



**DEVI
SANSTHAN**
Dignity Education
Vision International
Leave no one behind
dignityeducation.org



SYSTEMIC CHANGE

FLN FOR ALL

IN MONTHS NOT YEARS





Foreword: A Radical Rethink

Currently, 70% of 10-year-olds (Grade 5) in Low-and-Middle-Income Countries around the world are illiterate. These children are at risk of leaving school without the ability to read, which could result in lifelong poverty. This is unacceptable.

Time is of the essence; we must act swiftly.

Is it possible for children to acquire FLN skills in months not years?

Is it possible for children to learn by themselves, working in pairs?

We believe it is, with disruptive methods. In our pilot implementation of the Accelerating Learning for All (ALfA) program in Shamli district, Uttar Pradesh, we have caught glimpses of this vision being realized. We've seen children who haven't learned to read in years of school acquiring literacy in a month. Shy, special needs and hyperactive children alike blossoming with self-confidence as they work in pairs. Teachers being astonished by what their children can achieve, when the children make questions and ask each other rather than looking to the teacher for answers.

ALfA is not just faster, it is also more effective, leading to deeper & more joyful learning; with the 21st century 6C skills embedded in the very process of paired learning.

Warm regards,



Sunita Gandhi

Founder & CEO, DEVI Sansthan
Dignity Education Vision International

Chief Advisor, Academics, City Montessori School (World's largest school)
Former Economist, The World Bank, USA
PhD (Physics), Cambridge University, UK

To replicate and scale-up transformation like this across the nation, we need system-wide reform. What happens in the classroom is strongly determined by a set of systemic factors – from the training teachers receive to their structures of accountability and supervision; from the curriculum used to the assessments performed.

NIPUN's goal of universal literacy by 2026-27 is laudable, but without a clear roadmap to achieve it, we are not currently on track to achieve it. This report strives to provide such a roadmap, outlining and arguing for the systemic changes needed to revitalise India's education. Drawing on national and international research, as well as DEVI Sansthan's own experiences working across several districts, we analyse the gaps to propose a way forward.

A paradigm shift – in our pedagogies, our processes, and our policies – is urgently needed to ensure every child acquires key foundational skills. We cannot wait for incremental improvements (10% changes), we need a dramatic acceleration in the rate of learning (10x changes).

If we look with new eyes, the vision that seemed impossible can become reality.



Contents

Foreword: A Radical Rethink	3
The Key to SDGs: Literacy	6
A Call to Action	7
Executive Summary	9
Context: An Illiteracy Crisis	10
A Framework for Systemic Transformation	12
The Micro-level: Pedagogical Transformation	15
Known-to-Unknown: Building Off Students' Existing Knowledge	16
Peer Learning: The Power of Pairs	18
3R6C: Linkages Between Basic Literacy and 21st Century Skills	20
The Mid-level: Process Transformation	23
Assessments as Learning: Compete with Yourself, Not Others	24
Rethinking Supervision: Outcome-based Accountability	26
Teacher Peer-Sharing: Communities of Practice	28
The Macro-level: Policy Transformation	31
Back to School: Maximising Teaching Time	32
Education Pays: Conditional Cash Transfers	34
Catalysts for Change: The Role of NGOs	36
Conclusion	38

Index of Figures

Table 1: Linkages between SDGs and Literacy	6
Table 2: National Achievement Survey Results, 2017 and 2021	11
Table 3: Annual Status of Education Report (Rural), 2018 and 2022	11
Table 4: Key differences between traditional and ALfA classrooms	19
Table 5: Re-examining exams	25
Table 6: On-paper and In-field Pupil-Teacher Ratios observed in visits to Shamli government schools, October 2022	33

Index of Figures

Figure 1: Learning Poverty by world region, over time (2015-2022)	10
Figure 2: Key systemic changes are required at multiple levels	12
Figure 3: ALfA known to unknown approach	17
Figure 4: The learning pyramid	18
Figure 5: ALfA Booklets	21
Figure 6: The 6C Skills	21
Figure 7: A holistic model for teacher accountability	27
Figure 8: Nicaragua's Conditional Cash Transfer Program	35

List of Abbreviations

ARP:	Academic Resource Person
CCT:	Conditional Cash Transfer
FLN:	Foundational Literacy and Numeracy
NEP:	National Education Policy
NGO:	Non-Governmental Organization
NIPUN:	National Initiative for Proficiency in Reading with Understanding and Numeracy
SDG:	Sustainable Development Goal
SMC:	School Management Committee
UDISE:	Unified District Information System for Education

THE KEY TO SDGS: LITERACY

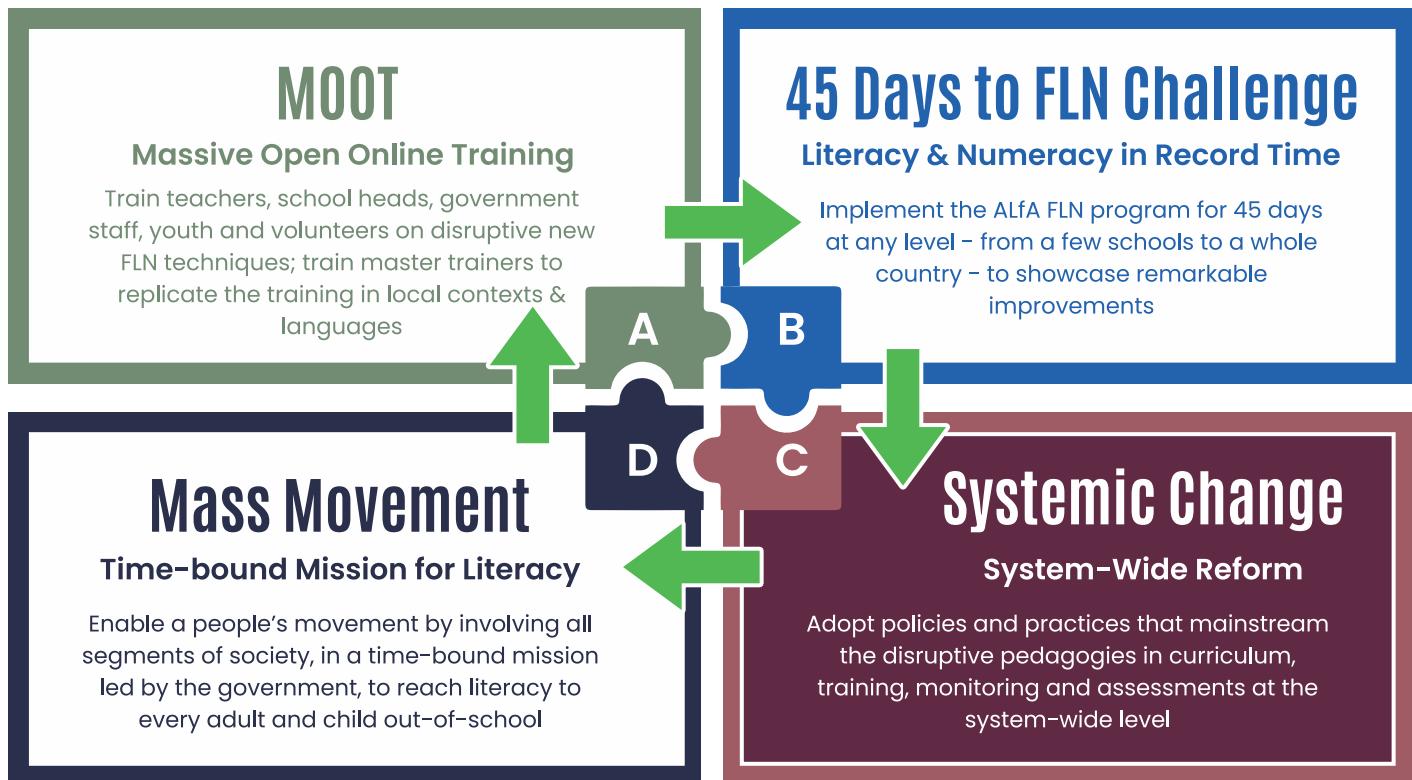
Achieving universal literacy is crucial for meeting Sustainable Development Goals (SDGs) – from fighting poverty to gender equality, from improving healthcare outcomes to citizen empowerment, from environmental sustainability to civic participation.

Table 1: Linkages between SDGs and Literacy

SDG		Intersection with Literacy (See page 38 for full references)
1.	Ending poverty	If all students in low-income countries left school with basic reading skills, 171 million people would be lifted out of poverty. ^a
2.	Ending hunger & malnutrition	Ending poverty directly contributes to ending hunger. ^a
3.	Good health & well-being	Literacy has a huge impact on lowering child mortality, and increases ability to engage with the healthcare system. ^b
4.	Quality education	Literacy is the foundation of all education; without literacy, education is impossible.
5.	Promoting gender equality	Literacy empowers women, helping them gain greater self-confidence, respect and freedoms. In Africa, 20% of illiterate girls are married before they turn 18, compared to 4% of literate girls. ^c
6.	Clean water & sanitation	Literacy improves awareness of water, sanitation & hygiene (WASH) issues, enabling people to advocate for clean water.
7.	Affordable & clean energy	Literacy improves employment prospects and income. Literate workers earn more than those who are illiterate, and nations with higher literacy rates have higher rates of economic growth. ^d ALfA focuses on 6C skills – collaboration, communication, critical thinking, creativity, citizenship and character – which is crucial for innovative industries, including renewable energy. ^e
8.	Decent work & economic growth	
9.	Industry, innovation and infrastructure	
10.	Reduced inequalities	Literacy fosters greater social equality, empowering people from disadvantaged castes and classes to stand up for their rights. ^f
11.	Sustainable cities	Literacy aids greater awareness of environmental issues, and is also critical in reducing population growth, particularly by empowering women to choose their family size. ^g
12.	Responsible consumption & production	
13.	Climate Action	Compared to many literacy programs, ALfA booklets are extremely thin (just 72 pages to reach FLN), thus helping save paper and reduce deforestation.
14.	Life below water	
15.	Life on land	
16.	Peace, justice and strong institutions	Literacy is critical to people's ability to know their rights and engage in civic institutions, including the judicial system.
17.	Partnerships for the goals	ALfA's paired learning process embeds communication and character skills, helping build a generation of collaborators.

A CALL TO ACTION

FOUR ACTS, ONE CAUSE: UNIVERSAL LITERACY FOR ALL



Scan the QR to view other reports and videos on these four acts.

Systemic Change

FLN for All
in Months Not Years



Executive Summary

India is facing a literacy emergency, with the Covid pandemic dealing a severe blow to the education system, and tens of millions of children at risk of being lost to education.

Business as usual, with incremental improvements to the existing system, is not enough – we need to act swiftly, at scale. If we are to achieve universal literacy by 2026–27, a paradigm shift is required at three levels: from within the classroom (pedagogy), to the mid-level management (processes) and the state and national level decisions (policy).

Transformation of Pedagogy

- Foundational Literacy and Numeracy instruction should scaffold from learners' existing knowledge. In literacy, this means drawing from learners' spoken language and recognition of pictures. Numeracy can be learnt swiftly through a concrete-to-abstract approach with numerous hands-on activities.
- Peer learning is crucial. Students help each other rather than relying on the teacher to provide answers. This entails a transformation of the education model: instead of transmission of information from teacher to student, it is collaboration from student to student.
- 21st Century 6C skills – communication, collaboration, creativity, critical thinking, citizenship, character – should not be considered an optional add-on, but rather need to be embedded in the learning process.

Transformation of Processes

- Assessments should provide detailed, timely feedback to students and teachers to enable rapid identification, early action and bridging of learning gaps.
- Teachers should be held accountable for students' learning outcomes, while given freedom to experiment with different processes.
- Organise teacher peer-sharing sessions to foster motivation and accountability.

Transformation of Policies

- Reduce the amount of non-teaching work given to teachers, to enable them to focus on their students' learning.
- Trial conditional cash transfers (CCTs) to increase attendance of girls, especially adolescents.
- Create a better, more enabling environment for NGOs: allow many organisations considerable freedom to work in a few schools each, and scale up proven interventions with full government support.

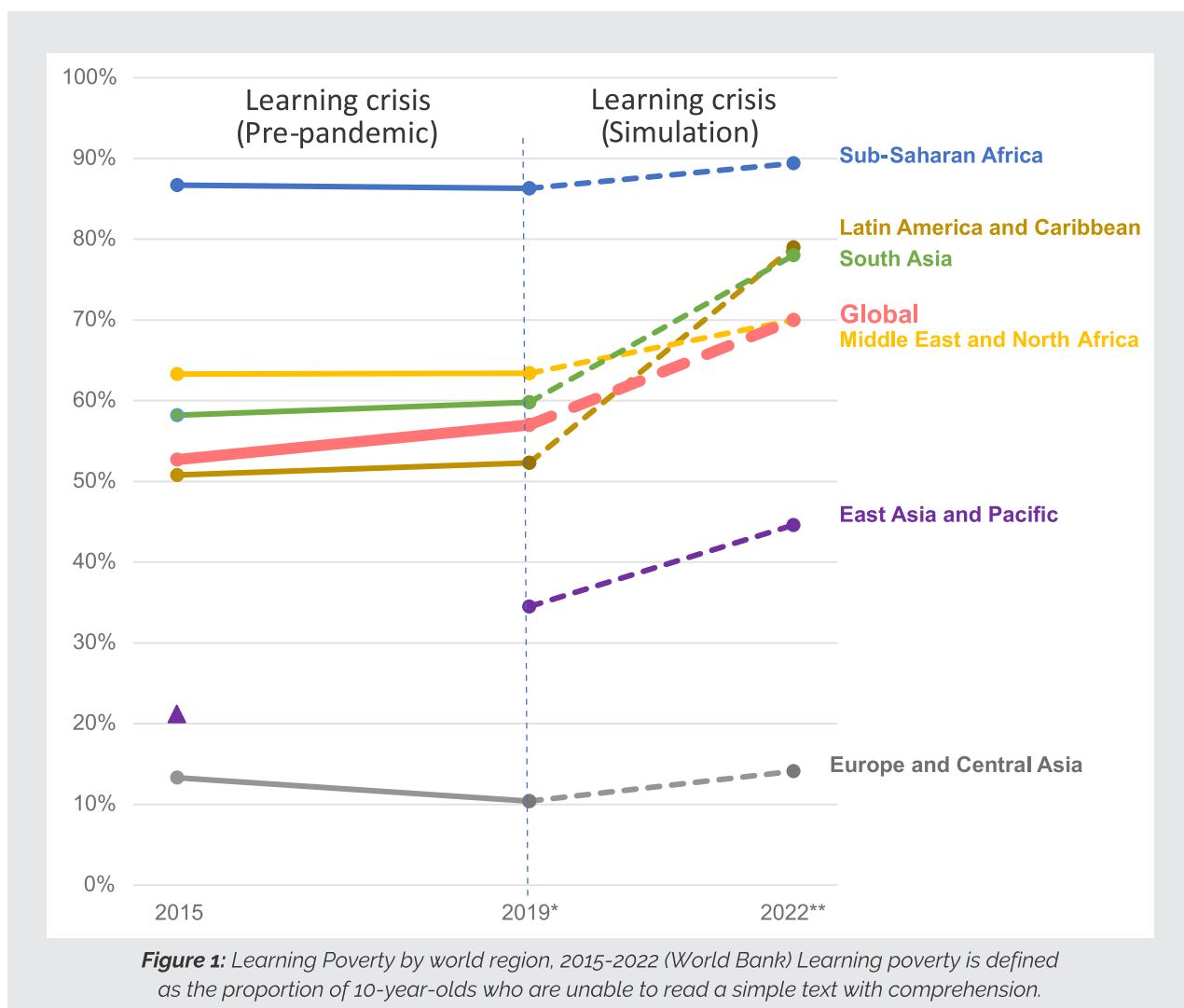
Context: An Illiteracy Crisis

India is facing an educational crisis. Tens of millions of these students are not learning basic literacy and numeracy skills.

The National Education Policy (NEP) 2020 acknowledges: "We are in a learning crisis: a large proportion of students currently in elementary school have not attained foundational literacy and numeracy (FLN). The highest priority of the education system will be to achieve universal foundational literacy and numeracy in primary school by 2025. The rest of this Policy will become relevant for our students only if this most basic learning requirement is first achieved."

India's literacy crisis has been drastically worsened by the Covid pandemic, which has seen widespread school closures. According to an Azim Premji University Survey, 92% of primary school students have lost at least one literacy skill, and 82% have lost at least one numeracy skill, during the pandemic.¹

The problem is not limited to India, but is truly a global crisis. Child labour and underage marriages have increased substantially, as tens of millions of families have been pushed deeper into poverty. Without concerted action, many of these children will not return to the education system.² According to UNICEF, the problem of literacy loss is now 'nearly insurmountable'. Worldwide 70% of 10-year-olds are now in learning poverty.



The Covid pandemic has been a huge blow, but even earlier the global rate of learning poverty has increased (Figure 1, previous page).³ Recognising that an educational crisis long pre-dates the pandemic, the UNICEF Chief of Education, Robert Jenkins, argues that we cannot simply resume the current education system; instead, we need drastic change: “Just reopening schools is not enough. Students need intensive support to recover lost education.”⁴

The lack of learning is starkly visible in the National Achievement Survey. Children are getting only 50-70% of grade-level questions correct – despite the multiple-choice structure of the paper, which means that even randomly selecting answers would yield a 25% score. The scores drop in higher grades compared to lower ones, indicating that more and more children fall behind as they progress through school. Further, the scores for 2021 are even lower than the 2017 results.

Table 2: National Achievement Survey Results, 2017 and 2021

	2017 Language	2021	2017 Maths	2021
Grade 3	67%	65%	64%	61%
Grade 5	64%	61%	62%	57%
Grade 8	61%	60%	54%	51%

The Annual Status of Education Report (2022) tells a similar tale of low learning levels and a pandemic-induced backsliding. Half of Grade 5 students lack foundational literacy skills in their own mother-tongue. Similarly, half of Grade 5 students are not foundationally numerate.⁵ Again, the figures for 2022 are worse than those of 2018. Further, longitudinal analysis shows the dramatically low rates of learning: on average, a child who is illiterate has only an 18% chance of learning to read with an additional year of schooling.⁶

Table 3: Annual Status of Education Report (Rural), 2018 and 2022

	2017 Language	2021	2017 Maths	2021
	(% who can read Standard 2 text)	(% who can do 2-digit subtraction)		
Grade 3	27%	21%	28%	26%
Grade 5	51%	43%	52%	50%
Grade 8	73%	70%	66%	68%

Research & References

¹Azim Premji University. 2021. Loss of Learning During the Pandemic.

<https://azimpremjiuniversity.edu.in/field-studies-in-education/loss-of-learning-during-the-pandemic>

²International Labour Organisation. 2020. COVID-19 may push millions more children into Child Labour – ILO and UNICEF. <https://www.unicef.org/press-releases/covid-19-may-push-millions-more-children-child-labour-ilo-and-unicef>

³World Bank. 2022. The State of Learning Poverty: 2022 Update.

<https://thedocs.worldbank.org/en/doc/e52f55322528903b27f1b7e61238e416-0200022022/original/Learning-poverty-report-2022-06-21-final-V7-0-conferenceEdition.pdf>

⁴UNICEF. 2022. Covid-19: Scale of Education Loss ‘Nearly Insurmountable’, Warns UNICEF.

<https://www.unicef.org/press-releases/covid19-scale-education-loss-nearly-insurmountable-warns-unicef>

⁵Annual Status of Education Report (Rural). 2022. <http://www.asercentre.org/survey/p/418.html>

⁶79% of children in Grade 3 cannot read. By Grade 8, there are still 30% who cannot read.

This implies an average of 18% reduction in illiteracy per year.
$$1 - \left[\frac{30\%}{79\%} \right]^{\frac{1}{5}} = 18\%$$

A Framework For Systemic Transformation

The National Education Policy (NEP) and National Initiative for Proficiency in reading with Understanding and Numeracy (NIPUN Bharat) rightly prioritise universal FLN. However, the reality is that we are a long way from achieving these goals. There is an urgent need for system-wide changes which enable disruptive approaches to accelerate learning.

This report seeks to identify and address critical gaps in the Indian public education system. The different parts of the educational ecosystem are strongly interlinked, such that the parts cannot be changed separately, but rather a system-wide transformation is required. We present our framework in Figure 2, depicting three levels at which transformation is required: within the classroom (pedagogies), at the cluster or district level (processes) and the state level (policies).

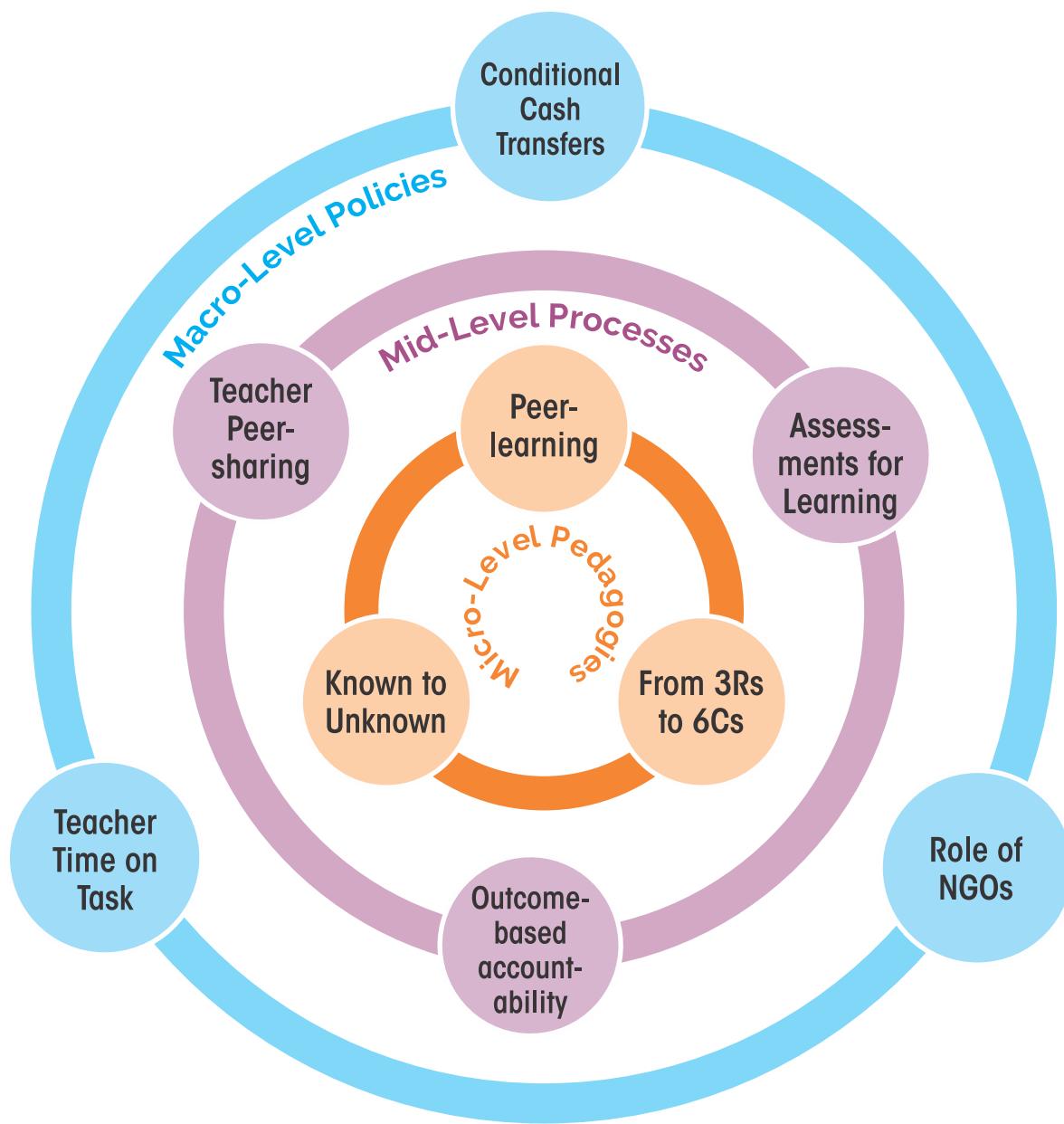


Figure 2: Key systemic changes are required at multiple levels, from policies to processes to pedagogies.

Pedagogies, Processes and Policies

At the heart of the transformation is the **pedagogy** used in the classroom. We urgently need better ways of teaching and learning, moving away from rote memorisation and teacher-centred classrooms, towards peer-learning which scaffolds from children's existing knowledge. Our report draws from pedagogical research around the world to show that literacy and numeracy can be taught much more swiftly and effectively – while also cultivating 21st century skills through the process.

What happens inside the classroom is reflective of a much broader set of **processes**. We need better assessments which provide useful and timely feedback to all stakeholders, rather than being used to sort and label students. We need different forms of accountability, which focus more on outcomes than paperwork. And we must give teachers more platforms for observing each others work and sharing best practices, for this is highly motivating.

Teachers are sometimes scapegoated as the source of all educational woes, but teachers don't operate in a vacuum: the success of these processes is contingent on **policy** decisions at the state and national levels. Teachers need to be kept free of additional non-school duties, so they maximise their time in the classroom. Conditional cash transfers are an excellent tool to help fight poverty while boosting school attendance – maximizing student time in the classroom. NGOs can provide sparks of innovation that accelerate learning, so we need a clear pipeline from pilot experimentation to scale-ups of proven interventions.

Principles of Transformation

Crucially, these changes reinforce and rely upon each other. Pedagogy is unlikely to change unless the right processes are in place, which in turn hinge upon good macro-level policies. On the other hand, changing policies on paper will achieve little unless they are translated into processes and pedagogies on the ground. The changes in all of these realms are animated by a common set of three principles:

- 1. Peer learning** Within the classroom, children learn well from other children in a learner-centred environment. Meanwhile, teachers learn best from other teachers, and need to be given the opportunity for peer sharing. Even at the macro-level, NGOs would do well to learn from and coordinate with each other.
- 2. Fearless and intrinsic motivation** The current system is overly hierarchical, with teachers subject to the orders of bureaucrats, parents powerless in the face of teachers, and children at the bottom of the pecking order. Instead, we need a more egalitarian system which harnesses intrinsic motivation at all levels – from children's joy of learning to teachers' sense of professionalism.
- 3. Outcome-oriented experimentation** Teachers should not be given a straitjacket curriculum, but should be relatively free to experiment with the goal of achieving well-defined outcomes. Similarly NGOs should be able to try out different interventions, with proven and cost-effective projects scaled up.



THE MICRO-LEVEL: PEDAGOGICAL TRANSFORMATION

Pedagogy. Noun. *The method and practice of teaching, especially as an academic subject or theoretical concept.*

Consider how much technology has changed in the last hundred years. Today's cars are far more powerful than those in the early 1900s. Telephones have changed almost beyond recognition. Computers have gone from the size of a room to fitting in a purse.

Yet when we consider photos of classrooms a hundred years ago and compare them to classrooms today, it is the similarities which are most striking:

- Rows of desks facing the teacher
- Teaching from the front on a board (even if it's gone from a blackboard to an interactive whiteboard)
- Children filling worksheets (now on fancy apps)
- Children divided by age and career streams
- Children repeating after the teacher: rote learning

The technology may have evolved, but the fundamentals of these practices have barely changed.

Much as factories strive to produce identical products, the industrial education system was designed to produce identical people: conforming, punctual, obedient, hard-working, docile young adults. But the workers and citizens of today need to be creative, collaborative, critical thinkers, not docile factory cogs. Over a century of the industrial education system has not succeeded in ensuring that all our children gain even the most basic skills of literacy and numeracy, let alone crucial 21st century skills.

It's time to reimagine the fundamental unit of education – the classroom. This section sets out three key transformations, showcasing the evidence that children can:

- Scaffold new learning from their existing knowledge.
- Learn swiftly from each other, in pairs.
- Develop their 21st century skills through the process.

KNOWN-TO-UNKNOWN

building off students' existing knowledge

Could it be that the conventional 'A for Apple' approach has it back-to-front?

In a Nutshell

- The key to deeper understanding and long-term retention is scaffolding off students' existing knowledge.
- Literacy instruction should use a phonics approach which draws from students' oral language and picture recognition.
- Numeracy can be learnt swiftly through a concrete-to-abstract approach.

The Problem with Business as Usual

In the traditional conception of education, the teacher imparts knowledge to the student, who acts as a passive receptacle. Paulo Freire famously critiqued this as a 'banking model' of education, in which the teacher 'deposits' information into the student, who must be able to 'withdraw' it in time for a test.⁷ Unfortunately, most information that students memorize for tests ends up forgotten or useless.

It should be acknowledged that rote learning is a problem across India's education system, not just government schools. A 2011 survey of so-called 'top private schools' displayed an astonishing lack of practical skills and conceptual understanding: for instance, some two-thirds of Grade 4 students were unable to measure the length of a pencil with a ruler.⁸

There is growing recognition that rote memorisation is an ineffective way of learning – a recent survey of principals found that 80% believed it to be leading to a poor quality of education.⁹ However, many teachers seem stuck with the rote approach, partially because they have not seen and experienced alternatives.

Numerous studies show that rote memorization and passive learning is ineffective.¹⁰ Rather than being empty vessels, children's minds contain a complex set of beliefs and observations about the world.¹¹ For new information to stick, learners must actively incorporate new ideas into their pre-existing knowledge. According to cognitive scientist Nick Cowan, "New information must make contact with the long-term knowledge store in order for it to be categorically coded."¹² Dr. Joseph Novak explains, "knowledge acquired by rote learning will not be assimilated into existing cognitive frameworks."¹³

Case Study

Our experience teaching children who have struggled to learn foundational literacy and numeracy often throws up examples which clearly show the problem with rote learning. For instance, many children who have memorised the alphabet can barely recognise a letter when chosen at random. Similarly, our students who know the number names from 1 to 100 sometimes can't answer a question like 'what comes after 53' without counting all the way from the start.

A Disruptive Approach

Accelerating Learning for All (ALfA) goes beyond the unhelpful ‘reading wars’ between the whole language and phonics approaches, instead providing a revolutionary third way. It supports learners in understanding new and abstract concepts by helping them connect with their existing knowledge. Even a fully illiterate learner has knowledge of the spoken language and visual understanding of their environment, which the program builds upon by asking questions, as shown in Figure 3. Instead of ‘A for Apple’, we need an ‘Apple – A’ approach.

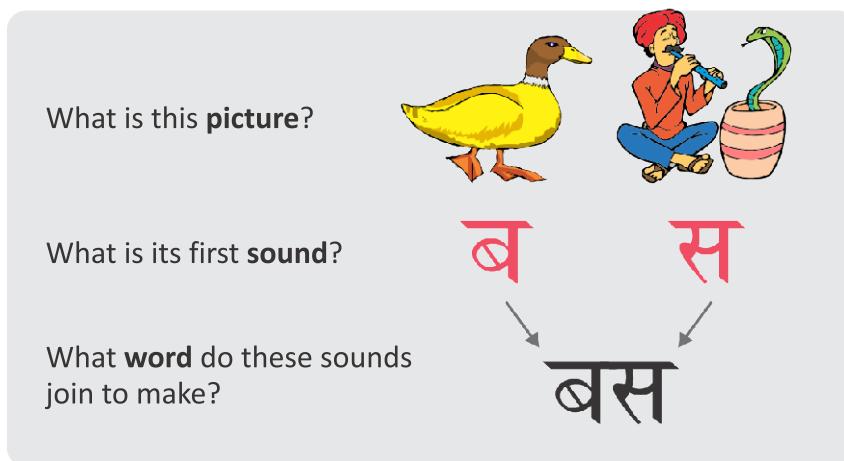


Figure 3: Children derive the sound from the known picture, and learn to decode letters and blend to form words.

Similarly, even a learner who doesn't recognise mathematical symbols is still able to count objects in their day-to-day lives. Thus ALfA uses concrete objects for counting and operations before introducing abstract representations. NIPUN formulates a similar concrete to abstract approach known as ‘ELPS’:

- **Experience** (with solid/concrete objects): for instance, we can use ice-cream sticks to represent tens and matchsticks to represent ones.
- **Language:** discussion of word problems that connect to real life.
- **Pictures:** representing questions through diagrams.
- **Symbols:** at the final stage, using full abstractions and mathematical symbols.

Research & References

⁷ Freire, P. 1968. Pedagogy of the Oppressed.

⁸ Venkataraman, K. 2011. Learning by Rote Prevalent in Top Schools Too. The Hindu. <https://www.thehindu.com/opinion/oped-learning-by-rote-prevalent-in-top-schools-too/article2707183.ece>

⁹ Sampat, S. n.d. The Rote Learning Crisis in India. Progressive Teacher. <http://www.progressiveteacher.in/the-rote-learning-crisis-in-india/>

¹⁰ Hillocks, G. (1984). “What works in teaching composition: A meta-analysis of experimental treatment studies.” American Journal of Education, 93(1), 133–170.

Freeman et al. “Active learning increases student performance in science, engineering, and mathematics” PNAS 111 (23) 8410-8415 (2014). Robert Talbert and Anat Mor-avi, “A space for learning: An analysis of research on active learning spaces”, Heliyon 5 (2019) e02967

¹¹ Vanessa Rodriguez, “The Teaching Brain and the End of the Empty Vessel”, Mind, Brain, and Education, November 16, 2012.

¹² Cowan, N. 1988. Evolving conceptions of memory storage, selective attention, and their mutual constraints within the human information-processing system. Psychol. Bull. 104, 163–191. <https://pubmed.ncbi.nlm.nih.gov/3054993/>

¹³ Joseph Novak, “Helping Students Learn how to Learn: A View from a Teacher-Researcher”

PEER LEARNING

the power of pairs

If you could choose, would you rather a 40:1 pupil-teacher ratio or 1:1?

In a Nutshell

- Teacher-centred instruction is ineffective, especially given the diversity and size of a typical classroom.
- Children can learn effectively from each other, in pairs. Numerous studies on peer learning show a huge array of benefits.

The Problem with Business as Usual

Most classrooms are centred on the teacher, who directs and instructs the students. Much of the teacher's time is spent reading from or explaining the textbook, writing on the board for children to copy, or marking their work. Students are not encouraged to interact much with each other: a 'good student' is one who quietly does their own work.

Merely listening to the teacher passively is boring and ineffective for most students. Further, a typical Indian classroom has many students, with diverse learning levels. In a traditional classroom, the teacher is unable to tailor instruction to each individual student: as the teacher progresses through the curriculum, many students are left behind.¹⁴

A Disruptive Approach

Peer learning – students teaching each other – can help solve these issues and transform the classroom. In pairs, even the shiest child becomes an active participant in learning. Learning is individualised, with each pair progressing at their own pace. While a diversity of learning levels and styles is a roadblock in the traditional classroom, the peer learning classroom celebrates diversity as students can help each other. While a traditional classroom relies upon forms of instruction that have low retention, such as lectures and individual reading, the peer learning classroom maximizes time on the highly effective lower rungs of the learning pyramid: practice by doing, and teaching others. (Figure 4)

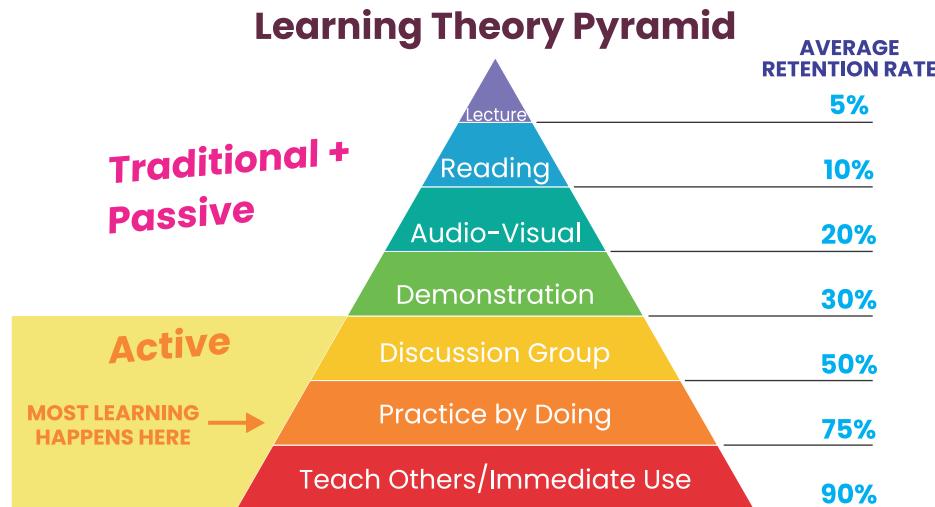


Figure 4: The learning pyramid.

Studies around the world have found that peer learning has a huge array of benefits:¹⁵

- Superior academic performance and test scores, greater skill mastery
- Enhanced reading comprehension and vocabulary
- Improved understanding of relevant material
- Increased ability to link content to themes
- Better student attitudes and motivation, leading to improved classroom behavior

How does this work in practice? In the Accelerating Learning for All (ALfA) process, the teacher facilitates pairs of children teaching each other. Some of the key differences between a traditional teacher centred-classroom and an ALfA classroom are elaborated in Table 4 below.

Table 4: Key differences between traditional and ALfA classrooms

Traditional classroom	ALfA classroom
Students working in whole class or groups, sitting in rows facing the teacher.	Students working in pairs is the main modality, they are facing each other.
Children are grouped by skill level. Groups are fixed for a long period of time.	Random pairing which ensures diversity. Pairs are changed frequently, so that children get to mix and work with others of all ability levels and background.
All children are on the same textbook page, everyone is working on the same question. Some are bored while others find it too difficult	Different pairs are on different modules at any given time; children are given their own.

Case Study

After 30 instructional days of ALfA implementation in Shamli district, UP, many teachers appreciated the power of peer learning.¹⁶

"When we explain things to the children, it takes time for them to understand. But when they are learning from each other, it is much easier for them." Nitin Kumar, assistant teacher, UPS Jagannpur

"Kids who earlier weren't interested are now enjoying. I wish that this technique would be used everywhere, for every school and every child." – Alla Rakha, principal, PS Gari Pukta

"Some of my children have learnt numbers up to thousands, they now understand them well. It is a notable achievement. The children's attendance has improved." – Arvind Kumar, Class 2 Teacher, PS Kairi

Research & References

¹⁴ Pritchett, Lant & Beatty, Amanda. 2012. The Negative Consequences of Overambitious Curricula in Developing Countries. Centre for International Development, Harvard University. <https://bitly/32uKwyr>

¹⁵ M. Lorenzo, Catherine Hirshfeld Crouch, and E. Mazur. (2006). "Reducing The Gender Gap In The Physics Classroom". American Journal Of Physics. Volume 74, Issue 2. 118-122. Lorenzo and Crouch found that replacing lectures with a participatory lesson build on peer learning increased achievement and reduced gender gaps.

See also: Mastropieri 2006, Stenhoff and Lignugaris/Kraft 2007, Kamps et al. 2008, Okilwa and Shelby 2010, Romano and Walker 2010, Costantini 2015, Bakare and Orji 2018, Hasnani and Ismail 2020, Babayigit and Erkuş 2022, Spencer and Balboni 2003, Saddler and Graham 2005, Simpkins et al. 2009, Fuchs et al. 1997, Fuchs et al. 1999, Saenz 2005, Calhoon 2005, Veerkamp et al. 2007, Spörer and Brunstein 2009, Holt et al. 2014, Lee 2017, Mattatall 2017, Eskay et al. 2012, Fuchs et al. 1997, Lorenzo and Crouch 2006, Mattatall 2017

¹⁶ FLN ALfA Revolution at Shamli, UP. 2022. <https://www.youtube.com/watch?v=h1lmay7U0tg>

3R6C

linkages between basic literacy and 21st century skills

If the industrial education system failed to impart basic literacy and numeracy to all, how can it inculcate 21st century skills?

In a Nutshell

- We urgently need to reform our education system to help our students develop key 21st century '6C' skills of communication, collaboration, creativity, critical thinking, citizenship and character.
- The '6C' skills are not to be traded off against '3R' skills of reading, writing and arithmetic; rather, they can be embedded in the process of learning foundational literacy and numeracy.

The Problem with Business as Usual

In 2022, a group of American business and education leaders formed the Partnership for 21st Century Skills, declaring that, beyond literacy, "If today's students want to compete in this global society, they must be proficient communicators, creators, critical thinkers, and collaborators."¹⁷ In the years since, there has been increasing international recognition of the importance of these '6C' skills, from educationists, governments and business leaders alike.¹⁸

However, there has also been a growing awareness that most school and even college graduates do not have well-developed 21st century skills.¹⁹ Indeed, the industrial education system is inherently ill-suited to teaching the 21st century skills – imagine the absurdity of having a student repeat after the teacher 'I must think for myself'. Indeed, the current system actively works against the 6C skills in many ways: students are made to compete against each other in exams, given mostly individual work assignments, and made to memorise the 'right' answer.

Case Study

Some argue that drilling 'the basics' is a prerequisite to higher-order skills like creativity and problem-solving. If this is the case then a country like India should first focus exclusively on the '3R' skills of reading, writing and arithmetic; and only later have the chance to develop the 6C skills.

The No Child Left Behind Act (USA, 2001) used this 'back to the basics' approach which enforced standardised testing across the country, with significant consequences for schools and teachers whose students fared poorly. In response, many schools stripped away sports, art and music programs; and began more 'teaching to the test'.²⁰ The No Child Left Behind Act failed in its stated purpose – ensuring all children gained foundational literacy skills – while damaging efforts to inculcate the 6Cs among students. The Act was revoked in 2015, in favour of a more positive and holistic legislation (Every Student Succeeds Act).²¹

A Disruptive Approach

Fortunately, there need not be a trade-off between ensuring all children learn foundational literacy, and helping develop 6C skills. Indeed, the two can and should go together: the 6Cs are embedded in the new learning methods discussed above:

- The known-to-unknown and concrete-to-abstract approach are ideal fuel for creativity and critical thinking.²² For instance, consider the game in which a pair of children are given a set of letters and try to make as many words as possible using only those letters – this helps develop both literacy skills and creativity.
- Peer learning naturally involves much more communication and collaboration than direct instruction or filling simple worksheets entails. For instance, when students ask each other questions and assist each other, they are learning to work together.
- Peer learning also provides a healthy environment for character and citizenship education – for instance, children are interacting with others of diverse socio-economic and religious backgrounds, helping break down such barriers.²³

Sometimes “less is more”: reducing the curriculum creates more space for greater creativity and innovation, as is explained in the National Education Policy (4.5).²⁴ Accelerating Learning for All is one such attempt to slim down the curriculum (just three booklets totalling 72 pages to reach FLN), while embedding the 6Cs in the process.



Figure 5: ALfA Booklets

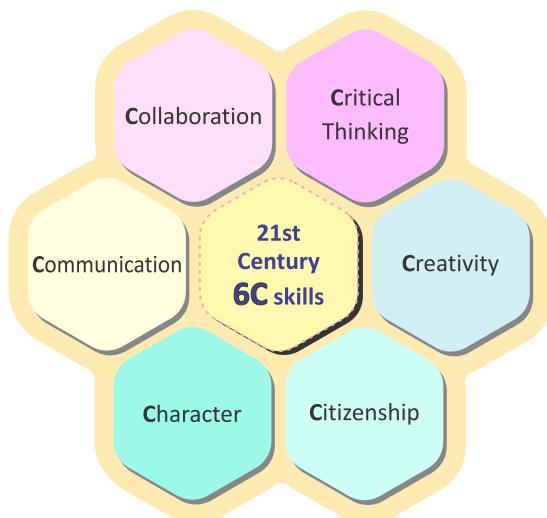


Figure 6: The 6C Skills

Research & References

¹⁷ NEA - Preparing 21st Century Students for a Global Society

¹⁸ Mohammed bin Rashid Al Maktoum Foundation, Arab Human Capital Challenge: The Voices of the CEOs

¹⁹ AMA 2010 Critical Skills Survey: Executive Summary." P21.org. American Management Association, 15 Apr. 2010. Web. 16 May 2011

²⁰ Kohn, Alfie. 1999. The Schools our Children Deserve.

²¹ Layton, Lyndsey. 2015. Obama Signs New K-12 Education Law that Ends No Child Left Behind. The Washington Post.

https://www.washingtonpost.com/local/education/obama-signs-new-k-12-education-law-that-ends-no-child-left-behind/2015/12/10/c9e58d7c-9f51-11e5-a3c5-c77f2cc5a43c_story.html

²² Project-Based Learning Model Towards Students' Skills in the 21st Century: In a Systematic Literature Review, Dagar V and Yadav A. Constructivism: A Paradigm for Teaching and Learning.

²³ Halah Ahmed and Alismail Dr. Patrick McGuire. 21st Century Standards and Curriculum: Current Research and Practice

²⁴ MHRD. 2020. National Education Policy. https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf



THE MID-LEVEL: PROCESS TRANSFORMATION

Process. Noun. A series of actions or steps taken in order to achieve a particular end.

Government teachers are sometimes scapegoated as inefficient; and one of the most common proposed solutions is to offer teachers more training. But government teachers are not incompetent – indeed they are on average more highly qualified than private school teachers, and passed a rigorous entrance exam to enter the profession. Could it be that the problem is not so much the teachers, but the broader educational ecosystem they find themselves in?

This part explores reforms needed in some of the key processes which shape the classroom. Assessments are crucial – what we measure, we value. We need to shift from high stakes exams to diagnostic tests which provide useful feedback to both teachers and students. Supervision and accountability measures should be focused on learning outcomes, rather than obsessing over inputs or demanding teachers follow a set of detailed prescriptions. Regular teacher peer-sharing sessions need to be organised to foster teachers' intrinsic motivation and facilitate sharing of best practices.



ASSESSMENTS AS LEARNING

compete with yourself, not others

Could exams be joyful and constructive – not stressful and competitive?

In a Nutshell

- It is crucial to track learning to provide useful, timely feedback to both students and teachers, so that learning gaps can be addressed swiftly.
- New technologies enable rapid, easy and enjoyable learning assessments.
- Third-party spot-testing should be conducted occasionally to check students' learning levels

The Problem with Business as Usual

The traditional assessment system is deeply problematic, often creating an environment of fear and competition which undermines learning, while failing to measure what really counts.

- Many exams test factual recall but not deeper understanding.
- Exams are used to classify students into 'strong' and 'weak' – labels that are unhelpful for all.
- Exams take days or weeks for teachers to mark, wasting valuable time and creating a substantial lag between the student sitting the exam and receiving feedback.
- When students do receive feedback, all they typically get is a percentage or grade, which doesn't help them understand the specific areas they need to work on.²⁵ Similarly, teachers don't receive detailed feedback on which areas the whole class requires revision on.

Case Study

Our experience conducting baseline testing in Shamli demonstrated the danger of assessments which are perceived to be high stakes. The initial testing, conducted on 20th April 2022 by Academic Resource Persons (ARPs), showed astonishingly high results: Grade 3 averaged 72% on the NAS-based multiple-choice questionnaire, compared to the district average of 26% in NAS 2017. However, a surprise test conducted by DEVI staff the next day indicated that actual learning levels were much lower (44%). It is vital that assessments are conducted impartially, which may require third party involvement.

A Disruptive Approach

The purpose of assessment should be to help all children understand their areas of improvement and to better guide their efforts to develop these skills. Assessment data should be used to 'identify areas of learning and development where children may need support or extension,' as NIPUN Bharat reminds us.²⁶ Feedback needs to be much more specific: giving students and teachers data on how well they did on each sub-topic so they know what their strong points and areas of improvement are. Tests should be ipsative – that is, children should be competing with themselves, striving to improve over their past efforts, rather than competing against each other.²⁷

What does this look like in practice? New technologies like the Pragati App can help transforms the way assessments are done and the type of feedback they can offer. It unlocks the power of instant, automated marking and analysis in an accessible format. The process is simple:

- Students are given an assessment, which may be a standardised exam or a test the teacher has created themselves.
- Responses are entered on the equivalent of an OMR sheet, by the students themselves.
- The teacher scans these sheets with their smartphone and, within a few minutes, receives a detailed report card for each student and for the class overall. This enables them to revise concepts that many students are still struggling with.
- Students receive a detailed, topic-wise analysis, which shows their progress relative to the previous test rather than ranking them against other students.
- Because the testing process has been streamlined and simplified, no-stakes diagnostic tests can be conducted more frequently.

Table 5 below highlights the key changes required.

Table 5: Re-examining exams

	Traditional Assessments	Paradigm Shift
Why? Purpose	Summative: Sorting and ranking students.	Formative: Informing the teaching-learning process. Students compete with themselves, not each other.
What/ When? Methods	High-stakes exams: Lots of memorisation required, fixed timings.	Low-stakes repertoire: Mix of assignments and portfolios too. Frequent, unannounced tests, problem-solving and unseen passages.
How? Reporting	Focus on overall marks: Lots of teacher marking required, delayed results, takes away time from learning.	Focus on Progress: Use Pragati or similar app to provide specific, easy-to-understand feedback for learner, teacher and policy-maker.

Research & References

²⁵ Markovich, Isidora. 2021. Why Giving Instant Feedback is Important for Effective Learning. EDUME. <https://edume.com/blog/role-of-feedback-in-improving-learning>

²⁶ Ministry of Education, Government of India. 2021. NIPUN Bharat Guidelines, p. 131. https://dse1.education.gov.in/sites/default/files/NIPUN_BHARAT_GUIDELINES_EN.pdf

²⁷ Gandhi, Sunita. 2017. Compete With Yourself (CWF): Maximising Learning Gain in Schools. In: Hughes G. (eds) Ipsative Assessment and Personal Learning Gain. Palgrave Macmillan, London. https://doi.org/10.1057/978-1-37-56502-0_11

RETHINKING SUPERVISION

outcome-based accountability

How can we develop forms of accountability that enhance teachers' motivation and creativity rather than stifling them?

In a Nutshell

- We need healthy and holistic supervision mechanisms to ensure that teachers are held accountable for their students' learning outcomes, while given scope for creativity and innovation.
- Accountability should take a variety of forms – towards parents, community, peers; not just principals and officials.²⁸

The Problem with Business as Usual

- Supervision is often focused on inputs and documentation – whether there are charts on the wall, whether the trackers & registers are being filled – rather than pedagogy or learning outcomes.
- Teachers are being tied to extremely detailed prescriptions of what to do every period, often leading to a focus on curriculum completion rather than learning outcomes.
- There is very limited accountability towards the community, with parents often feeling that they have little input into school decision-making. School Management Committees (SMCs) are a nice idea on paper, yet sadly, many are not properly functional. This is partially because village and slum communities often have much lower social and educational status than the teachers serving there, impeding the teacher-community relationship.²⁹

----- Case Study -----

Teachers in the ALfA implementation in Shamli were initially hampered by pressure from Academic Resource Persons (ARPs) to complete the curriculum in the prescribed time-frame. The experience demonstrates the importance of teacher supervision being aligned with program objectives and conducted with a focus on outcomes rather than inputs. When the DEVI team visited a school and conducted an oral reading fluency test – listening to children read, one-on-one – their teacher expressed surprise, "*I have had many officials visit my school before but you are the first to sit on the floor with the children. Everyone else only wants to see the attendance and mid-day meal registers.*"

In other words, there is very little outcome-based accountability.

A Disruptive Approach

Overall, we need to align the whole education machinery – teachers, ARPs, BEOs – with the vision and mission. The focus of supervision and accountability should shift away from inputs and documentation, towards learning outcomes:

- Reduce emphasis on curriculum completion; teachers given more freedom and professional autonomy to choose from different materials and work at their own pace.
- During supervisory visits, conduct spot-testing of students to monitor learning rates.
- There are no direct consequences for teachers or students for low test results – but suggestions are given for corrective action.

International evidence suggests that community accountability is effective in improving the quality of education, and especially in reducing teacher absenteeism.³⁰ We need to strengthen communities' roles in ensuring accountability, through mechanisms such as:

- Publication of data on teacher absenteeism
- Town halls displaying student work for the whole community
- A helpline for complaints, as a recourse for parents and children

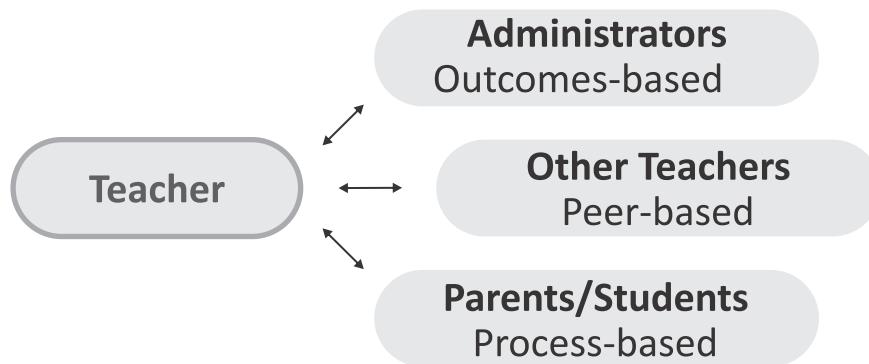


Figure 7: A Holistic model for teacher accountability

Research & References

²⁸ Gill, Brian; Learner, Jennifer and Meosky, Paul. 2017. Reimagining Accountability in K-12 Education. Journal of Behavioural Science & Policy <https://behavioralpolicy.org/articles/reimagining-accountability-in-k-12-education/>

²⁹ Ramachandran, Vimala et al., 2006. Teacher Motivation in India. Working Paper #306, E-Social Sciences. <https://ideas.repec.org/p/ess/wpaper/id306.html>

³⁰ UNESCO, 2020. Time to Teach: Teacher Attendance and Time on Task in Eastern and Southern Africa. <https://bit.ly/3fW17OM>

TEACHER PEER-SHARING

communities of practice

Can we move beyond carrot-and-stick ideas to foster teachers' intrinsic motivation?

In a Nutshell

- Provide opportunities for teachers to visit each other's classes both within the same school and across schools, to foster intrinsic motivation.
- Such 'communities of practice' facilitate teachers sharing best practices with each other.

The Problem with Business as Usual

A highly motivated teacher cadre is crucial to any education system. Current systems for teacher motivation rely primarily on extrinsic factors like carrots (high pay, offer of promotion) and sticks (threat of transfer, suspension). However, this is problematic because:

- In various studies it has been found that extrinsic motivators can undermine intrinsic motivation.³¹
- Teachers often have little chance to meet with their peers from other schools, and can feel isolated, stuck in a rut.
- Despite being highly paid, many government teachers report feeling trapped in unsatisfying jobs and lacking community respect. To quote from an influential World Bank report: 'The teachers in government schools were less satisfied with nearly every aspect of their jobs and careers than were private school teachers: they felt they got less respect from management, less respect from parents, they felt the school's leadership was weak and the work environment was worse.'³²

Case Study

Fred Mednick, founder of Teachers Without Borders, has done extensive research on the issue of teacher motivation.³³ He found that communities of practice – that is, teachers sharing their learnings, questions and research with each other – contribute to drastic changes, including:

- Increased pedagogical choices to accommodate and serve multiple learning needs of students, as well as the teachers' own content mastery
- Greater use of visualisation techniques and manipulatives
- Increased willingness to try new pedagogies
- Greater sharing of resources and willingness to discuss failures as well as successes

These ideas are put into practice in City International School, Lucknow. Every Saturday, teachers meet to share what they've been doing that's new and different. To maximise results from these meetings, the teachers share a slide presentation with their hypotheses, research design, intervention, data on student improvement, photos and videos as evidence. The observers offer appreciation for their peers' work, and then may also share a suggestion. This serves as a great motivator: teachers want to be appreciated by their peers, and through the process, they are constantly learning new ideas from each other.

A Disruptive Approach

Teachers' intrinsic motivation will flourish when they are given regular and ongoing opportunities to share their experiences with their peers.

Dwight Allen, a renowned American educationist, developed the concept of microteaching: teachers observing a colleague teach a short lesson, giving them feedback, and then having them re-teach it.³⁴ Some top-performing US schools have teachers observe each other's classes as frequently as twice a week!³⁵ Teacher peer-sessions can be done in-person, and in online formats such as WhatsApp groups to share photos and videos of classroom innovations.

Another format is for teachers of a local geographical area to meet together regularly, and each present something new and innovative they have done this year, along with data on its impact on student learning outcomes. Exceptional teachers can be awarded prizes, as judged by juries of their peers according to transparent criteria.³⁶



Research & References

³¹ Murayama, Kou. 2018. The Science of Motivation. American Psychological Association. <https://www.apa.org/science/about/psa/2018/06/motivation>

³² Pritchett, Lant and Murgai, Rinku. 2006–7. Teacher Compensation: Can Decentralization to Local Bodies Take India from the Perfect Storm Through Troubled Waters to Clear Sailing? India Policy Forum, pp. 123–177. <https://brook.gs/34a1qxl>

³³ Personal email correspondence in Nov-Dec 2021

³⁴ Allen, Dwight. N.D. Microteaching. https://www.liquisearch.com/dwight_w_allen/microteaching

³⁵ Ibid.

³⁶ Kools, M. and Stoll, L. 2016. What Makes a School a Learning Organisation? OECD Education Working Papers, No. 137, OECD Publishing, Paris. <https://doi.org/10.1787/5jlwm62b3bvh-en>



THE MACRO-LEVEL: POLICY TRANSFORMATION

Policy. Noun. A *high-level overall plan embracing the general goals and acceptable procedures especially of a governmental body.*

Imagine a random primary student at 11am on a given school day. There is less than a one-in-three chance that they and their teacher will both be in the classroom, engaged in a learning activity!

$$\begin{aligned} & 72 \text{ per cent student attendance} \\ & \times 85 \text{ per cent teacher attendance} \\ & \times 45 \text{ per cent teacher time spent teaching} \\ & = 27 \text{ percent of time spent productively}^{37} \end{aligned}$$

Classroom-level pedagogies and district-level processes are vital, but they cannot succeed if students and teachers are not present in the classroom and engaged in learning. This part explores key government policy at the state and national level which help ensure this.

Conditional Cash Transfers can improve student attendance and prevent dropouts and child labour. Sufficient teachers need to be allocated to all schools, and teachers need to be liberated from excessive non-teaching duties. Many NGOs are doing excellent educational work but lack a clear pipeline to scale up their innovations – this is another key area of policy reform.



Research & References

³⁷ Pritchett, Lant and Murgai, Rinku. 2006–7. Teacher Compensation: Can Decentralization to Local Bodies Take India from the Perfect Storm Through Troubled Waters to Clear Sailing? India Policy Forum, pp. 123–177. <https://brook.gs/34a1qxl>

Annual Status of Education Report (Rural). 2018. <http://asercentre.org/Keywords/p/346.html>

BACK TO SCHOOL

maximising teaching time

How can we ensure teachers are in the classroom and actually teaching?

In a Nutshell

- One of the key systemic factors limiting learning levels is the inadequate number of teachers in many schools, and their lack of teaching time.
- Official non-teaching duties, such as survey and election work, should be minimised for teachers to maximise their time in the classroom.
- We need to redeploy teachers from schools with teacher surpluses to those with high pupil-teacher ratios.

The Problem with Business as Usual

India has a moderate shortage of government teachers: we have 1.79 million government teachers for Grade 1–5, and 67 million students.³⁸ This implies a pupil-teacher ratio of 37:1, somewhat more than the National Education Policy stipulation of 30:1.³⁹ Paradoxically, numerous 'tiny schools' have low pupil-teacher ratios.⁴⁰ Meanwhile, the teacher shortage remains acute in some marginalised and rural areas, where few teachers want to work, and many vacancies remain unfilled.

Even when sufficient teachers are allocated to a particular school on paper, low teacher attendance can easily ruin the actual situation. With over 15% of teachers absent on any given day, the cost of these missed workdays amounts to a staggering Rs 100 billion annually.⁴¹ A further chronic burden is that teachers are sometimes present but given various non-teaching duties, from conducting surveys to election work to aadhar enrolments.

Case Study

In an anonymous online survey of 242 Shamli school teachers, over two-thirds of teachers rated 'being given excessive non-teaching duties' as a 'very serious issue'. The issue was particularly striking in a visit to PS Malakpur on 14 October 2022 – the four-teacher school had one absent for personal reasons and two more busy with official duties, leaving a single teacher to handle 160 children across five grades! (Table 6, overleaf)

One Block Education Officer quipped: "*I have a list of 44 priority tasks to accomplish – and teaching my students is the last item on this list.*" Teachers further feel demotivated by being allocated menial bureaucratic tasks, and also recognise the huge wastage of funds this entails, with another teacher reporting: "*I cleared numerous exams and underwent extensive training to become a teacher. I'm being paid Rs 70,000 per month. So why am I being allocated jobs that a 10,000-per-month clerk could do?*"

Table 6: On-paper and In-field Pupil-Teacher Ratios observed in visits to Shamli government schools, October 2022

School	Students on roll	Teachers on roll	On-paper PTR	Students in attendance	Teachers in attendance	In-field PTR
PS Malakpur	231	4	56	160	1	160
PS Khurgan	453	10	45	346	8	44
PS Lilon 2	218	5	44	144	5	29
Total	902	19	47	650	14	47

Non-teaching administrative duties and high pupil-teacher ratios push teachers towards more monological and less dialogical approaches to education. In the words of one teacher, who wished to remain anonymous: “*When I am handling 100 kids in three classrooms simultaneously, what am I supposed to do? The best I can manage is to give them work to copy off the blackboard.*” These huge systemic issues impede the prospect of pedagogical change.

A Disruptive Approach

- Equalise the distribution of teachers across schools by urgently transferring and/or hiring teachers to fill vacancies in under-served rural areas.
- Ensure teachers are attending school punctually every day. Pilot biometric machines and other forms of accountability – such as taking a photo of their teacher in the class at the start and end of the school day.⁴²
- Employ contractual staff to conduct various non-teaching bureaucratic tasks, leaving teachers free to focus on their students’ learning.

Research & References

³⁸ Unified District Information System for Education Plus, 2019–20 Report

³⁹ National Education Policy, 2020. Paragraph 2.3

⁴⁰ Datta, Sandip and Kingdon, Geeta Gandhi. 2021. Teacher Shortage in India: Myth or Reality? The Fiscal Cost of Surplus Teachers, Fake Enrolment and Absences. IZA Discussion Paper No. 14251, Available at <http://dx.doi.org/10.2139/ssrn.3823618>

⁴¹ Muralidharan et al., 2014. The Fiscal Cost of Weak Governance. National Bureau of Economic Research. <https://bit.ly/2JwZ2sN>

⁴² Duflo, Esther et al., 2012. Incentives Work: Getting Teachers to Come to School. American Economic Review.

<https://www.aeaweb.org/articles?id=10.1257/aer.102.4.1241>

EDUCATION PAYS

conditional cash transfers

How can financial incentives be used to improve student attendance on the ground – not just on paper?

In a Nutshell

- While India has dramatically improved school enrolment rates over the past few decades, there are still major issues with attendance and dropping out, which have been exacerbated by the Covid pandemic.
- Conditional cash transfers (CCT) can help ensure maximum student attendance, especially for girls and adolescents, and encourage children to return to school

The Problem with Business as Usual

UDISE data from 2019-20 shows that, even before the pandemic, the retention rate is only 80% to primary and 62% to upper primary.⁴³ The Covid pandemic has exacerbated the crisis, with millions of families being pushed deeper into poverty, resulting in children dropping out of school into child labour⁴⁴ and underage marriages.⁴⁵ Unless we get children back into school, the future of an entire generation is at risk.

Children's years of education are a key determinant of future income. However, it is often difficult for families in pressing poverty with unmet short-term needs to plan adequately for the future. In such situations, a clear short-term reward for having children attend school is required.

The midday meal scheme has helped improve student attendance to some extent.⁴⁶ However, the use of unconditional cash transfers has generally been less effective: for instance, some parents have enrolled their children in government schools to gain the benefits, but are not sending them to school, let alone buying a uniform (the cash transfer's intended purpose).

Case Study

One of the most common complaints of teachers in Shamli government primary schools is the low attendance of many of their students. Some of the most cited reasons were family migration and child labour; with many children working seasonally in sugarcane fields or brick kilns. Many teachers expressed frustration with their inability to effectively help children achieve learning goals because of the extremely patchy attendance.

A Disruptive Approach

Conditional cash transfers (CCTs) are more effective in ensuring high attendance and preventing dropouts. CCTs have a particularly powerful impact on school enrolment and attendance for the extremely poor and marginalised (Figure 8), as the cash they receive can make a huge difference in other areas of life. Brazil's Bolsa Família program is a global leader: families are given cash transfers conditional on their children's school attendance and health check-ups. Numerous countries in our region, including Bangladesh and Pakistan, have also used such programs with considerable success.⁴⁷ India should trial a conditional cash transfer program for upper primary schools in aspirational districts with a high dropout rates.

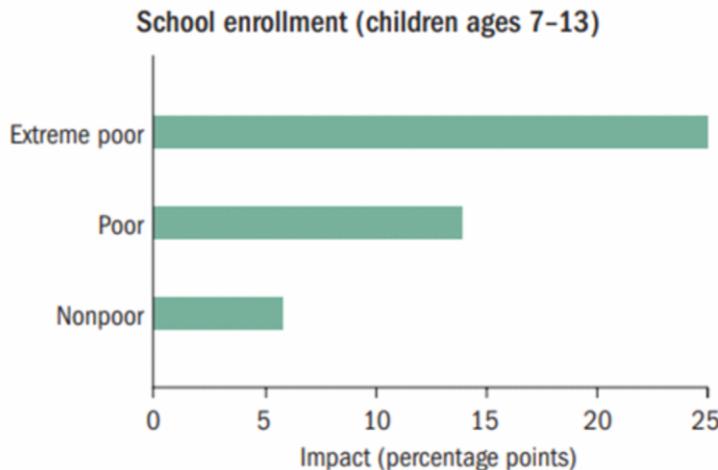


Figure 8: Nicaragua's Conditional Cash Transfer Program has been successful in increasing primary school enrolment, with the effect size largest among the extremely poor.

Children in Odisha, India, enjoy the use of ALfA books in their mother-tongue.



Research & References

⁴³ Unified District Information System for Education (UDISE) Plus. 2019–20.

⁴⁴ International Labour Organisation. 2020. COVID-19 may push millions more children into Child Labour – ILO and UNICEF. <https://www.unicef.org/press-releases/covid-19-may-push-millions-more-children-child-labour-ilo-and-unicef>

⁴⁵ UNICEF. 2021. 10 Million Additional Girls at Risk of Child Marriage Due to COVID-19. <https://www.unicef.org/press-releases/10-million-additional-girls-risk-child-marriage-due-covid-19>

⁴⁶ The Himalayan Times. 2019. Midday Meal Increases Attendance of Students. <https://thehimalayantimes.com/nepal/midday-meal-increases-attendance-of-students>

⁴⁷ Fiszbein & Schady. 2009. Conditional Cash Transfers: Reducing Present & Future Poverty. World Bank. <https://openknowledge.worldbank.org/handle/10986/2597>

CATALYSTS FOR CHANGE

the role of NGOs

How can innovative NGOs help transform the government education system?

In a Nutshell

- Non-government organisations (NGOs) can play a key role in the transformation of the education system.
- NGO support for government schools should be methodically measured for impact.
- Proven and cost-effective interventions can be incorporated into the government system and scaled up.

The Problem with Business as Usual

There are many NGOs and CSR foundations doing good work in government schools, providing a range of support and interventions. However, there are many constraints preventing innovations from being scaled up.

- NGOs are often given limited scope for what they can do in government schools – for instance, syllabus completion is sacrosanct and any NGO-provided ‘supplementary materials’ typically receive less time and focus.
- Government teachers are sometimes initially resistant to new pedagogies or materials being implemented by NGOs, partially because of feeling overwhelmed by curriculum completion requirements. Their schedule is already packed with prescriptions – NIPUN specifies what to do each period of each day.
- There is also a lack of rigorous evidence collection – many NGOs show a large ‘number of people impacted’ without quantifying the impact and comparing to other interventions.
- There is often a lack of coordination between different NGOs – sometimes there are even multiple NGOs working in the same schools on separate programs, without clear communication.

----- Case Study -----

Our experience working in Shamli district illustrated the difficulty for NGOs partnering for change in government schools. Firstly, it took a long time to consult the relevant stakeholders at the district and state levels and sign an MoU. Once the non-financial MoU was signed, there was still a substantial amount of work required to raise funds to implement the pilot. Once we began implementation, learning materials from other NGOs were also used in the schools we had selected; which led to teacher confusion, and could confound results.

A Disruptive Approach

- Standardise a transparent process for NGOs to apply to work in government schools, specifying the intervention, its desired outcomes, how success will be measured, and budget.
- Upon approval of a project proposal, sign a one-year non-financial MoU. Select schools from within the desired geographical range to randomly allocate, while ensuring that no two NGOs are allocated the same school.
- Give the NGO authority to work with considerable freedom for the duration of the project, including the ability to visit schools, train teachers, provide different TLMs.
- Across different NGO projects, conduct third-party evaluations of students' learning outcomes and progress relative to baseline.
- Select the most promising projects to be scaled up as part of the system, using government human and financial resources.



A volunteer from Literacy Chicago, USA, helps a man with low literacy skills form a word using letter and picture cards provided with the Alfa materials

Conclusion

India's education system is facing a huge challenge and opportunity. How we build back from the Covid pandemic will determine the future of a whole generation. If we revert to business-as-usual, we can expect to see the same sort of results. But if we seize the day to think afresh, we can build a new education system.

A system where children use their existing knowledge to help each other learn.

A system where all children learn the key skills of reading, writing and numeracy – through a process that inculcates their creativity, communication and critical thinking.

A system that motivates and energizes teachers, giving them flexibility and peer sharing opportunities without burdensome non-teaching activities.

A system that ensures all students and teachers are in the classroom and engaged in learning

A system that allows NGOs to innovate, and to scale up what works.

We only have four years left to achieve the ambitious NIPUN goals of universal literacy – and there is still a mountain to climb. We no longer have time for incremental changes – we need a paradigm shift.

Together, we can.

Research & References (From Page 6: Sustainable Development Goals)

^a Save the Children. 2017. Investing for Impact: Global Literacy for Children. <https://www.savethechildren.org/content/dam/usa/reports/ed-cp/investing-for-impact-investing-in-global-literacy-for-children.pdf>

^b Cambridge University. 2013. Literacy, Not Income, Key to Improving Public Health in India. <https://www.cam.ac.uk/research/news/literacy-notincome-key-to-%20improving-public-health-in-india>

^c Save the Children. 2017. Investing for Impact: Global Literacy for Children. <https://bit.ly/3fYowPx>

^d Van Pelt, Jennifer. 2018. What is the Connection between Literacy and Economic Development? Words Alive. <https://bit.ly/3lV3HvI>

Desai, Vaman. 2012. Importance of Literacy in India's Economic Growth. International Journal of Economic Research. Vol. 3 Iss. 2, pp. 112–124. <https://www.semanticscholar.org/paper/IMPORTANCE-OF-LITERACY-IN-INDIA-%E2%80%99-S-ECONOMIC-GROWTH-Desai/7641384d2d4b87bb5f2666309be66ef796558c5b>

^e National Education Association. 2002. Preparing 21st Century Students for a Global Society. <https://www.bibsonomy.org/bibtex/c10e4cac61df68c1e367bc209d7ffb38>

^f Raghavendra, R.H. 2020. Literacy and Health Status of Scheduled Castes in India. Contemporary Voice of Dalit. <https://journals.sagepub.com/doi/full/10.1177/2455328X19898449>

^g Mahanta, Amariyoti. 2016. Impact of Education on Fertility: Evidence from a Tribal Society in Assam, India. International Journal of Population Research. <https://doi.org/10.1155/2016/3153685>





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

SDG 4
**disruptive
FLN at scale**
Foundational Literacy & Numeracy



SYSTEMIC CHANGE FLN FOR ALL

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



+91 740 840 6000



info@dignityeducation.org



dignityeducation.org