ANATOOLAMA FOR EDUCATION TO ALL BY ADITYA NAG

nowledge is power. Information is liberation. Education is the premise of progress, in every society, in every family," Kofi Annan.

On the occasion of world literacy day we decided to catch up with an 'Andolana' (agitation) which has already revolutionised Karnataka and has now taken root in Odisha too. Known as the 'Ganitha Kalika Andolana', which is being conducted by Akshara Foundation, a non profit organisation, which is changing the way children learn Math in the government run schools.

With literacy being a challenge in an ever growing digital world we caught up with Lipsa Bharati the program manager for Odisha who gave us inputs about what Akshara Foundation and its 'Gantiha Kalika Andolana' (GKA), are all about and how the children of Odisha, their parents, communities, Government officials and you too can be a part of this literacy drive and remove the threat of maths forever.

Founded in 2000 as a public charitable trust-Akshara Foundation, was conceived as a partnership between the government, the corporate world and the voluntary sector.

Mr. Ashok Kamath is currently the Chairman of Akshara and it's his focus on scalable solutions that guides Akshara today.

Driven by the goal to arouse a genuine interest in children to

attend classes in schools, Akshara Foundation started off with preschool education in the slums of Bangalore and as time passed by Akshara developed its own expertise in quality education in these 'anganwadi' (pre-school) and in Government primary level schools. Yes, folks changing the method in which education is delivered in India, does take time but it is showing results.

Working on these goals Akshara Foundation has built a unique 3 point approach to make education more interesting, approachable and technologically friendly in this ever changing dynamic world of information delivery.

- 1. Develop and Deploy low cost, sustainable and scalable education models.
- 2. Build Capacity within the government.
- 3. Strong Community engagement programs.

"The last point is where we aim to make the biggest impact is for quality education of children in government primary schools. through programs like Gram Panchayat Math Contest. Through which we Create an interest in children to learn and go more often to schools thereby resulting an increase in attendance rates. And then it hits you, My God!, so many children are actually interested in going to schools. Yes, it also puts in a lot of confidence in Government





schooling system", says, the bright eyed program head for Akshara Foundation of Odisha, Lipsa Bharati.

With almost two decades of experience and a huge knowledge base Akshara Foundation is very upbeat in replicating the same model here in Odisha and they are doing it with the 'Ganitha Kalika Andolana', with a tripartite MoU with the Department of School & Mass Education and Kusuma

Foundation on the 22nd of May 2017. The prime focus of the MoU has been to implement 'Ganitha Kalika Andolanaa', which is a movement with focus to improve mathematics proficiency for children in classes I to V.

"You would be surprised to know that Akshara has trained 350 teachers of Odisha directly and empowered them to be Master Resource Persons, who have in turn trained 4000 more teachers and one













kit with Mathematics Teaching Learning Materials (TLMs) has reached each of the 4100 Govt. primary schools of Balangir and Rayagada. The eventual impact will cover around 2,40,000 students in these 2 districts. And that's what we have achieved in just one year," says Lipsa Bharati.

Apart from training teachers and arming them with the new methods of education and learning materials the 'Ganitha Kalika Andolana', is

addressing one of the most basic problems affecting children in Government schools. Maths, yes folks we all hate it just like everyone hates Barbarossa from the movie Pirates of the Caribbean but we all at some point of time have to deal with maths. Jokes apart, yes maths is a subject that is dreaded and revered at the same time in primary schools. Usually, it has been taught in a traditional rote manner and this has caused children to become



math-phobic. It is widely believed to be a 'foundational' discipline upon which a lot of future learning in school depends and rote learning contrary to popular belief destroys this foundational understanding of math. Hence, achievement levels of students in primary school maths are generally poor. In a nationwide study conducted recently it was found that less than 20% of children in Std 5 can do simple division.

"So, Akshara in sync with the National Curriculum Framework 2005, calls for moving beyond the 'narrow aim' of mathematics confined to numeracy but to embrace a 'higher aim' to develop the child's resources to think and reason mathematically, to

pursue assumptions to their logical conclusion and to handle abstraction," says Lipsa Bharati.

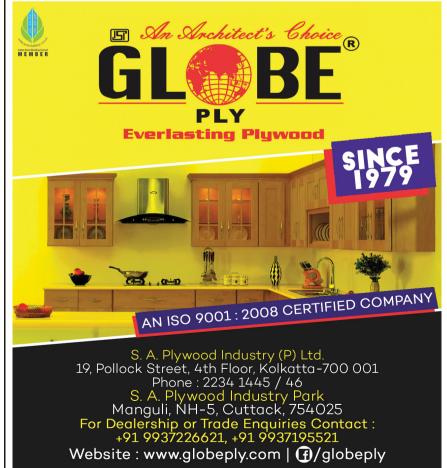
One of the interesting ways in which GKA addresses the issue is by making connections between concepts within maths as well as with other subjects and solve unstructured problems from real life using maths. Math is not limited to someone with high IQ or exceptional grasping abilities, if we just manage to tweak our system like Akshara is doing in Odisha it will work wonders for students and make maths your best pal in class.

Akshara believes that since every child is unique and learns in a different way and at a different pace, teachers need to be aware of each child's progress in each concept to be able to help them better. Instead of pen and paper assessments at the end of the year, assessments can be ongoing and through observing children's activities. These paradigm shifts that come inside a classroom are always driven by teachers.

Technology also plays a major role in delivery of education with their google app which is a very simple application which any user can download and use. So Akshara came up with an app idea to let kids reinforce their math concepts outside of the class hours, on their parents' phones, because children get less than about 2 hours of maths instruction per week, inside classes. "Very recently we launched

our beloved Building Blocks on Google PlayStore- A fun learning app which can be installed in the most basic of smart phones, needs only one-time internet for download and its ready for children from grades 1 to 4, to practice math on in form of 150+ exciting games! All games are designed as per National Curriculum Framework (NCF 2005), with pedagogy experts and animation assets by design experts. We love technology because you see termites don't eat way digital resources (chuckles) and we love fast decision making because tech tools ensures our reports don't get lost in snail mail and we love sharing and technology enables us to share and become stronger,"







says, Lipsa Bharati. With a such flexible application which needs virtually no usuage of internet, once downloaded even a parent with a basic smart phone can educate his or her child in maths and the best part is it is in Odia. Which is really great, for anyone who is not proficient in is who is not proficient in in the says.

But all of this is not enough until we understand one major thing that has been plaguing the Indian education system off late. While a lot has been done over the years to strengthen the supply side of education with policy as an instrument, very little has been done to catalyse the demand side- the primary beneficiaries of education i.e. parents and community. How many of these primary stakeholders realize their own responsibility or their ability to guide their child's learning? As a result of this sub optimal demand, there was very little reason for the supply side to

English or Hindi.

be efficient. Again, a pandemic issue in mass public education in India. Akshara has spent a large percentage of its human capital on building this vital function and its current community engagement model is a result of this. And this is where people like you, me and other partner NGO's come into play. Akshara through this article would also like to spread the word their model of education and the Ganitha Kalika Andolana is open to individuals and other NGO's working in the sector of education, women and child welfare for partnerships and also having the government on the other end which is providing support on the other end of the spectrum.

Further explaining the point Lipsa says, 'A GO(Government Order) gives a programme legitimacy in the minds of teachers and it is also required to ensure the state's financial participation in



the programme. So, this basically means, Ganitha Kalika Andolanaa in Odisha is a government owned program for improving maths learning outcomes of children in primary grades of I to V. And when you seek reasons for it, it's quite simple, there really is no other robust system to deliver public goods like education than the government. They really have the last mile reach, resources and mandate. So, government is your solution to scale.

You know, I think we are living in times when governments are more open than ever to seek out working solutions from various NGOs and then see them to scale. Think of the government as a large incubator that takes in promising solutions and "commercializes" them in the public amenity sense of it. Isn't that exciting? So when a non-profit oraganisation like ours aims at scale, here's the golden constraint

we align ourselves against- "An idea is worth its salt if it is politically acceptable, socially desirable, technologically feasible, financially viable and administratively doable," as expressed by Mr. Anil Swarup, ex-School Education & Literacy Secretary, MHRD. So the point is, the question is not about involvement of government machinery in Ganitha Kalika Andolanaa in Odisha or in our other projects, the question really is about how well does Akshara understand and therefore design solutions that can be delivered through the government machinery. I have the luxury of having a working space inside the Education Department in Odisha and access to key stakeholders when need be. That's how closely we work with the government. Think Systemic. Think Scale. Think Government.'

And with that we would like to wish all of our dear readers a happy



