implemented are designed to provide hands-on experience in mathematics teaching and learning, with the aid of tactile and concrete TLMs. The teaching-learning process shifted from rote-learning to co-operative and experiential learning.

Akshara Foundation has been the state's numeracy partner in Karnataka since 2015 and in Odisha since 2019.

On any working day, in ~95,000 government schools across Karnataka, Odisha and Andhra Pradesh, around 95,000 teachers open up the maths kit to teach over 5 million kids numeracy, the Ganitha Kalika Andolana (GKA) way.

From 2014 when we proved the efficacy of the GKA maths kit in classroom instruction and getting the Chief Minister of the state to announce the scaleup of this programme all the way to 2023 when we piloted digital learning models within the system for children, we've come a long way. But nothing has changed in the way we work. And that is, everything we conceptualise is designed for scale. It is all about providing access to the last child because that's the only way we can level the playing field. Be it within the community, in school, or at home, we are always thinking about the last-mile student and how we can remove the fear of numbers from them and make maths a fun learning experience.

This year's Annual Report highlights all our innovations that we implement at scale and we hope you enjoy reading it just as much as we have enjoyed implementing each and every one of them.

After a Long Hiatus

Community-driven Gram Panchayat
Maths Contests



Pg.

Digital Accessibility for All Children

The Keonjhar Pilot



Pg.6

GKA 2.0 the Pilot

Akshara officially set the first phase of the GKA 2.0 Pilot rolling in October 2022.



Pg.6

Partnering with Government

Proactive officials who are action-takers and emissaries of change.



Pg. 11

Partnerships & Outreach

Customised GKA trainings to exemplify the spirit of sharing - from resources to trainings



Pg. 13

Pratibimba

A Podcast by teachers, for Teachers

Pg. 14

Advocacy

Pg. 15

Key Events & Workshops

Pg. 16

Accountability & Transparency Donors Financial Statements





he years 2020 to 2022 were a washout with respect to what we had started as a community-driven initiative in the form of Gram Panchayat Maths Contests.

For a programme to be sustainable well beyond Akshara, every stakeholder needs to recognise its potential, take ownership of its outcomes and continue to implement it long after our exit from a geography. In other words, it needs to become Socially Desirable. Unless the locus of control moves from the supply side to the demand side (parents, School Development and Monitoring Committee (SDMC) members, Education Volunteers(EVs) and Gram Panchayat leaders), the quality of schooling will not improve.

Which is why, people collaborations are the nub of Akshara's Community Programme.

The Gram Panchayat (GP) Maths Contest is a first-ofits-kind community initiative in India to encourage all concerned stakeholders to push for enhancing the quality of teaching and learning of mathematics, across the education system. These Contests are an independent, transparent, outof-school, curriculum-linked evaluation of children's current maths learning levels.

It had been a few hectic months, November 22, 2022, to March 10, 2023. An extraordinary season of fruition for Akshara. A storm of activity swept through large parts of Karnataka. In the villages where Akshara's Gram Panchayat Maths Contests took place the fervour was there in plain sight.

We also managed to facilitate over 100 such Contests in Odisha, a first at this scale.

Stakeholders of every hue and dimension connected with the education of government school children stood staunchly in support. The GPs, the local administration, whose official mandate doesn't exactly extend to education, put themselves in the forefront. The Zilla Panchayats and Panchayat Development Officers (PDOs) issued prolific letters and circulars that activated the administrative machinery. The Education Department was a solid enabler. Every manner of officialdom lent the weight of office to the Contests.

Karnataka

- Akshara facilitated the Contests in 2,625 of the 5,956 Gram Panchayats in the state, in 30 out of its 35 districts.
- A record 3,12,550 children in grades 4-6 participated in the Contests.
- There was 80% attendance in the participating GPs.



Odisha

- Akshara teams organised 115 GP Contests in the districts of Dhenkanal, Ganjam, Keonjhar and Mayurbhanj.
- More than 10,600 children in grades 4-6 participated.

OBJECTIVES

- Gram Panchayat Maths Contests are a barometer that informs parents, teachers, and other influential stakeholders where children are in maths, their learning status.
- The arena is not a testing centre, but a learning ground.
- The Contests provide government school children with exposure to current-day practices.
- The Contests are an instructive, educative, and transformative experience for them.
- It builds confidence and sharpens mind and intellect through which they come to grips with the structure of an exam, the concept of healthy competition, of competing for a prize.
- Participation eliminates, at least partially, the fear of maths.
- Add to this multidimensional mix the psychological impact the Contests have on teachers and parents, the stakeholders with a direct, personal influence on shaping children's progress.
- Teachers are overjoyed when their best performers stride to the stage for their prizes, a matter of prestige for them, and mortified by the trailing scores and resolve to create a more satisfactory maths environment in class.
- Parents react much the same way, thrilled to tears when their children win prizes, dismayed that it is largely a landscape of poor performance and underachievement, and decide to take proactive steps.
- The Contests hope to generate a community demand for quality learning in government schools.



Children in grades 4-6 in their best, brightest blue uniforms turned up at the contest venues, usually at the GP headquarters or school forecourts, sat in neat, disciplined rows, mostly on a rug on the floor, under a colourful shamiana put up by the administration, and awaited their maths test. Each GP has a cluster of 4-5 government schools in the villages in its jurisdiction. Children walked or cycled to the site, got dropped off by parents. ed them in autorickshaws or walked with them. There were instances of the community transporting them in tractors. Their number varied from 50 to 130 at the venues.

The question papers were prepared with the help of multiple District Institutes of Education and Training (DIETs) in the state for each grade - 20 questions in each, set to the previous year's grade-expected competencies. It was not an attempt to dilute the exercise or render it simplistic, but a realistic acknowledgment that children were not all there after education went into a pause.

The timer was set to 1 hour as they begin the test. Village Education Volunteers evaluated the answer sheets soon after the hour was over, before finally announcing the winners. The entire process was done within three hours.

The Gram Panchayats and the local administration, whose official mandate doesn't exactly extend to education, put themselves in the forefront.



Akshara has over the years nurtured a small battalion of Volunteers in Karnataka and Odisha, a community running into thousands, who participate in education with no expectation of reward.

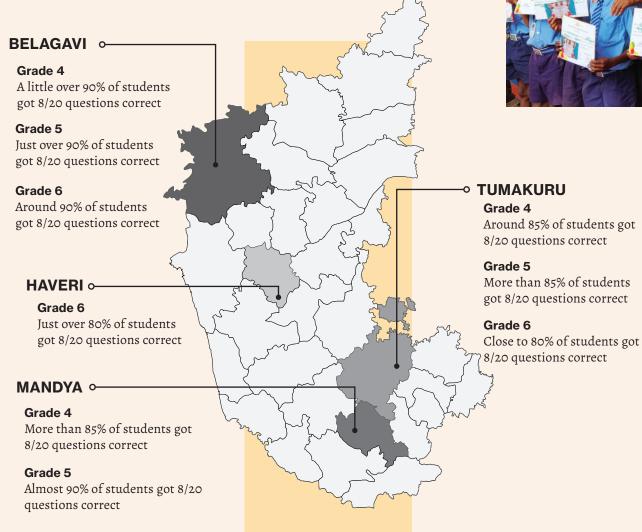
- Facilitating the Contests in Karnataka last academic year were 21,300 GP Team Leaders and Education Volunteers.
- In Odisha there were 806 GP Team Leaders and Education Volunteers.
- The entire team of Volunteers gave their services probono, their giving back to the schools they studied in and the villages they grew up in.

In each of these Contests, nine children (the highest scorers) were awarded a total of INR 6,000 as prize money. The cash rewards were a contribution by the GP. Much coveted was the Akshara certificate of merit. The prize-winning children held it up possessively as a cherished trophy, which the media took pictures of for the next editions of their news cycle.

Maths Outcomes

Only districts with a total of 5,000 or more children participating in the GP Maths Contests were considered for the analysis of the outcomes.

TOP PERFORMING DISTRICTS IN KARNATAKA





Maths Competencies in Karnataka across Grades 4, 5 and 6

In grade 4, students found Addition, Number Sense, and Multiplication to be the easiest competencies, while Division, Fractions, and Subtraction posed greater challenges.

Moving on to grade 5, the simpler skills included Number Sense, Addition, and Fractions, whereas the more demanding competencies involved Measurement, Subtraction, and Shapes.

In grade 6, students excelled in Fractions, Addition, and Shapes as the easier topics, while the more challenging competencies encompassed Multiplication, Division, and Measurement. As students progress through these grades, they encounter a variety of mathematical concepts, building a strong foundation for their understanding of numbers and operations.

TOP PERFORMING DISTRICTS IN ODISHA

Maths Competencies in Odisha across Grades 4, 5 and 6

In grade 4, students encountered various mathematical competencies, with Number Sense, Addition, and Place Value being the easiest to grasp, while Division, Subtraction, and Shapes were challenging.

Building on these foundations, grade 5 students continued to find Number Sense, Addition, and Place Value to be more manageable, yet faced increasing difficulty with Division, Subtraction, and Shapes.

As students progressed to grade 6, the dynamics shifted, and Shapes, Fractions, and Subtraction emerged as the more accessible competencies, while Measurement, Multiplication, and Division were more diffcult. Grade 6 marks a progression in the complexity of mathematical concepts.

Grade 4 Around 45% of students got 8/20 questions correct Grade 5 Around 70% of students got 8/20 questions correct Grade 6 Around 73% of students got 8/20 questions correct Grade 4 Around 75% of students got 8/20 questions correct

MAYURBHANJ

Grade 4

Just above 60% of students got 8/20 questions correct

Grade !

Close to 70% of students got 8/20 questions correct

Grade 6

Close to 74% of students got 8/20 questions correct

DHENKANAL

Grade 4

Around 85% of students got 8/20 questions correct

Grade 5

Around 95% of students got 8/20 questions correct

Grade 6

got 8/20 questions correct

Around 80% of students got

Around 85% of students got 8/20 questions correct

8/20 questions correct

Grade 5

Grade 6

Just over 84% of students got 8/20 questions correct

The harmonious alliance of stakeholders was a standout feature. The number of children and officials at certain venues surpassed expectations. The local media was another significant stakeholder powering the drive, generous in its reporting, and the community relished the spotlight on their children and their villages. Independent videographers circulated short

clips and television channels regularly beamed the Contests – 132 articles appeared in the print media and 43 videos on YouTube in Karnataka, and 34 articles in print in Odisha. And Akshara's field teams, the behind-the-scenes organisers - their part cannot be overstated. "This coming together is called cooperation, collaboration and coordination," said Shankar



Narayan, Head, Field Operations, at Akshara Foundation.

The GP Maths Contests have the potential to become an annual rite of passage for students in the pivotal grades of their academic life, a platform from which to reach a higher agency and connect with maths, which, with language, is perhaps the single most important subject they will learn in school.

Case Studies | Column

Thriving On Challenges



he Biligiriranganabetta Gram Panchayat, Yelandur block, Chamarajanagar district, Karnataka, has two schools in its domain, in tiny villages embedded in wild, untamed jungle. The Government Higher Primary Schools in Biligiriranganabetta village and Yarakanagadde have 53 students in grades 4-6.

The Panchayat Development Officer Mahadevappa didn't think it worthwhile to conduct a GP Maths Contest here. He forestalled it, with all good reason. There had to be reach and sweep and scale, an ambition to it. Half the children may not come, he predicted gloomily. They belong

to the Soliga tribe, a community of forest dwellers, so rooted to their earth, tied to their culture and identity, the parents, not too keen on education in the first place, may not allow them to participate in an extracurricular event like this. "Let's not have a contest in the Biligiriranganabetta GP," Mahadevappa said, disheartened in advance by the possibility of a poor turn-out and negligible results.

Akshara's Divisional Field Manager, Ranganath, whose territory this is, Chamarajanagar one of the 11 districts in his field of work, held firm. "Sir, we must not give up. We can't always have a big attendance. We can't

exclude anyone whatever their circumstances." Listening to this rousing assertion, Mahadeva came to a standstill, reversed his defeatist stance, and "became a big support," turning the outlook in a matter of moments from hopelessness to hope.

To everyone's astonishment, all 53 children participated in the GP Contest held on December 3, 2022. It was one of the most meaningful successes for Ranganath and his three-member team. What makes the Biligiriranganabetta GP Contest special, spectacular even?

Biligiriranganabetta or Biligirirangana Hills is a lofty, leafy, emerald region of peaks and variegated forest land. Biligiri or 'white hill' in Kannada represents the rock here over which a near-permanent whiteness settles for much of the time, the colour of mist and cloud. Wild elephants, ubiquitous in this jungle, roam freely, owning all they see. The Soliga tribe who live here are a gentle, na-

ture-worshipping, animal-loving people, gatherers of forest produce – it's their livelihood. They venture out shrinkingly, only when necessary, or they're content to live within, amid the trees and animals.

Their children are withdrawn and inhibited, fearful, diffident. The best way to strike up a conversation with them, Ranganath discovered, is to lock into their worldview. They become competitively chirpy discussing the animals they see almost every day. "Their relationship is more with nature than with education." But after nine years at Ak-

win. The marks, 60-70%, didn't mean much, the distinction it symbolised did. They could barely contain themselves when they saw their children receive cheque rewards. Money is an honour to have in hand.

Ranganath used this softened moment to drive home that "Your children must study. We respect your culture. But your children need progress. You look on your forests as God. Your children are also God. They can be Forest Rangers or environmentalists." It made sense to them - they understand some Kannada.



shara, Ranganath has a toolkit for any conversational impasse. "Talk to the children individually and they understand the idea of a future." They want to become police officers, teachers, doctors. "They know."

The GP Contest was low-key. Some parents showed up, impressed most of all by the mental picture they had of prizes. They were happy to see their children To have taken the GP Contest to this remote area and given the Soliga children a taste of the world they don't experience gives Ranganath a heightened satisfaction. To have given them a glimpse of what education can do, that life can be enlarged — "It made me personally very happy. To see these children receiving their prizes was a very different kind of satisfaction."



Setbacks & Successes

"No," firmly declared the Village Sarpanch, the Gram Panchayat President of Sundarpur, Chhatrapur block, Ganjam district, Odisha. The District Field Coordinator (DFC), Satyaprakash Das, felt a sudden halt in his ambitious plans. Organising the first-ever Gram Panchayat Maths Contest had hit a roadblock with a categorical rejection from the Sarpanch, who cynically dismissed the initiative, citing the transient nature of many NGOs.

Undeterred by this setback, Satyaprakash moved on to Tanganapalli, another village in the same block. Here, the response stood in stark contrast as the welcoming Sarpanch extended support without hesitation. With permission granted, Satyaprakash and the Education Volunteers began building a network in the community.

The backbone of this network was the 11 Education Volunteers,

185 children from six
Tanganapalli GP schools
participated in a maths
contest at the local high
school. The competition
included a pen-and-paper
test, and winners received
Akshara certificates and
cash rewards.

local village youth recruited and equipped by the Ganjam team. Proudly serving their community without expecting remuneration, these volunteers became effective advocates for education. The Ganjam team orchestrated over 50 Contests in the district within a span of 45-50 days, involving 2,875 EVs.

On February 10, 2023, 185 children from six schools in Tanganapalli GP participated in the Math Contest held at the local high school. The EVs facilitated the pen-and-paper test, corrected answer sheets, and concluded the event with prize distribution, honouring the winners with Akshara certificates and cash rewards.

The unprecedented event in Tanganapalli GP garnered attention, reaching the pages of Prameya, the third most widely circulated Odia newspaper. Empowered by this success, Satyaprakash returned to Sundarpur, newspaper in hand, and presented the article to the Sarpanch. Convinced by the impact, the Sarpanch eagerly embraced the idea, saying, "Please conduct the contest in our Sundarpur Gram Panchayat."

With the EVs actively involved, the announcement of the Contest date, timings, and proceedings echoed through the village. The personal touch extended to contacting parents via phone, inviting them personally, and broadcasting details on Sundarpur GP's WhatsApp groups. The efforts paid off when even irregularly attending children were brought to the contest by their parents, some travelling on bikes, while the Sarpanch hired a tractor to transport children from distant villages.

In Sundarpur, 121 children from five schools participated in the contest, marking not only a unique assessment but also a celebration of learning. Top scorers were recognised with prizes, certificates, and monetary rewards, turning the event into a memorable occasion. Children who performed well but didn't qualify for top honours received surprise acknowledgment gifts from the Sarpanch.

Remarkably, 70% of children in both Tanganapalli and Sundarpur passed the Contest. Despite some children facing challenges and a few demonstrating a decline in maths proficiency, the constructive and fruitful environment created by the Contests prevailed. Parents expressed overwhelming positivity, with many suggesting, "This Contest should happen every month."

The sentiment resonated with the children, leading both Sarpanches to officially endorse the idea, expressing willingness to host more Akshara programmes. The success in Tanganapalli and Sundarpur became a catalyst for broader outreach, with neighbouring Gram Panchayats expressing interest in hosting similar events. The Sundarpur Sarpanch envisioned the next GP Contest as a grand festival, solidifying the commitment to open doors for more Akshara initiatives in the future.



India is in a Learning Crisis today ———

- The National Digital Education Architecture (NDEAR) Report says that we are falling behind in meeting Sustainable Development Goal (SDG) 4 and emphasises the urgency to take quick action to provide quality ACCESS to education for all by 2030.
- Learning Poverty a measure developed jointly by the World Bank and UNESCO's (United Nations Educational, Scientific and Cultural Organisation) Institute of Statistics, has determined that 53 percent of children in low- and middle-income countries cannot read or understand a simple story by the end of primary school. In poor countries, the level is as high as 80 percent.
- . India is definitely Learning Poor
 - » 55 percent of children in India at late primary age today are not proficient in reading.
 - » Large-scale learning assessments of students in India indicate that 54 percent do not achieve the Minimum Proficiency Level (MPL) at the end of primary school, proxied by data from grade 5 in 2017.

Source: The World Bank https://www.worldbank.org/en/topic/education/brief/what-is-learning-poverty

Digital Inequality is Wide and Seemingly Unbridgeable

- Technology can be a leveller provided there's accessibility.
- Based on the 2017-18 National Sample Survey, less than 15% of rural Indian households have internet (42% in urban India).
- Telecom Regulatory Authority of India (TRAI) reports suggest that 500 million users still use the 2G network primarily in rural India.
- Enrolment in primary grades in 2019-20 was 122 million.

- If we assume two-thirds have no digital access, then over 80 million children are excluded from the benefits of digital access.
- » This number is about the size of the combined populations of Finland, Singapore, South Korea and Sweden – countries that do well in the Programme for International Student Assessment (PISA).

The pressing urgency is a digital infrastructure that's inclusive, low on cost and data consumption, cuts across demographic and geographical walls, and works for all.

The Keonjhar Pilot, incubated at Akshara Foundation, aimed at bridging the divide, creating equal opportunity, and an even distribution of resources. The children it reached were deserving but underserved, their circumstances precarious, their access to mainstream possibilities poor.

The Pilot covered more than 400 children in grades 4 and 5 in 22 government schools in Sadar and Banspal blocks in Keonjhar district, Odisha. They hailed mostly from tribal families who have limited exposure to formal education. They did not have a learning environment at home. A majority of the children had no access to digital devices for learning.

Their learning levels after two years of COVID depletion gave teachers no comfort. As Sudhakar Kunar, a grade 4 teacher at the large, well equipped Ashram Residential School in Sadar block, said, "Truthfully, none of my students studied during COVID. No opportunity, no conveniences. 'How to learn at home?' they asked. They've never learnt at home. It is not set up for it nor is it a supportive environment for studying."

The Pilot ran for six months, from September 2022 to March 2023.

The Dual Lesson Plan

- The Keonjhar Pilot unfolded as a dual lesson plan strategy that effectively leveraged technology. It engaged groups of three children at a time. It was held during the last free period of school.
- During the session, the teacher distributed smartphones preloaded with Building Blocks, Akshara's maths app, to the children and tracked

- their progress through Worksheets.
- This process went by rotation in alternate day cycles, one day digital learning, the next day the Worksheets..
- The digital content enabled children to reinforce maths learning, while the Worksheets kept them in touch with regular classwork and provided a forum, as in class, for answering questions and solving maths, transferring what they had learnt digitally through the medium of pen and paper.
- In the Keonjhar Pilot the teacher was a facilitator. She was supplemented, not supplanted.
- The Akshara team encouraged teachers to further augment the sessions with the GKA kit and its 22 teaching-learning materials. The kits had earlier been distributed to their schools as part of government's adoption of the programme in the state's primary schools.

The Main Attraction

- The main lever of the Pilot was Building Blocks, an app with unmatched features, a little stalwart in its own right. As of March 2023, it packed 250+ games for grades 1-5 in nine languages including Odia.
- Building Blocks has an edifice of progressive maths and an in-built practice-and-reward system that goads children upwards, getting them committed to maths.
- The class wise content in the app is anchored in robust pedagogy that aligns with the syllabus, GKA and the National Curriculum Framework (NCF) 2005 guidelines.

- Building Blocks is available on DIKSHA (DIKSHA is the Digital Infrastructure for Knowledge Sharing platform for teachers, students and parents, an initiative of the National Council of Educational Research and Training (NCERT), Ministry of Education, Government of India.).
- It is free to download and use, works on a low-capacity Android smartphone, and has a technology spine free of frills and flourishes while being attractive and capable of retaining consistent focus.
- Once the content is downloaded, the app works offline.
- It was the ideal technology for the village schools the Pilot served.
- On one day, children played maths games on the app which they accessed through the smartphones given to them by the teacher for the duration of each session.

For six months these same children attended the "mobile maths classes," as they called it their faces glowing, beaming, comprehending. Sanjay Khara, Akshara's DFC, who visited 3 to 4 schools in his block unfailingly every day, said, "They were very, very happy they had been given a mobile phone. Many children hadn't seen one before. The idea that they could learn from it astonished them. I saw children staring in wonder at the Building Blocks app and beginning to get familiar, bit by bit, with numbers."

What was a glimmer at first expanded and grew. Understanding burgeoned and maths became a subject the children wanted to engage with.

The Assessment Framework

Distribution of students by HSCE Score Bands

| | Grade 4 | Grade 5 |
|------------------------|-----------------------|-----------------------|
| Score Bands | Baseline Endline | Baseline Endline |
| First Division 60%+ | 18 (9.2%) 161 (82.1%) | 17 (9.2%) 174 (90.6%) |
| Second Division 45-59% | 13 (6.6%) 21 (10.7%) | 21 (10.9%) 12 (6.3%) |
| Third Division 33-44% | 21 (10.7%) 12 (6.1%) | 32 (16.7%) 1 (0.5%) |
| Below 32% | 77 (39.3%) 2(1%) | 68 (16.7%) 5 (2.6%) |
| Zero | 67 (34.2%) | 54 (28.1%) |
| Total No. of Students | 196 (100%) 196 (100%) | 192 (100%) 192 (100%) |

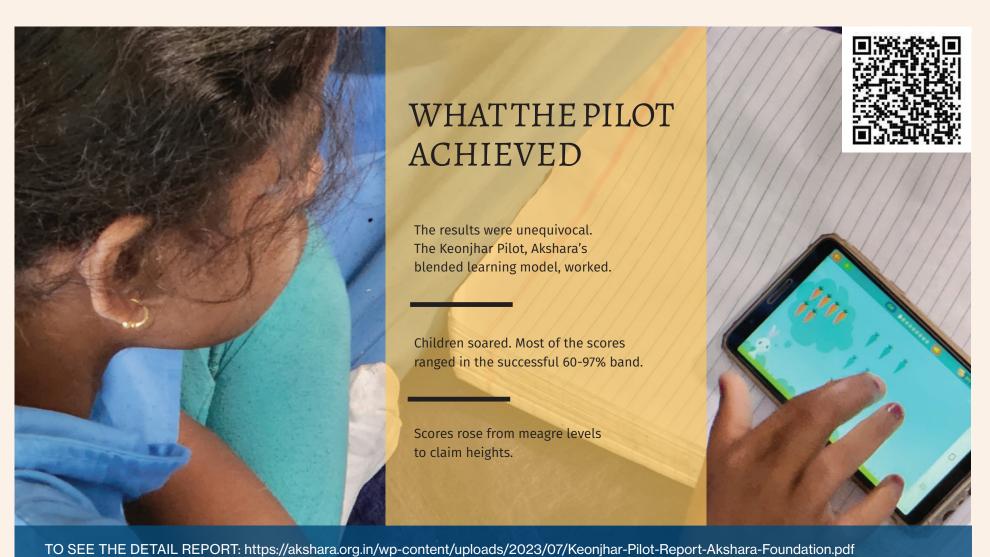
- All 22 schools participated in both the baseline and endline assessments.
- 430 students were present for the baseline assessment and 429 for the endline.
- 388 unique students were considered for the analysis.

The data for grade 4 shows that 82% of the students (161 out of 196) secured First Division scores, 11% (21 out of 196) secured Second Division and 6% (12 out of 196) Third Division by the time of the endline test. Only two students (1% of 196) did not score enough to pass.

The data for grade 5 shows that 91% (174 out of 192) secured First Division scores, 6% (12 out of 192) secured Second Division and less than 3% (6 out of 192) scored below 32%. All children passed in the endline test.

It is evident that in both grades there is a significant improvement and students have moved to a higher band.

Baseline and Endline Results by competencies (in %) Baseline and Endline Results by competencies (%) Grade 4 (N-196) Grade 5 N-192 Addition - word problems Money - word problems Measurement Currency Notes & Coins Measurement - Time Identify 2D shapes Identify 2D shapes Fractions using pictures Long Division without remainder Long Division with remainder Multiply and Divide by 10s, 100s &1000s Long Division without remainder Long multiplication Long Multiplication (zero inbetween) Subtraction with borrowing Long Multiplication Subtraction without borrowing Subtraction with borrowing Addition with carryover Subtraction without borrowing Addition without carryover Addition with carryover Ascending or Descending Order Addition without carryover Number Sequence - Missing number PlaceValue - Expansion form Identify place value for a given number 92 Number Sequence - Missing number Odd number and Even numbers 93 Oral number name association Oral number name association ■ Endline ■ Baseline ■ Endline ■ Baseline



The Learning Curve From Baseline to Endline

Students of grade 4 benefited a great deal from the Pilot, learning shapes, place value and measurement.

Government of Odisha's support was solidly behind the Pilot. It gave vigour and energy to implementation. The district education department handpicked the schools in some of the deepest tribal recesses. At the Pilot's inauguration were the Principal Advisor to the Hon'ble Chief Minister, Naveen Patnaik, and Additional Director (Quality) and Collector of Keonjhar along with Ashok Kamath, Chairman, Akshara Foundation, and the Odisha team. The District Mineral Foundation, an arm of government, supported the Pilot.

The transformation it wrought in children went far beyond Akshara's reasonable predictions. The gloom of the baseline and the surge at endline were faith-restoring. Most of the children came from circumstances that circumscribed them, their economic hardship, isolation, and reluctance to engage wholeheartedly with education putting limits on achievement. The Pilot gave them a new prism, introduced them to the empowerment and joy of learning.

Interest didn't fizzle. Many teachers reported that children attended school regularly just so they could participate in the Pilot. The last period was awaited with eagerness and expectation, and that maintained an unfaltering tempo. The group settings became a bonding ground for friendship, peer learning, mutual support, and the shared project of maths.

In six months, children who had never seen a smartphone became deft navigators, glued to the screens as Building Blocks displayed its power to hold attention with games and challenges that didn't put performance pressure on them.

Not only did the children immerse themselves in a newly discovered world of maths they moved towards the concept of digital learning for the first time.

Along with maths, language skills too slowly improved. Practising on the Worksheets, children "who couldn't even write their names," "understand 1 to 10 in English," or "read a simple word problem" began a steady engagement with language.

All this coincided with an expansion of personality and social skills. Tongue-tied, scared, and diffident when they joined the Pilot, many of them strode ahead. More confident, more communicative, and more at ease with people and education, and the way things are wired.

"The Keonjhar Pilot Gave Us The Right Direction"

Por the 57 children of grades 4 and 5 at the Government Upgraded High School in Rugudi, a quiet, little hilly village in Sadar block, Keonjhar district, Odisha, the last period of school felt like celebration. Here were 40 minutes of unrestrained fun and joy, a time for free form maths. This was one of the 22 schools in Sadar and Banspal blocks in Keonjhar district where the Pilot was implemented.

The children would rush to their teacher's table to get their Akshara-provided smartphones, settle down in groups of three, and start playing Building Blocks, the maths app, with hectic fingers, punching their way through the games and ascending the ladder of learning.

Bigyan Kumar Barik, the dedicated and industrious HM, renowned for his work in promoting education in far off, tribal-dominated areas, would often stand witness, quietly observing in some disbelief that all the rejoicing was not because of a free period but on account of maths. "Those students were not thinking, 'This is a subject. This is maths.' They were thinking, 'This is a game."

"I could see how it improved their connection with maths." Ananda Naik, for instance, grade 4. About four months into the Pilot, he won the 1st prize at a GP Maths Contest. "He achieved it because of the programme," Bigyan Barik was quick to emphasise. "He practised on the smartphone and worked on the Worksheets regularly."

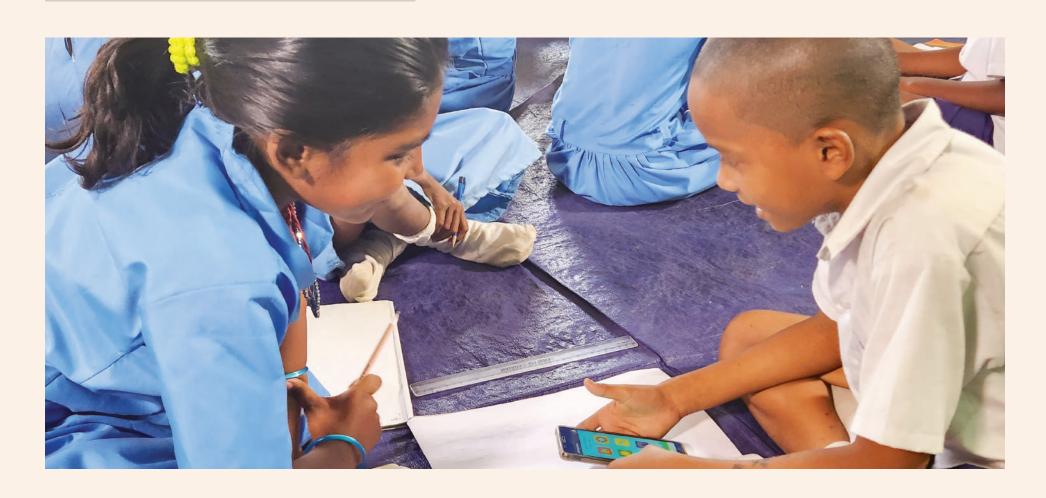
The children would rush to their teacher's table to get their Akshara-provided smartphones, settle down in groups of three, and start playing Building Blocks, the maths app, with hectic fingers, punching their way through the games and ascending the ladder of learning.

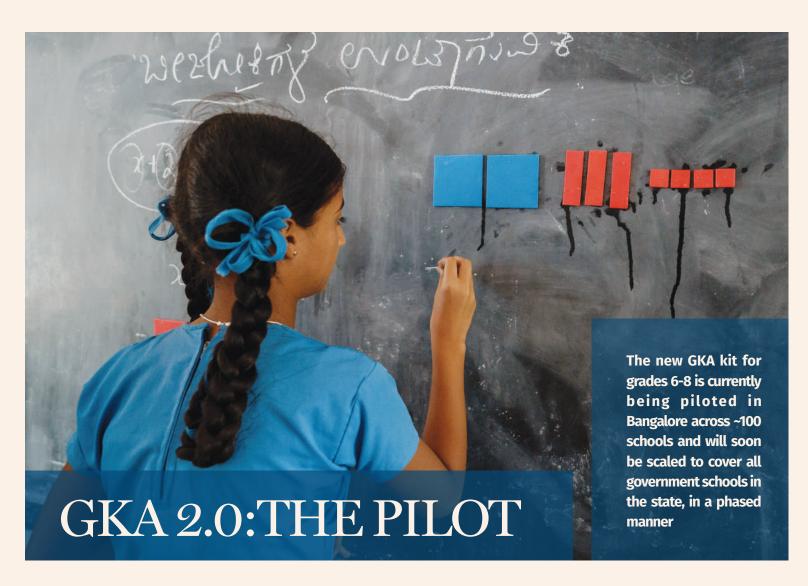
Ananda could never quite manage maths. Fear got hold of him. It left him confused and overwhelmed. He was in grade 1 then. The two years of COVID were a blank phase for Ananda. Like many children in village government schools he forgot every little shred of what he knew. On returning, he found himself in grade 4, promoted as mandated by government, and stranded among numbers. Towards the end of the programme he had acquired

mastery in number operations, geometry, and even measurement. At that GP Contest the 2nd and 3rd prize-winners were also from grade 4 in Bigyan Barik's school.

If this Blended Learning Pilot awakened children to the wonders of maths, it called forth something proportionate in teachers too. Bigyan Bhushan Mohanty, a teacher in Banspal block, said, "I had only heard of digital learning. Only heard that it can happen so easily. That it actually can is beyond the scope of my thought. I never thought a big thing like this could come to children here. I didn't think concepts could be so easily taught. I didn't know. I think it would be good if this programme is available throughout the state. To me the fact that the Building Blocks app works offline is the greatest thing about the programme."

Bigyan Barik says, "Building Blocks is attractive, colourful, and provides meaningful education. Combined with Ganitha Kalika Andolana and its TLMs, it can work wonders for children in maths. In my school I have 375 students from classes 1 to 10. Children from grades 1, 2, 3 and 6 came to observe the Keonjhar Pilot and its process, longing to be a part of it. From my point of view, the programme should cover the lower primary classes and be extended at least to grade 6. The government should implement it."







🖥 anitha Kalika Andolana 2.0, the second rendition, holds out as much promise and allure to students in grades 6, 7 and 8 as the first edition in the primary classes. In the thinking rooms at Akshara where ideas are dreamt and programmes grown, the thought has long circulated, and acquired urgency, even as GKA 1.0, its forerunner, made impressive strides. Governments acknowledge its calibre, buy into it in a spirit of ownership and accord it import and status in maths classrooms.

Akshara Foundation's flagship programme, Ganitha Kalika Andolana is a Maths Learning Movement which started in 2010 as a pilot in 3 of the most backward districts in Karnataka. It has been a movement ever since, adopted and implemented by the Government of Karnataka, in partnership with Akshara Foundation.

It begins with classroom interventions, engages the community, uses appropriate technology for programme monitoring and data analysis and advocates home-based learning using low-end, entry-level digital devices as a supplement to classroom instruction

GKA is Akshara's standout innovation, entering the classroom without disturbing its existing framework. It attempts a breakthrough to clarity in the regular maths period. It attempts to take children from tedium to joy.

Since 2015, GKA has benefitted over 7 million children study-

ing in Government Primary schools in Karnataka, Odisha and Andhra Pradesh.

Government of Karnataka implements GKA 1.0 for around 12,00,000 children in grades 4 and 5 in 48,000 schools in 35 districts. 1,00,000+ teachers/ Resource Persons trained so far.

Government of Odisha takes the programme to around 28,00,000 children in grades 1-5 in 54,000 schools in 30 districts. 96,000+ teachers/Resource Persons trained.

In Andhra Pradesh it is implemented for 2,85,000 children in grades 1-5 in 2000 schools in 13 districts. 2075+ teachers/ Resource Persons trained.

These are decisive, far-reaching numbers. Akshara hopes that the GKA 2.0 Pilot Programme launched in 2022-23 for 14,000 students in grades 6-8 in 95 handpicked schools in Bangalore will grow to be as universally acknowledged, popular and effective as GKA 1.0 and go on

to conquer heights and impress upon higher primary school maths the imagination, creativity, and wider latitude it needs.

Samagra Shikshana Karnataka (SSK) that has been implementing GKA 1.0, in collaboration with Akshara, envisioned GKA 2.0 for higher primary students, an easy, liberating way to teach and learn maths for grades 6-8. SSK requested Akshara to take the lead in developing an activity-based pedagogy and TLMs for them in accordance with the National Education Policy (NEP) 2020 and NCF 2005.

Ganitha Kalika Andolana is also mentioned in the National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN Bharat) document as one of the best state level learning initiatives in the country.

Higher primary teachers underscore the fundamental need for GKA 2.0's tactile, activity-based ambit of maths learning and its teaching-learning materials that break down the abstractions of concepts into relatable scenarios and help students understand it through the Concrete-Representational-Abstract (CRA) methodology it espouses. The absence of a fun, interesting, nudging-along comprehension is felt in the higher grades, a method that's persuasive and derived through reasoning and logical thinking rather than rote.

At five GKA 2.0 Workshops SSK hosted in 2021-22, 30+ teachers from government schools across villages and towns in Karnataka teamed up in Bangalore, gave free release to their creative interpretations of maths and created a GKA 2.0 kit with 22 TLMs, a Teacher's Handbook, and Teacher Training Manual. Akshara and Sikshana Foundation facilitated the design.

The Akshara Maths Resource Team finalised the TLMs, refined the models, scrutinised every component that went in, making minute adjustments with every iteration till they were satisfied with the final kit. Ninety teachers in the Pilot Programme underwent the training that State Resource Persons (SRPs), teacher-mentors, from the Workshops imparted, always the prerequisite of an Akshara programme. Akshara's Master Trainers were there to guide and facilitate.

Akshara programmes, even those with inherent propensity for immensity and high impact, must pass the trial of a pilot, which is essentially a small, intensive study in a concentrated area. For Akshara, the GKA 2.0 Pilot is a pacesetter that will continue into 2023-24. It's a measurement indicator, and a gauge of mood and moment among teachers and students, of what comes to light in the testing laboratory of the maths classroom. It will determine scalability and the future sweep and success of GKA 2.0, its power to work change. For now, Akshara's long-standing hope of a maths programme at scale for grades 6, 7 and 8 is coming closer to realisation.

The Training

"All maths teachers in Karnataka should get this training," said Nazia Sultana of the Government Kannada Higher Primary School (GKHPS), Lingarajapuram. She was ecstatic, fervour pouring out.

The three-day GKA 2.0 training that SSK sponsored and Akshara facilitated had that deep, thought-reorienting effect on the 90 teachers, most of them feeling the reverberations days after it was over.

They're experienced teachers, thorough in class, possessing an intimate understanding of concepts and the pitfalls of maths for teachers and children. They could easily have assumed superiority or a know-all attitude. That wasn't so. They were open-minded and accepting of change, willingly accommodating the slight paradigm shift of GKA.

Concentration and participation intensified as the sessions progressed. Three SRPs trained the group. Vanaja S., Government Higher Primary School (GHPS), Munnekollal, said, "This is my first exposure to GKA. Of course, I've not attended a training like this before. I've undergone many trainings in maths. But nothing like this. Many things surprised me. This is advanced. The TLMs are better designed. I haven't done anything with this three-dimensional effect before. My surprise is: all this is according to the curriculum."

Echoing these thoughts was Ranganatha D., Government Model Primary School (GMPS), Bagalur. "No, I never knew there were TLMs for grades 6-8. I always looked for an easy way to teach maths. There can be so many



teaching-learning materials for maths? It surprised me."

Nagesh K.O. from the Government Model Higher Primary School (GMHPS), Challakere town, Chitradurga district, a teacher-mentor, was similarly engaging. As designers of many of the GKA 2.0 TLMs, "we had our doubts. How will teachers receive our materials? Will they find it easy to implement them?" The TLMs have a simple, direct, and efficient method of communicating maths, and the teachers endorsed that. Nagesh demonstrated whole numbers and integers in his session with the number line TLM and round counters and it cleared the vagueness and "confusion" in teachers' minds about positive and negative numbers.

"In this subject called maths, we used to find it difficult to understand shapes and number operations. To address this Akshara Foundation has given us a GKA 2.0 kit with which it has become so easy to understand all kinds of shapes like cubes or anything else. We see it before our eyes. We touch it. We get to know what it is and we're able to learn what this vertex of a cube is very easily. Thank you, Akshara Foundation."

Deepak Rao and Sai Yathin, grade 8, GHPS, Tharahunise

How can you rely on, much less use, TLMs for maths? This was a common misconception among teachers at the training. Unlike their primary grade colleagues, high school teachers have seldom been exposed to TLMs. On the third day they unequivocally conceded that teaching with TLMs was the only effective way. The discovery of this profusion of support resources led to a kind of wonderment that Nazia captured. "That we can do all this with TLMs is absolutely amazing - fractions, decimals, even a method for multiplication tables. I loved the TLMs. Children will visualise maths with this, understand x and y in algebra."

Opinion | Column

Unfolding of GKA 2.0



- Akshara officially set the first phase of the GKA 2.0 Pilot rolling in October 2022. It ended in March 2023.
- The Pilot was implemented in 95 higher primary schools in three Educational Blocks in Bangalore Urban District, S4, N4 and N3.
- . Number of children in the programme 14,000.
- . Number of teachers in the programme 90.
- . The programme is slated to continue as a pilot in the academic year 2023-24.

rucial factors swayed decision-making at Akshara before GKA 2.0's debut. Pushpa Thantry, Head, Maths Programme, says, "The Pilot was restricted to Bangalore for reasons of proximity. We wanted to deliver our kits easily and ensure that they reached the schools in an organised manner. We wanted it to be easy for us to showcase the programme to SSK. These were our central considerations."

Ninety-five schools for a pilot were an ideal ecosystem, not too spread out and geographically challenging, not too small for impact assessment.

SSK, a key collaborator and believer in the GKA endeavour since inception, suggested the blocks. Akshara selected the schools in consultation and coordination with SSK and the Department of School Education.

Government's Interest and Involvement

Be it a pilot or a mega programme, government's role is

unsurpassed. It dominates public education like no non-governmental organisation can. It has the reach, the resources, and an almost infinite capacity.

The effective implementation of the GKA 2.0 Pilot was the joint handiwork of government and Akshara. There's scope for all-out transformation when the Department of School Education in the districts, blocks and clusters is a vigorous, espousing power.

Madhumalathi, the Cluster Resource Person (CRP) of Nagenahalli, N4, is dynamic and committed, a veritable force. Her interest in education rises above the mere consideration of a job and her concern for government school children runs deep.

Madhumalathi was very happy with GKA 2.0, says Akshara's Maths Resource Team that has accompanied her and seen her ways of working. Being progressive and receptive to ideas is characteristic of her. "You must conduct a one-hour class with GKA 2.0," she would tell teachers. "She trained teachers on how to use the kit," says the Team. It was not part of

"In my class we have a maths kit that **Akshara Foundation** has given us. Firstly, there are a lot of maths related items in it like 2D, 3D objects which our teacher uses to help us visualise shapes. The concept used to be very difficult for us. Now it is very easy to learn by touching and feeling the items and observing them. My thanks to Akshara Foundation for giving us this kit."

Inchara C., grade 8, GHPS, Tharahunise her work agenda, nor was she duty-bound to do it. This was an Akshara Pilot, not strictly a government initiative. All the same she felt accountable.

Madhumalathi was so taken up by the maths activities the students were doing in a school she visited that in the spirited way typical of her she took it upon herself to arrange GKA 2.0's activity-based sessions for teachers not included in the programme.

Another remarkable instance of outreach was when Madhumalathi went the extra distance to support the government-run, Urdu medium schools in her cluster that were outliers in the Pilot. All schools couldn't be accommodated in GKA 2.0. Akshara had constraints of resources and manpower. The 12 Urdu medium schools represented their case to Madhumalathi, the teachers saying they felt they had been denied access to a valuable input in the maths class. Madhumalathi promptly initiated action. She wrote to Akshara in her official capacity requesting kits for these schools that felt keenly their exclusion, a request Akshara at once fulfilled.



GKA 2.0 and Empowerment

Higher primary school students are a new cohort in Akshara's stakeholder mix, and it was during the rigorous monitoring of the Pilot that the maths Resource Team observed that these children were responsive, communicative, confident and aware, comfortable and unhesitant about the knowledge they possessed and wanted to develop. They also seemed to have shed some of their lower primary timidity about maths.

Essay | Column

This Is Maths That My Children Will Remember

ne morning, Akshara's Maths Resource Team on an observation visit to the class found a much-loved teacher, one of the most proficient in the Pilot, "enthusiastic, interested, supportive and confident." Into a maths period of 40 minutes thronged free-spirited inquiry, experimentation, and concept deduction. No hazy, insecure wanderings with maths. A coherence developed and their musings with the TLMs took them to answers, Manjula mediating the process.

It was the maths hour in grades 6,7 and 8 at the GKHPS, Murphy Town. As Manjula G.M., the maths teacher of this multigrade classroom, walked in with the big blue GKA 2.0 kit in hand, the excitement was intense.

"Maths is abstract," said Manjula, setting out her challenges and students' fears. "There's this idea among children that it's difficult. They like maths but can't do it. Their recall is very poor. At that

point they can do it – later gone, especially a new concept."

"I used to be teaching and repeating for a long time - all the time." It had been an epic difficulty, despite her proclivity for maths. Now with GKA 2.0, an ease has flowed into Manjula's class. "Children were eager for the resources. 'Give it to me,' they

said. 'No, to me.' If I said triangles, they would identify what TLMs to use."

Multigrade classrooms are a challenge for teachers, and the higher classes a real predicament in lesson management. Manjula had an innovative strategy, said the Team, that bound the three grades in harmonious accord.

"The GKA kit is very useful for us because we understand maths very well with it. It is a beautiful way to understand maths. We enjoy it very much when Miss explains maths to us with the kit. I understood the topic of circles very well with it. Maths concepts have become very easy to understand with the kit."

Akshaya, grade 7, GKHPS, Murphy Town

While grade 7 students were on one side of the classroom with 15 minutes allotted to play, explore and learn the concept with the TLMs, angles on that day, grade 6 was invited to observe, and grade 8 moved out to the corridor to do science. Group learning is a central tenet of GKA. Manjula gave the working group opportunities to engage, explore, explain to each other, elaborate, and evaluate their workings and its culmination. They're the 5Es of maths that GKA embodies.

Till a few months previously none of these students thought it possible that they could play with numbers and get to the bottom of it. Never did they imagine a maths period when they didn't have to labour on numberwork, cramming it all in senselessly. How simple now, how uncomplicated, that counters and chips and strips, base 10 blocks and geoboards could visualise maths for them.

"I like GKA 2.0 very much," said Manjula. "From Abstract to Concrete, I went back over my process." A process that had hardened with time. But here she was, a transformed teacher, an enlightened one. "My thinking changed. I never knew there could be TLMs for decimals and fractions. Arithmetic and algebra too have TLMs? It was a revelation. All the TLMs are very beautiful. I never knew...." Manjula repeated wonderingly. "So useful for concept development. I used it for that."

All the time she used it, she marvelled that TLMs could guide the Concrete-Representational-Abstract process of maths, that GKA 2.0 aids were in fact available for it, right here in her domain, when all through her 17 years as a teacher she would have said it was pure make-believe. "My weaker students too can learn with GKA 2.0," she said relieved. "With all this material and the textbook and CRA together."



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Partnering With Government

An Emissary of Change

t is difficult not to invoke COVID in the context of education. As a regular academic year dawned after two obliterating years, nervous hope intermixed with a bleak outlook. Alarming reports trickled in from government schools all over sending warning signals jangling in the offices of the Department of School Education. The reports were quiet at first, so incredulous no one dared to voice it openly. Soon it was a cascade that could not be stemmed or muted.

Children had not just forgotten language and maths. They had forgotten how to learn.

At the highest levels of the Department of School Education in the districts and blocks that Akshara's field teams visit over and over, GKA 1.0 is recognised as an imperative that cannot be ignored, a programme that



can target maths stagnation, and breathe new energy back into a stumbling maths class. The whole of government's education machinery, and even the local administrations were seized of the urgency of the matter and offices across the hierarchy synchronised their energies towards education, GKA, and the building of learning opportunities for children.

Akshara's teams meet proactive officials almost every day, extraordinary individuals who are action-takers and emissaries of change. This is one such official, Dr. Gopal Krishna B., I.A.S., CEO of the Zilla Parishad, Chikkamagaluru district, Karnataka. Ranganath, Divisional Field Manager of 13 districts, said he had never in all his career at Akshara come across a more ardent or open-minded official. The Zilla Parishad is an official body at the apex or district level that coordinates the activities of the local Gram Panchayats in all its developmental activities. It acts as the link between the state government and the village-level Gram Panchayat.

Paraphrased from: https:// en.wikipedia.org/wiki/District_council_(India)

Ranganath had gone in for a routine appointment as schools reopened to introduce GKA 1.0 and seek expeditious implementation and was taken by surprise when the CEO reeled off the names of some of the TLMs in the GKA kit. "I want to learn about it," he said by way of explanation. "I'm interested in knowing how well it will benefit children. The Concrete-Representational-Abstract method - we officials should all learn it, feel the TLMs, know what it is." The CEO and his team spent the next one hour and forty-five minutes understanding GKA, the pith and substance of it, as Ranganath laid it out in depth, sitting in the august chamber, or occasionally standing to emphasise a point.

The Executive Officer of the Taluk Panchayat left a scheduled meeting and came over to the CEO's office to participate in the GKA discussion. The CEO then steered the conversation towards children's learning outcomes and how GKA could accelerate learning momentum. He issued instructions that all Panchayat Development Officers be motivated to work for education. This was a CEO who was aware, kept himself in the loop, was conversant and invested. He visited schools all through, observed classrooms, inspected scorecards, delivery of instruction, and manner of learning. "Every child in every government school should learn with the TLMs. We must ensure quality learning through GKA."

"For nine years I've been working in Akshara spreading GKA 1.0," said Ranganath. "I have not seen a CEO so interested in the kit or in finding out if children are using it. He was not satisfied only with understanding GKA, but in its implementation too."

"Every child in every government school should learn with the TLMs. We must ensure quality learning through GKA."

B. Gopalkrishna, CEO of the Zilla Parishad



Opinion | Column

A Change-Maker

ak, Principal, District Institute of Education and Training (DIET), Khordha district, Odisha, believes in GKA with a certitude that's unflagging. He calls it pathbreaking.

Dr Nayak is a forceful champion, swinging opinion around a broader use of GKA 1.0. He apprised government at all levels that he found the kit "incomparable. I've seen other kits. GKA's is the best. It is attractive – that's one thing. Easy to use. It's comprehensive and aligned to the curriculum. It builds the conceptual understanding of children – that's the most important thing in maths learning." His was one of the dominant voices behind GKA 1.0's institutionalising in the state.

r Tapas Kumar Nay- At the teacher trainings that he personally conducts and at meetings with officials in Samagra Shiksha and the School & Mass Education Department (S&ME) he amplifies the need for GKA. As a learning recovery mechanism post-COVID, "I strongly recommended the GKA 1.0 kit saying it's a hundred times more effective than anything out there."

> Dr Nayak was serving at the State Council of Educational Research and Training (SCERT) when the partnership with Akshara yielded output of consequence. He was instrumental in getting the GKA Teacher Training Manual, developed by Akshara, translated into Odia. Workbooks for grades 1 and 2

and teacher support material in which the GKA kit was incorporated came out, designed such that the teaching-learning materials are used in class. Under Dr Nayak's guidance SCERT joined hands with Odisha School Education Programme Authority (OSEPA) to bring out more than ten videos for teachers with detailed guidelines on using the TLMs. The CRA construct was highlighted in all the materials, and the concepts were matched with the corresponding

Dr Nayak's commitment to GKA 1.0 is deep-rooted, based on experiential understanding, personal appraisal, and insights from primary classrooms on its practical applicability. "I've seen He has gone many steps ahead and asked for the GKA 2.0 kits that Akshara has just launched for grades 6, 7 and 8. "I want to implement GKA 2.0 in ten schools in my district. I want to demonstrate that the kit is useful for conceptual understanding in maths and build pressure on government to purchase them for us."

He has strong assets to back him. "As an official I'm able to motivate others. That's my strength. I have a depth in maths matters, in teacher training, in material development. So, I can advocate the use of teaching-learning resources with knowledge." He's mathematically driven. Why maths? Because it's a defining subject, it lights

up everything else around - science, Odia, daily life. "A mathematical person is at a different level." Dr Nayak specialised in maths for his MSc and he holds a Master of Education (M.Ed) and a PhD in Maths Education.

"Yes, I'm a change-maker." No role in government is without responsibility and work, Dr Nayak says. No part that's uneventful. Or without scope for innovative change. In every position he has held, he has rooted for it. "In government you can do many things for education." The scale big or small, all roads lead to renewal and regeneration. "In my capacity I'm trying to impact my district, at the school level, in capacity building. From where I am in Khordha, change at the grass roots is possible."



kshara's foundation rests on partnership. Connecting with like-minded organisations has remained a momentum-building characteristic of Akshara Foundation since its founding in 2000 as a tripartite partnership between government, the corporate sector, and the voluntary sector. Ever since, Akshara has disseminated its expertise freely and widely. The resources it creates are available on Creative Commons to use, adapt or build synergies with.

When it comes to its flagship GKA, Akshara claims no exclusive ownership of its principles, processes, or protocols. The GKA Teacher's Training Manual is out in the public space for anyone who seeks its support, insights, or techniques. Its 25+ hours of Teacher Training Videos are up on YouTube, a comprehensive, step-by-step guide to using the GKA TLMs not just for teachers but any aspirant who wishes a closer, deeper understanding of how maths can be taught and learnt in appealing, lighthearted ways.

Akshara's programme trainings are acknowledged for knowledge transfer and unique content delivery, with child psychology, classroom management and the illuminating logic of maths brought into the ambit as well.

Exemplifying the spirit of sharing and giving were two customised GKA trainings the Maths Team spearheaded, both conducted by Akshara's Maths Pedagogy Expert and Master Trainer, Dr. Annapurna Kamath.

Seeing Value in GKA 1.0

First came the interactive, activity oriented, twelve-hour GKA 1.0 workshop for South Zone

Kendriya Vidyalaya teachers on How Primary School Teachers can Make a Difference. The training was hosted by the Teaching Learning Centre, IIT Chennai. A cross-section of Kendriya Vidyalaya primary school teachers participated in the training that focused on new pedagogical techniques and the GKA model of teaching maths using TLMs and the Concrete-Representational-Abstract method.

Annapurna is proficient at tailoring her training for specific target groups. GKA 1.0 and 2.0, which she helped conceptualise and design, are an embedded part of who she is, and it transfers itself effortlessly, aiming directly at the group before her. For this training there was no predetermined strategy she came equipped with. "We went with the flow."

GKA can transcend the boundaries of government schools where it is implemented and find relevance in any school setting, attune itself to any syllabus. This was amply demonstrated here. Kendriya Vidyalayas are affiliated to the Central Board of Secondary Education (CBSE), but that posed no barrier. "I used a different approach," says Annapurna. "The focus was on how they handle maths. Maths being a universal subject the content is more or less the same." The emphasis was on the topics the teachers wanted, dropping what they didn't need explication of. They were experienced, knowledgeable teachers who have been in the maths field for long years.

"My goal was to introduce them to the GKA way of teaching and learning maths," said Annapurna. Kendriya Vidyalayas use activity-based teaching; it's not an unfamiliar construct in class.

"But GKA 1.0 had more to offer." They were quick to recognise that and absorb methods that would enlighten their maths classrooms. Putting together the TLMs for the various concepts, they saw how lucidly comprehension emerged and how easily answers were derived. It was a highlight of the workshop. They appreciated the kit's design and features. "In fact they wanted to buy the kit," said Annapurna. "Though they were well-versed in using TLMs in class they saw value in GKA 1.0."

The outcome was meaningful for Akshara. A boundary had been crossed, pathways explored. The teachers commented that it was time well spent, a worthwhile exercise, from which they obtained a new dimension of maths that they could productively engage with in class.

Another Partnership Created

The next outreach was a two-day GKA 2.0 training for teachers at Christel House School, Bangalore. Annapurna had finished a round of online GKA 1.0 training for them during the COVID shutdown of schools, and later, an in-person refresher coaching as reinforcement. "So, they had

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a good foundation," said Annapurna. "They were practising GKA 1.0 in class."

A private English medium school, Christel House is known for its progressive approach to education, its adoption of reformist strategies, and fresh thinking. These were teachers who knew the GKA 1.0 spectrum, "all its parameters of learning," and it was a smooth and fluid transitioning to GKA 2.0. "They were enthusiastic, inquisitive, quick to grasp, and quick to learn." Belief in GKA already well-laid they soaked in the Akshara training. "They

wanted to learn to execute it. They wanted the next step," said Annapurna. "They were asking the right questions. Very effective learning took place." Their feedback was precise and meticulous, just as diligent as their participation was.

In a message to the Head, Maths Programme, they listed their comments.

- "Clear understanding of concepts.
- This method of teaching helps us progress from concrete to abstract content.
- It benefits all levels of learners and retention is evident in this method.
- It connects the mathematical content to real life situations.
- The TLMs help children organise, record, and communicate mathematical ideas.
- The TLMs also clarify confusing ideas that children may find hard in purely symbolic form.
- The TLMs are good and effective in conveying a concept.
- Manipulatives are most useful while introducing a new concept."

Three months down the line, interest hadn't worn away. An Akshara training, teachers often say, stays in the mind, and this was an unflagging batch, clear about integrating its principles in their maths class. Active, keen, and committed they were posting messages on a WhatsApp group with Annapurna, asking questions, seeking clarity, refining their understanding, and sharing experiences.

Another working relationship with GKA is getting established in Christel House's higher primary classrooms. For Akshara another partnership created.



1-3-6-9 WALL WRITINGS



To encourage community involvement and create awareness, Akshara has promoted the 1-3-6-9 wall writing activity in public places so that people read this information and act on it.

Each 1-3-6-9 wall writing has the following message:

- 1- The School Development and Monitoring Committee (SDMC) to meet every month.
- 3- Parents to participate in the parents' meetings schools hold once in three months.
- 6- Teachers to ensure that parents review their children's

learning progress once in six months.

• 9- Children to attend school nine months in a year.

The community, motivated by the Education Volunteers, have raised money by themselves and facilitated these wall writings in every village.

Over 17,800 wall writings have been done in Karnataka and over 600 of them in Odisha.

As a result,

• There was an increase in parents' visits to schools and at-

- tendance in parents meetings increased.
- The participation of parents in the Samudayadatta Shale programme also improved and parents are now more involved in their child's progress.
- Group discussions on the concepts of 1-3-6-9 are slowly increasing in the villages.
- School teachers are coming forward to do these wall writings in their schools.
- Some of the Block Education Officers are encouraging teachers to take up wall writings in the schools.

Five Seasons Later, Pratibimba Still Going Strong

ta time when colleagues were not able to meet and share their classroom experiences with each other (during the COVID pandemic), we decided to provide an easily accessible platform to showcase these stories. This led to an idea of a podcast by teachers, for teachers – Pratibimba.

Launched in October 2020, Pratibimba is Akshara Foundation's curated podcast series. It is a platform for teachers and Education Department officials to share and learn. It brings out positive stories on



classroom innovations, community participation and child-level impact that have emerged from government-run primary schools.

Teachers are born social creatures. Whether they're teaching children in a classroom, or learning from their peers' experiences, they thrive on this knowledge transfer. And sometimes, we ourselves have been privy to an idea going viral and being adopted by an entire district.

And since 2020, Pratibimba has launched five successful seasons, with 10 episodes each. That is 50 fabulous stories worthy of being shared with every single teacher.

We've summarised one of the episodes from season 5 for you. But it's nothing close to the real deal. We hope you go on and listen to the episodes after you read this. And do share the qr code below to every teacher you know!

Scan this QR code or click on it to listen to the podcast.



Opinion | Column

A Science Teacher's War Against Superstitions

Ms. Pooja Devi is a teacher at N. R. Pura, Chikkamagaluru District. She has been teaching science for the past two and half years. She has a total of 17 years of experience in teaching. She has been the winner of many State and National Awards for her excellence in teaching. She even has her own YouTube channel and blog spot for teachers.

Pooja Devi is also inspired by her primary school teachers. She feels science is as interesting as it can be difficult. She is convinced that in order to make science learning effective, teachers have to make the students curious and ask 'Why?' and How?'

She advocates learning by observation of natural phenomena. She emphasises the importance of science in our daily life. Her teachers were helpful in getting rid of her superstitions through

Pooja Devi is also inspired by her primary school teachers. She feels science is as interesting as it can be difficult. She is convinced that, in order to make science learning effective, teachers have to make the students curious and ask 'Why? and How?'

science. Hence she draws the attention of students toward everything that affects life on earth.

She then goes on to quote a very interesting incident. Students had to use a toilet located next to a crematorium adjacent to the school. They were found falling or getting injured particularly on a new moon day or on a full moon day. Superstition drove the children away from the school. After a bit of digging around, Pooja Devi found out that students would run back to school after using the toilet on those days. It was all due to the fear they had already built up in their minds, after hearing random stories. And that fear, coupled with haste, led to them tripping and falling, and injuring themselves. She then helped them get over their superstition by explaining her observations to them.



Pooja Devi narrates another story of a boy who would dance like a snake and declare that the snake god had possessed him. He would light a piece of camphor in his mouth and close his mouth and show the flame going out. On closer observation, Pooja revealed that he was doing all this to command the respect of his classmates, who would otherwise make fun of his poverty.

She has arranged many mock sessions to demonstrate that many people fool others for a reason and give it the colour of religious belief. This has also led her to teach that 'knowledge is wealth'.

Pooja Devi has had to take the parents into confidence to achieve a few desired results. The monthly magazine 'Ayush' is one such result. Students are thrilled to see themselves on her YouTube channel - talking about what they did to get rid of their superstition. She created a 'Science Room' in some students' homes. All households tend to have many chemicals - unknowingly. She used this fact to encourage students to conduct their own experiments at home so that they understood the concept of an acid and base by taking extracts of different flowers.

Pooja aims to build a scientific outlook among children. That would be the biggest reward to her from her students.

ADVOCACY An Undeniable Force In Classrooms



Activity Book Reviewing by Ms. B B Kaveri , State Project Director, Samagra Shikshana Karnataka (SSK)

kshara's Mathematics Programme started its journey as the tiniest of seeds some twenty-two years ago, and grew, its mettle vigorously tested in school environments where maths outcomes were modest, below average, or failing. It had innovation wired into it and a capacity to remake itself over and over, every time in a progressive new cast.

When Ganitha Kalika Andolana 1.0, the latest iteration, emerged on the scene and the Government of Karnataka adopted it and made it its own in 2014-15, it was a culmination of effort, the institutionalising of a programme Akshara had never ceased to believe in or grow despite every hurdle.

GKA 1.0 is today a significant entity, an undeniable force in maths classrooms in primary schools across Karnataka and Odisha and selected schools in Andhra Pradesh. A once tedious subject is now ripe with possibility and hope and thousands

upon thousands of children are discovering joy in the doing of maths.

Recognition has not been far behind.

To give two examples:

- The National Initiative for Proficiency in Reading with Understanding and Numeracy, NIPUN Bharat, Guidelines for Implementation 2021, has cited GKA 1.0 as one of the best practices in maths teaching.
- In 2022, the Numeracy at Scale (NAS) study selected GKA as one of the successful programmes from low and middle-income countries around the globe that have improved early-grade numeracy outcomes at scale. NAS research is implemented by RTI International and is part of the Centre for Global Development Research Consortium, funded by the Bill & Melinda Gates Foundation.

Judging from this standpoint, GKA 1.0 perhaps doesn't need more endorsement. But advocacy opportunities come unbidden and the Research and Evaluation team at Akshara has been tireless in disseminating it wider and impressing it in the public consciousness.

We present here a few key events that marked the annual calendar. Schools were learning to cope after COVID-19, and unifying the activities was the central theme of GKA 1.0 and its potential for recouping and transforming.

Blended Learning During the Pandemic

K. Vaijayanti, Director, Research and Evaluation, wrote an article on Education in the Time of a Pandemic for an international publication, Global Pandemic and Human Security, a Springer imprint, published by Springer Nature Singapore Pte Ltd., that in a series of 22 articles based on specific case studies, field data, and evidence, highlights two pillars, development and technology, two interdependent issues discussed in the perspective of the global pandemic.

Vaijayanti's article discussed the Blended Learning Model, a small pilot Akshara implemented for 240 children in 15 villages in Mysore district, Karnataka, which deployed a skilful combination of technology and pen-and-paper Worksheets, all rooted in GKA 1.0. As the article concluded, education was the worst affected sector during the pandemic. The learning collapse that the pilot's baseline indicated was redeemed somewhat by the time of the end-line evaluation, demonstrating that a blended pedagogy could be a way forward when large-scale disruption hits the system. The article blended in with the book's overarching narrative that "the positive part of technology development was accelerated by social innovation amid the global pandemic."

A Viable Model for All Grades

As a civil society organisation and a crusader of education, Akshara, along with five other NGOs, made a presentation at a Consultation Workshop with Civil Society groups on the National Curriculum Framework. It was organised by Bengaluru City University in collaboration with NCERT and the Karnataka State Higher Education Council.

Vaijayanti and Pushpa Thant-

of experiential learning; a shift from rote cramming towards real understanding and interactive teaching-and-learning; digital content and the technology thrust; and community participation in education.

On Supporting Post-COVID Learning Recovery

Akshara showcased GKA yet again this year as a proven system for maths acceleration in primary schools where children, particularly now after COVID, strive at maths and fail to make the cut. The event was the 12th International Comparative Education Society of India (CESI) Conference 2022 on the theme,



Reviewing of the maths activity book for grades 6 to 9 by Mr. Raghavendra, Senior Lecturer, DIET

ry, Head, Maths Programme, who represented Akshara highlighted the GKA model in their address and spoke of how numeracy ought to be taught for a better appreciation, enjoyment, and understanding of maths. Since the Workshop's focus was on developing an appropriate curriculum for a child-centred absorption of maths, they shared GKA as a viable case study, a continuum experience, that could be advocated right through from the early primary grades and Foundational Learning and Numeracy (FLN) to the advanced maths of the upper primary classes and high school.

GKA operates in conjunction with the goals of the National Education Policy 2020, said Vaijayanti, which accords the highest priority to FLN and calls for increased attention to individualised maths learning, so every student is assured of access to mathematical skills. GKA harmonises with the NEP aims

Educational Transformations: Crisis and Resilience, organised by Maulana Azad Urdu University (MANUU), Hyderabad.

In its concept note, seeking presentations, CESI said the conference would ponder questions such as: "How have the states and their policies responded to the new challenges? What are the new structures proposed and will they suffice to deal with the learning gaps, crisis, and emerging concerns? How has COVID-19 influenced and reshaped education systems? What are the possible global dimensions and linkages of India's educational transformations? And how to make sense of the various localised efforts...... in the metamorphosing educational landscape of the country?"

Vaijayanti presented GKA 1.0, already embedded in the government educational structure in a few states, as a solution provider in primary classes,



drawing the spotlight on its well-established role in deepening textbook-oriented maths. To a gathering of academia, educational practitioners, civil society organisations, and prominent citizens from across India, the presentation gave further visibility to GKA as a model that is supporting post-COVID learning recovery.

Workshop on preparing an Activity Book

The Government of Karnataka conducted a workshop to create

an activity book and Teacher Bank based on the recommendations of NEP - 2020, focusing on 21st century skills. The workshop covered 6 subjects: English, Kannada, Mathematics, Science, Hindi, and Social Science. A total of 110 participants, including resource persons from different locations, attended the 5-day residential workshop.

The main objective of the workshop was to develop an activity book for elementary students that incorporates 21st century skills and aligns with the NEP recommendations. Prior to

this workshop, an introductory session was held in November 2022, which provided an overview of activity book preparation, teaching approaches for mathematics, 21st century skills, and the NEP - 2020 recommendations. Resource persons such as Sri. Maruthi, Director, T.K Ragavendra, Senior Lecturer, DIET, and Ms. Vaijayanti from Akshara Foundation shared their ideas and suggestions for creating activity books for all standards.

For mathematics, 15 themes with 15 objectives were identi-

fied for grades 6 to 9. The maths activity book will consist of 96 pages, with each outcome covering 6 pages and containing 3 to 4 activities. Additionally, a Teacher Bank will be included, providing extra activities and instructions for teachers related to the activities mentioned in the activity book. The book will have 150 pages for grades 6-7 and 8-9.

The second phase of the workshop took place from January 10th to January 14th, 2023, at Bikshudam, Adakamaranahalli, Bangalore. Akshara Foundation

has been the numeracy partner for the Government of Karnataka since 2015. As a result, the organising committee invited members of Akshara Foundation to join the workshop team as Maths Resource persons. Mr. Shivakumar and Mr. Nikhil Gowda participated in this fourday residential workshop. They worked alongside the team responsible for preparing activity books for students in grades 6 to 9. Together, they created activities for three learning objectives from the 6th and 7th standards.

EVENTS & EXHIBITIONS

AKSHARA SAMVAADA

Akshara has been organising a series of webinars called Akshara Samvaada, or Dialogues since 2021.

The objective of these webinars is to make it a bridge, a connector, a conversation starter for others striving for the same cause, a platform to listen, share and exchange ideas and best practices.

Akshara Samvaada 2022 is a three-part series that highlighted interventions in maths education being implemented in government schools across Karnataka. It's all about learning from each other's experiences and seeing how we can build partnerships that will benefit millions of children, with access to learning.

Part 1 was a discussion on Maths Learning Recovery. While part 2 was based on GKA - An Easy Way to Learn Maths, part 3 focussed on Community Participation in GKA. We had speakers from the Department and teachers, and even volunteers and HMs who shared their experiences and definitely left us inspired.

If you would like to listen to these webinars, scan the QR code here.



IT ALL ADDS UP - ANNUAL MATHS SYMPOSIUM

Activity-based Learning of NEP 2020 is the key for future education in India

Akshara Foundation had organised its annual Symposium on the M of STEM Education at the Chancery Pavilion hotel, Bangalore on the 20th of January 2023. Held under the title of "It All Adds Up 2022-23", the symposium hosted three independent panel discussions on 'Innovative Pedagogies in Maths', 'Using Technology to Supplement Classroom Instruction and Spark Joy of Learning', 'Test scores and Beyond' followed by a brief interactive session titled 'Maths in Everything'.

Opening with an introductory speech, the Chairman of the Foundation, Mr. Ashok Kamath, observed that "We need an e-Sarva Siksha Abhiyan to bring in blended learning to all children. Blended learning is a combination of teacher in the classroom + technology in the form of a smartphone." He also emphasised sustainability on top of the scale that SSA has been able to achieve.

The first panel discussion commenced with opening remarks



by Ms. Cauvery. B. B., IAS, State Project Director, Samagra Shikshana Karnataka, who observed how Kalika Chetarike has helped, in the post COVID educational scenario, to better improve the conceptual understanding among teachers and students. She also noted the positive impact of Ganitha Kalika Andolana, an activity-based maths learning programme that has now become the maths period in every government school across Karnataka and Odisha. "Ganitha Kalika Andolana, now for grades 4-8 in Karnataka, has been a successful programme. The feedback has been that when children are able to see, feel and observe teaching-learning aids, it makes it easier for them to understand."

While pedagogy expert and Maths Communicator Mr. V. Sivashankara Sastry drew attention towards the lack of the 'element of entertainment' in teaching maths in schools in order to be strongly equipped for the times of the 4th industrial revolution, Mr. T. K. Raghavendra, Senior Lecturer, DIET, & State Mathematics Resource Person, underlined the importance of recognising maths in everyday life which will, in turn, stress the applicational value of mathematics.

In the following sessions, Azeez Gupta, Founder of Rocket Learning, Prasanna Vadayar, EO of Sikshana Foundation and Ebenezer Vidyasagar, Board Member of Vibha India, shared their insights on how their products and efforts have brought in tangible changes in the lives of students of the remote parts of India. They also shared the challenges and bottlenecks involved in the EdTech sector.

The third panel discussion in the afternoon, titled 'Test scores and beyond' Principal, DIET, Odisha Dr. Tapas Kumar Nayak, Founder and ED of Centre for Science of Student Learning (CSSL) India Ms. Vaijayanthi Sankar, along with the Customer Satisfaction Head of Educational Initiatives, Ms. Jayanthi Dasgupta, shared their decade long research insights and outcomes regarding

the problems and challenges in methodologies of assessments.

Some interesting observations by Ms. Vaijayanthi Sankar, "Self-efficacy in maths - decreases with age. Those with a growth mindset tend to do better in maths. Those who enjoy reading do better in maths. We are not addressing any of these aspects while assessing children, and many more."

Dr. Tapas Kumar Nayak put out an interesting couple points as well, "We talk about innovative pedagogies. Then how can we contradict it with a traditional assessment system? An innovative assessment system is needed to evaluate a child. It will help the teacher to find out the indicators of whether the children are learning or not."



THE GKA GALLERY AT SURAVI

Suravi had a grand reopening in November 2022 at Bhubaneswar, disrupted so long due to COVID. Suravi is **Government of Odisha's** annual Children's Festival of education, art and culture, activities, competitions and prizewinning, a multidimensional offering of aspiration, ambition and achievement. It is held for three days starting on November 14,

As always, the S&ME Department invited Akshara to put up a GKA display. The Department has been implementing Ganitha Kalika Andolana, Akshara's Maths Programme, since 2017, starting on an experimental footing in Balangir and Rayagada, then extending it with conviction to other regions, and from this year to all government schools in all 30 districts for children in grades 1-5. GKA makes a beginning in 6800+ primary schools in Mayurbhanj and Ganjam districts, covering 3,60,000+ children, a fact that is especially significant since Akshara's field force works with great dedication to promote its



Enjoying the TLMs at the GKA gallery

Children's Day, every year. programmes in selected blocks.

GKA now has comprehensive, state-wide relevance and it seemed befitting that at Suravi this time, more than a stall or kiosk, what came up was the "GKA gallery", as Ranjita Pattnaik, Akshara's State Head, Government Relationship, put it. It maximised the appeal of the space apportioned to it in the pedagogy section. Side by side were Akshara's in-house publications, the GKA Workbooks, the Training Manual, the Teacher's Handbook, and other related titles.

Akshara made of the kiosk allotted a gallery, bedecked with GKA's compelling teaching-learning resources. Children flocked in droves - 200-300 visits in three days, the highest footfall in any stall at Suravi. They didn't just look around casually and go, but stayed on, gazed at the visual display of maths, sat on the floor and engaged with the resources.

For Ranjita who spearheaded the GKA operation at Suravi, steering the space and offering it unstintingly to the children who flocked in, enthusiastic and curiosity-driven, it was a singular achievement. "We exhibited our process all around. We arranged everything to make it visible, so that visitors' eyes would first fall on it."

"The invitation to us is a signal that government recognises Akshara as its numeracy partner. It believes that our GKA approach should be shared with everybody and that our materials should be demonstrated to all those who visited us."

Children who visited the gallery were engrossed, the learning resources so colourful, eye-catching, and simple. The abacus soared in popularity. Children did complex calculations with this basic TLM, denoting 435 on it, for instance. "Our stall had the biggest crowd of children," says Ranjita, who stood there morning till night, holding fort, disseminating GKA. "Around 250-300 children visited and participated. I was there with them the whole time sorting out their understanding of maths. They were from faraway areas, and I felt very good interacting with them."

The GKA quiz competition was a much-awaited highlight. The enjoyment with the TLMs was so strong children were unsated, asking if they could take them home with them. "Can we get to keep it for ourselves?" As the Akshara team said, "They just didn't want to leave."

Prominent government officials visited, among them the Education Minister, the Principal Secretary, and the Mayor of Bhubaneswar, and if one of them happened to be there at quiz time, they stood by witnessing silently and with endorsement. Or they interacted with the children. Government support is the sustenance on which GKA thrives. The government-Akshara partnership denotes an alignment of vision, purpose, and goals.



A quiz competition winner at the GKA gallery



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THE NEXUS OF GOOD ANNUAL NATIONAL AWARDS 2022

Nexus of Good (NoG), founded by Anil Swarup, former Secretary of the Government of India and author, identifies, appreciates, propagates, and promotes the scale up of good work done by people and organisations.



Their goal is to encourage people to join the movement and spread the good work, and share positive stories every time one sees something good will take the movement ahead.

They also believe that goodness should not go unnoticed. In order to ensure that these positive stories do not just get published but are also recognised at the national level, NoG has launched the Annual National Award in 2022.

And Akshara Foundation won the 'Nexus of Good Award' for the work done towards improving the quality of #matheducation in government primary schools with the flagship maths programme - Ganitha Kalika Andolana (GKA).

As Anil Swarup says, this one is a 'richly deserved' honour, as it goes to show Akshara's efforts in creating a working public-private partnership model that ensures that GKA is scalable, replicable, and sustainable.

Accountability & Transparency

IDENTITY

Akshara Foundation is registered under the Indian Registration Act on March 2, 2000 (Registration No. 335/1999-2000). The Trust Deed is available on request.

Akshara Foundation is registered under Section 12A of the Income Tax Act, 1961. The 80G Certificate is renewed under provisional approval Number AAATA4879RF20214 and is valid till AY 2026-27.

Akshara Foundation is registered under the Foreign Contribution (Regulations) Act, 1976. Registration No.094420987 dated October 3, 2002 to receive foreign contributions. Akshara's FCRA registration is valid till 30-06-2027

GOVERNANCE

The Board of Trustees

- Is ultimately responsible for strategy, policy, budget and results.
- Approves audited financial statements and ensures the organization's compliance with laws and regulations
- Examines the strategic long-term plan and the individual annual plans and budgets and reviews the progress of the plan throughout the year
- Sees to it that the activities of the organization are aimed at realizing the target and contribute to its mission

SALARY

The salary and benefits of the NGO Head, the highest paid staff member and the lowest paid staff member. Highest paid staff: Rs 1,92,669 Lowest paid staff: Rs 31,278

NAMES OF BOARD MEMBERS AND THEIR POSITION ON THE BOARD | MEETINGS ATTENDED

| NAME | POSITION | GENDER | OCCUPATION & ORGANISATION/ COMPANY/ GOVERNMENT | NUMBER OF MEETINGS ATTENDED |
|----------------------------|--------------------------------|--------|--|--------------------------------|
| Mr. Ashok Kamath | Chairman & Managing Trustee | M | Director, PointCross India Pvt. Ltd Trustee-Pratham Books | 4 |
| Ms. Suzanne Singh | Trustee | F | Trustee-Pratham Books | 2 |
| Mr. Nishith Acharya | Trustee | M | Senior Advisor to Northeastern University, USA | 4 |
| Mr. Rajiv Khaitan | Trustee | М | Partner, Khaitan & Co. | 4 |
| Ms. Priya Chetty Rajagopal | Trustee | F | Managing Partner, Multiversal Advisory | 3 |
| Mr. V. P. Baligar | Trustee | M | Retired civil servant | 1 |
| | | | | |

The Akshara Board of Trustees met 4 times in the FY 22-23 on, July 29, 2022, September 27, 2022, December 23, 2022 and March 24, 2023. All meetings were held online, on Toom

Minutes of the Board meeting are documented and circulated.

THE DISTRIBUTION OF STAFF ACCORDING TO SALARY LEVELS AND GENDER BREAK UP

| SLAB OF MONTHLY REMUNERATION PAID (IN₹) | FEMALE | MALE | TOTAL |
|--|--------|------|-------|
| Less than Rs. 5000 | - | - | - |
| ₹5,000 - ₹ 9,999 | - | - | - |
| ₹ 10,000 - ₹24,999 | - | - | - |
| ₹ 25,000 -₹49,999 | 1 | 7 | 7 |
| ₹ 50,000 above | 4 | 4 | 8 |
| Total | 5 | 11 | 16 |

ALL REMUNERATION AND REIMBURSEMENTS TO BOARD MEMBERS

Name and Address of Statutory Auditors

Bangalore-560001. Karnataka, India

29/4, 6th Floor, Trade Centre, Race Course Road,

Singhvi, Dev & Unni LLP

| NAME | OFFICE HELD IN THE ASSOCIATION | REMUNERATION | REIMBURSEMENT |
|----------------------------|-----------------------------------|--------------|---------------|
| Mr. Ashok Kamath | Chairman & Managing Trustee | N/A | 39,238 |
| Ms. Suzanne Singh | Trustee | N/A | N/A |
| Mr. Nishith Acharya | Trustee | N/A | N/A |
| Mr. Rajiv Khaitan | Trustee | N/A | N/A |
| Ms. Priya Chetty Rajagopal | Trustee | N/A | N/A |
| Mr. V. P. Baligar | Trustee | N/A | N/A |

NAME AND ADDRESS OF BANKERS

| | Domestic Account | FCRA Account |
|-------------------|---|---|
| Name | Axis Bank | State Bank of India |
| Branch | Kasturi Nagar Branch | New Delhi Main Branch |
| Branch Address | SR Enclave, No.5M-631, 5th Main Road, OMBR Layout, Bangalore 560043 Karnataka, India | Secretariat, Parliament, Sansad Marg, Nueva Delhi, Delhi 110001 |



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Akshara Foundation

No.621, 5th Main road, OMBR Layout, Banaswadi, Bengaluru 560043

Phone:+ 91-80-25429726/27/28 • Fax: +91-80-25429728 aksharafoundation@gmail.com • info@akshara.org.in www.akshara.org.in



















To Our Donors & Partners

We express our heartfelt gratitude for your unwavering belief in our mission, a belief that has served as a guiding light throughout our journey. Your steadfast support and encouragement have not only buoyed our spirits but have also played an instrumental role in shaping our trajectory. Your unwavering commitment to innovation has propelled us to the point where we currently stand, actively engaged in scaling efforts to elevate the quality of education in government schools.

In every step we take, your support remains the bedrock of our success. We are profoundly grateful for your ongoing assistance, recognizing it as the cornerstone that has fortified our mission and enabled us to make a meaningful impact. Your dedication to our cause is a source of inspiration, and we look forward to continuing this transformative journey with you by our side.

Mr. Ashok Kamath

Ms. Anita K John

Mr. Lokvir Kapoor

Akamai Foundation

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P J Margo Pvt Ltd

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UK Online Giving Foundation

United Way of Mumbai

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Financial Statements 2022 - 2023

BALANCE SHEET, INCOME & EXPENDITURE, RECEIPTS & PAYMENTS ACCOUNT OR FUND FLOW STATEMENT | VALUE CALCULATED IN RUPEES

| Akshara Foundation, No.621, 5th Main, OMBR Layout, Banaswadi, Bangalore-560043 Balance Sheet for the Period Ended March 31, 2023 | | | | | | |
|---|----------|----------------------|----------------------|--|--|--|
| Particulars | Sch. No. | As at March 31, 2023 | As at March 31, 2022 | | | |
| Corpus Fund | 1 | 1,77,63,588 | 2,49,05,656 | | | |
| Current Liabilities | 2 | 7,36,214 | 8,59,788 | | | |
| Inter Unit Accounts | | - | - | | | |
| Inter Branch Office Account | | - | - | | | |
| Inter Branch Transfer of Donation | | - | - | | | |
| TOTAL | | 1,84,99,802 | 2,57,65,443 | | | |
| Fixed Assets | 3 | 2,81,016 | 3,87,417 | | | |
| Funded Fixed Assets | 4 | 10,25,034 | 12,04,572 | | | |
| Deposits | 5 | 3,00,000 | 3,00,000 | | | |
| Other Current Assets | 6 | 58,131 | 1,17,946 | | | |
| Cash and Bank Balances | 7 | 1,68,35,621 | 2,37,55,508 | | | |
| TOTAL | | 1,84,99,802 | 2,57,65,443 | | | |

| Donations Received Other Income SUB TOTAL A Programme & other income received: I'LM Programme Ganitha Kalika Andolana Research & Evaluation | Sch. No. 8 9 | As at March 31, 2023 34,03,238 8,07,366 42,10,605 | As at March 31, 2022 24,00,312 9,76,375 33,76,687 |
|--|-----------------------|--|--|
| Programme & other income received: TLM Programme Ganitha Kalika Andolana Research & Evaluation Maths Digital | A B C | 8,07,366 42,10,605 | 9,76,375 |
| SUB TOTAL A Programme & other income received: TLM Programme Ganitha Kalika Andolana Research & Evaluation Maths Digital | A B C | 8,07,366 42,10,605 | 9,76,375 |
| SUB TOTAL A Programme & other income received: TLM Programme Ganitha Kalika Andolana Research & Evaluation Maths Digital | A B C | 42,10,605 | 33,76,687 |
| Programme & other income received: TLM Programme Ganitha Kalika Andolana Research & Evaluation Maths Digital | B C | - | |
| TLM Programme Ganitha Kalika Andolana Research & Evaluation Maths Digital | B C | - 3,28,43,564 | 1,50.000 |
| Ganitha Kalika Andolana Research & Evaluation Maths Digital | B C | 3,28,43,564 | 1,50,000 |
| Research & Evaluation Maths Digital | C | 3,28,43,564 | |
| Maths Digital | _ | | 1,80,96,296 |
| | | - | - |
| SUB TOTAL B | D | - | - |
| | | 3,28,43,564 | 1,82,46,296 |
| TOTAL (A+B) | | 3,70,54,169 | 2,16,22,983 |
| Expenditure: | | | |
| Administrative Expenses | 10 | 29,42,893 | 19,15,849 |
| Donor Relation Expenses | 11 | 47,46,214 | 5,65,438 |
| Depreciation | 3 | 2,94,936 | 4,95,928 |
| Fixed Asset written off | 3 | 1,98,894 | .,,,,,, |
| SUB TOTAL C | | 81,82,937 | 29,77,215 |
| Programme Expenses: | | | |
| Inschool Programme | A | _ | 2,78,065 |
| Ganitha Kalika Andolana (GKA) Expenses | В | 3,60,13,307 | 2,76,86,808 |
| Research & Evaluation | C | - | 39,953 |
| Maths Digital | D | - | - |
| SUB TOTAL D | | 3,60,13,307 | 2,80,04,826 |
| | | 4.47.07.040 | 2 00 00 047 |
| TOTAL (C+D) | | 4,41,96,243 | 3,09,82,041 |
| Excess of Income over expenditure (Expenditure over income) for the year | | (71,42,074) | (93,59,057) |
| Add. | | _ | _ |
| Opening balance in Corpus fund | | 1,29,26,135 | 1,25,26,657 |
| Inschool Programme | Α | (1,28,065) | - |
| Ganitha Kalika Andolana | В | 76,23,007 | 1,72,21,294 |
| Research & Evaluation | С | 41,23,234 | 41,63,187 |
| Maths Digital | D | 3,61,350 | 3,53,576 |
| TOTAL | | 1,77,63,587 | 2,49,05,656 |
| 101111 | | | ,, |
| Excess of Income over expenditure (Expenditure over income) for the year | | | |
| Corpus funds | | 89,53,803 | 1,29,26,129 |
| Inschool Programme | Α | (1,28,065) | (1,28,065) |
| Ganitha Kalika Andolana | В | 44,53,264 | 76,30,782 |
| Research & Evaluation | C | 41,23,234 | 41,23,234 |
| Maths Digital | D | 3,61,350 | 3,53,576 |
| Excess of Income over expenditure | | 1,77,63,587 | 2,49,05,656 |

| Akshara Foundation, No.621, 5th Mai Receipts and Payments Accou | | | |
|--|-------------|--------------------------------------|--------------------------------------|
| Receipts | Sch. No. | For the Year ended March 31, 2023 | |
| BALANCE BROUGHT FORWARD | | | |
| - Cash on Hand | | 6,715 | 17,568 |
| - Cash at Bank | | 81,34,375 | 1,56,35,895 |
| Fixed Deposit | | 1,56,14,121 | 1,71,79,541 |
| | | - | - |
| Donations Received - General | 12 | 34,03,238 | 24,00,312 |
| Donations Received for Dharwad | | - | 36,904 |
| Miscellaneous Income | 13 | 7,49,533 | 9,19,101 |
| | | | - |
| PROGRAMME RECEIPTS | | | |
| Preschool Programme | 14 | - | - |
| Inschool Programme | 15 | - | 1,50,000 |
| Library Programme | 16 | - | - |
| Karnataka Learning Partnership Programmes (KLP) | 17 | - | - |
| Ganitha Kalika Andolana | 18 | 3,28,43,564 | 1,80,96,296 |
| Research & Evaluation | 19 | - | - |
| Math Digital | 20 | - | - |
| Tax Refund recieved during the Year | | 1,17,946 | 65,907 |
| PF Employee Contribution | | - | - |
| Movements in Creditors Balance | | (3,18,698) | 83,366 |
| Movements in Creditors Balance | 29 | (3),20,0,0) | - |
| Loans & Advances | -/ | _ | - |
| Movement in other Payables | 21 | - | - |
| TOTAL | | 6,05,50,795 | 5,45,84,890 |
| Payments | Sch. No. | For the Year ended March 31, 2023 | For the Year ended March 31, 2022 |
| Administrative Expenses | 21 | 27,47,769 | 18,03,470 |
| Donor Relation Expenses | | 47,46,214 | 5,65,438 |
| Miscellaneous Expenses | | - | - |
| PROGRAMME PAYMENTS | | | |
| Preschool Programme | 22 | - | - |
| Inschool Programme | 23 | - | 2,78,065 |
| Ganitha Kalika Andolana | 26 | 3,60,13,307 | 2,80,56,682 |
| Research & Evaluation | 27 | - | 39,953 |
| Maths Digital | 28 | - | - |
| Fixed Assets Purchased | 3 | 2,07,886 | 48,868 |
| Paid to Akshara Foundation, N. Karnataka | 30 | - | 36,904 |
| BALANCE CARRIED FORWARD | | | |
| - Cash on Hand | | 555 | 6,716 |
| - Cash at Bank | | 16,67,492 | 81,34,673 |
| Fixed Deposit | | 1,51,67,574 | 1,56,14,121 |
| TOTAL. | | 6.05.50.705 | 5 45 84 890 |

 $Significant\,accounting\,policies\,and\,notes\,there on$

TOTAL



Mr. Rajiv Khaitan

As per our Audit Report of even date for Singhvi, Dev & Unni LLP Chartered Accountants | Firm Reg. No. 003867S/0S200358

5,45,84,890



6,05,50,795