

Dr Sunita Gandhi Jonathan Hakim Tom Delaney

# BLOOMSBURY

NEW DELHI • LONDON • OXFORD • NEW YORK • SYDNEY

# Contents

Foreword		
Acknowledgements	ix	
Introduction: A Solvable Crisis	1	
PART A: PEDAGOGY		
1. Are We Stuck in the Past?	7	
2. The Reading Wars and the Missing Peace	18	
3. Making Maths Make Sense	32	
4. RePairing Education: The Peer Learning Transformation	43	
5. Beyond the 3Rs: Education for the Whole Child	51	
PART B: PRACTICE		
6. Teachers: Igniting a Spark	71	
7. From Degrading Grades to Inspirational Ipsative	89	
8. Five ALfA Activities You Can Try Out Today	105	
9. Teacher Question and Answer	113	
PART C: POLICY		
10. From Slums to States: ALfA's India Story	129	
11. Going Global: ALfA Around the World		
12. Taking It Forward: Implementing ALfA in Your Context	152	
Notes and References	159	

# Are We Stuck in the Past?

Imagine two students.

The first child is bored. He tries to focus on his teacher's lectures but has difficulty paying attention. Sometimes he already knows the material and loses interest when forced to hear it again. More often, he is too far behind to make sense of the lecture. He studies long hours at home via rote memorisation to compensate for the parts he misses. Those intense hours of study help him scrape through with a passing mark, but within a few weeks, he's forgotten most of the material he crammed.

Now consider a second child. She enjoys class, where she spends much of her time engaged in exciting activities with other children. The material challenges her at her current learning level, and she only moves on once she has become proficient. Because the lesson requires active participation, she stays on task and focused. Homework consists of creative activities and projects building on skills she learned in class. Often she is able to use the same concepts months later when they come up in other contexts.

Any teacher would prefer student #2 over student #1. But how do we get there? Many schools blame their struggling learners when they're not engaged, accusing them of being too dumb to understand the subject or too lazy to put in the work required. They say, 'Look, some children are doing fine. That proves it's not the system's fault.' So, nothing changes. Threatening children with low marks hasn't helped them pay attention in class, and the typical school reform mantras of 'tougher standards' and 'more accountability' have failed to make a difference.

What if the problem isn't *the student*, but rather *the school*? What if we can transform our outcomes not by changing our learners but by changing our institutions?

Turning traditional classrooms into active environments with selfmotivated learners is vital and achievable. We wrote this book to show you how to get there.

# An Outdated Model for Education

Look at this classroom. Can you tell what year it is?



Division of Class 6 in Boston, USA Photo by A.H. Folsom

The photo is from 1892. Yet, if you replaced the blackboards with whiteboards and modernised the decorations, it would look no different from today's classrooms. The only improvements are in aesthetics, not substance.

Teachers still stand at the front while pupils are seated in rows, passively listening. Instructional time still revolves around verbal lectures and written notes for the students to copy. After the lecture, children complete worksheets or do problems from a book. All learners are of the same age, work on the same material, and are given lessons at the same pace. And their primary motivation for learning remains the threat of upcoming tests.

Why are our schools still failing students? The simple answer is that our education system is stagnant.

We only need to look at other fields to know it doesn't have to be this way. In the last century, a technology sector once reliant on telegrams has produced computers, smartphones, and artificial intelligence beyond our wildest dreams. Transportation has gone from horse-and-buggy to jets and electric cars; media has gone from black-and-white silent movies to incredible 3D special effects. The medical profession has given us antibiotics, vaccines, and surgical advances that transformed public health. Yet schools have remained essentially unchanged.

This lack of progress in our schools has tragic consequences.

According to a 2019 World Bank study, 53 per cent of 10-year-old children in low- and middle-income countries could not understand a simple text.<sup>1</sup> These students are in Class 4 or 5, yet still can't meaningfully read. While official government statistics will label such youth 'literate' if they can merely string together words, their reading is useless without comprehension.

Longer stays in school only make a small dent in the problem. In India, 32 per cent of rural Class 7 students were unable to read a Class 2 text, and 61 per cent couldn't solve a two-digit subtraction problem.<sup>2</sup> What have these schools accomplished in seven years if that many of their children still lack basic skills?<sup>\*</sup>

The issue is not limited to low-and-middle-income countries. Another study found 80 million functionally illiterate adults in Europe.<sup>3</sup> Twelve percent of German workers have difficulty reading anything beyond a brief sentence, and try to avoid full passages.<sup>4</sup> In the USA, 70 per cent of adult prison inmates and 85 per cent of juveniles in the court system cannot comprehend a 4th-grade text, suggesting dire consequences for many of the young people who do not achieve literacy.<sup>5</sup>

Sadly, the COVID-19 pandemic has exacerbated these deficits. A 2022 World Bank report projects that the pandemic may increase functional illiteracy among 10-year-olds to 70 per cent, with the most significant struggles in South Asia (78 per cent), Latin America (80 per cent), and Sub-Saharan Africa (89 per cent). If teachers cannot help students recover the deficit, the World Bank estimates that this generation of children may see a loss of up to \$17 trillion in lifetime earnings.<sup>6</sup>

What must we change? As educator Alfie Kohn laments, 'Just about everything.'<sup>7</sup> At a glance, we see that in traditional classrooms:

1. Passive learning means children fail to reach their academic potential

<sup>\*</sup> As a literacy educator, I (Jon) have seen this myself. Many students enter our programme unable to read a Class 3 text; then, we discover during the registration process that they are attending 5th, 6th, or even 7th Class. In our course, they often learn to read after just 2-3 months of 15-minute daily lessons, so what was happening all those previous years?

- 2. Creativity and initiative are limited by teacher- and textbook- centred education.
- 3. Enthusiasm and morale are low as children are left behind in wholeclass instruction

Before we can grasp the remedy, we must first understand the illness. Let's break down these failings:

#### Passive Learning is Ineffective

seeing is not as good as knowing knowing is not as good as acting true learning continues until it is put into action

- 22 Xun Kuang, 3rd century BC.8

Instructors have always recognised the benefits of active learning. Before mass schooling, most people developed skills via apprenticeships and on-the-job training. Whether you wanted to be a farmer or horseman, craftworker or herbalist, you learned your trade by practising with a professional. No one believed you could master much of anything by sitting, listening, and taking notes. They understood that learning was a participatory activity.

So, how did schools become so passive?

In *The Schools Our Children Deserve*, Alfie Kohn notes that whole-class instruction isn't that old.<sup>9</sup> Prussian officials developed universal primary schools in the 19th century to educate the masses for a changing society. The new jobs of the Industrial Revolution required that more workers read and do basic mathematics. Only mass schooling could meet the need.

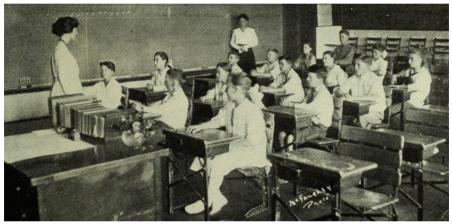
Unfortunately, these new industrial schools didn't adopt the participatory learning used in apprenticeships and small groups. Instead, they separated children into rows of desks, made lectures the primary instructional tool, focused most activities on the teacher, and tested memorised facts. Those decisions resulted from the pressure to get a lot of students through school as efficiently as possible. Teaching big classrooms felt more manageable if the students stayed quiet, sat still, and only did what they were told.

The Prussian system did have some improvements over previous eras, when only the privileged received formal education. But it was the product of Industrial Age mindsets: assembly lines, division of labour, top-down structure, and strict time management, all guided by a need for efficiency and mass production.<sup>10</sup> Elwood Cubberley, dean of Stanford's School of Education in 1916, praised the fact that schools had become much like industry:

10

Our schools are, in a sense, factories, in which the raw products (children) are to be shaped and fashioned into products to meet the various demands of life. The specifications for manufacturing come from the demands of twentieth-century civilisation, and it is the business of the school to build its pupils according to the specifications laid down.<sup>11</sup>

In the process Cubberley describes, the children's desires and motivations are unimportant. These students are 'raw products' to be built 'according to specification.' Such an educational model *requires* passive pupils because it assumes the system's desires take precedence over the learner.



Classroom in Kentucky, USA, 1917

In the same era, teacher and activist Margaret Haley blasted this industrial education, lamenting that teachers had become cogs in a machine.

'The increased tendency toward "factoryizing education" makes the teacher an automaton, a mere factory hand, whose duty it is to carry out mechanically and unquestioningly the ideas and orders of those clothed with the authority of position... The individuality of the teacher and her power of initiative are thus destroyed, and the result is courses of study, regulations, and equipment which the teachers have had no voice in selecting, which often have no relation to the children's needs, and which prove a hindrance instead of a help in teaching.<sup>212</sup>

How little has changed from Cubberly and Haley's time!

Yes, we have brought in some classroom technology and introduced more advanced techniques like differentiated learning. But have we created anything genuinely new? Teachers still see children as clay to be moulded, a product to be produced. Statistical goals based on test scores are deemed more critical than individual hopes and futures. Teachers feel more powerless than ever, constrained by national testing, statelevel curriculum requirements, and rigid administrator edicts. With a set curriculum, a dictated syllabus, a strict timetable, and politically derived materials, teachers must simply do as they are told to ensure a well-oiled machine.

The factory model may have enabled universal public schooling, but at what cost? When the lecture model hampers learners' ability to pay attention, it decreases their time on task and increases 'acting out.' Forcing everyone to follow along on the same page means that more advanced learners are bored with redundant material, while insufficiently prepared learners are confused and left behind. Teacher-centred rote instruction gives students little opportunity to engage in higher-order skills, such as critical thinking and creativity. Normed grades have led to stressful competition and make students reluctant to collaborate. And without participatory content, children are unlikely to understand how lessons are relevant to their lives.

Indeed, many studies confirm that passive learning techniques produce inferior results.<sup>13,14,15,16,17,18</sup> Those particular studies are relatively new, but their findings are not. As early as 1916, the famed psychologist and reformer John Dewey proclaimed that psychologists and researchers had universally condemned this industrial style of 'teaching by pouring in, learning by a passive absorption.'<sup>19</sup> Yet he had noted that it was already becoming entrenched in schools.

Looking back, passive education models may have been necessary in the 1850s, when universal schooling was in its infancy. But it is long past time to replace them with more comprehensive techniques. The experts of the early twentieth century knew there was a better way; will we finally implement their advice in the twenty-first?

## Teacher-centred Education Reduces Creativity and Initiative

What avail is it to win prescribed amounts of information about geography and history, to win the ability to read and write, if in the process the individual loses his own soul: loses his appreciation of things worthwhile; if he loses desire to apply what he has learned and, above all, loses the ability to extract meaning from his future experiences as they occur?<sup>20</sup>

12

- John Dewey, 1938

Though traditional methods are weak compared to active techniques, many learners eventually attain the fundamental skills. But at what cost? As you teach students the basics, they learn more than the 3 Rs: they learn *how* to learn. Unfortunately, children taught to read and do math via passive, teacher-directed lessons can end up stuck in those sedentary learning habits for the rest of their lives.



Second-Grade Class in Arizona, USA, circa 1953 Photo by Steve Leding

Creativity and initiative are essential attributes of any well-educated person. Great educators inspire students to learn more and try new things. But if all the child knows is 'be quiet and copy the teacher', then that's all they will bring to their future endeavours. How will they become creative writers if they've only written what the teacher has told them to write? Where will they find the inspiration to explore history if they've never been told they can ask questions of their own?

Infosys founder Narayana Murthy recently lamented that India's lack of inquiry-based learning has led to a shortage of innovation in the science and technology sectors. He suggested that if India wishes to advance in industry, its schools will have to change: The first component is to reorient our teaching in schools and colleges towards Socratic questioning and relating what they learn in the classroom to the real world around them rather than passing examinations by rote learning. Even our top institutions have become victims of this syndrome thanks to the tyranny of coaching classes.<sup>21</sup>

Mature, well-taught learners are curious, seek out problems, and form creative solutions. In contrast, passive learning limits students to following instructions, repeating after the teacher, and rushing through worksheets. Those mindless problem sets don't help them solve the math problems that arise in their daily lives. It may keep them from realising that math relates to their lives at all.

Even those who succeed in a faulty system can find it counterproductive in the long run. A New York University study of over 10,000 students showed that those with the highest grades had less desire to innovate.<sup>22</sup> This finding suggests that our institutions reward students who conform rather than students who come up with something new and different. Think of the Bollywood classic *Three Idiots* and how the institutional hierarchy treated Amir Khan's Rancho character, or what the system did to Robin Williams's nonconforming teacher in Hollywood's *Dead Poets Society*. We penalise those who want more from their school experience. We are systematically training our children to be mediocre.



Classroom in Chicago, USA. 1982 Photo by Margy Mcclain

Researchers have found that children start developing higher-order analytical skills in their first exposures to math and reading.<sup>23</sup> Thus, failing to foster these skills leads to deficits that will only accumulate in the future. Every step in a child's education builds on what came before it. If we hamstring young children by indoctrinating them in passive education, they will grow up with only passive skills to fall back on.

Is there a better way? Can there be something new?

Maria Montessori disrupted preschool norms in the 1900s when she realised that young children could learn independently, work for long periods, and focus on complex tasks. Our system, Accelerated Learning for All (ALfA), applies those insights throughout the schooling experience. Children have reason to hope that more can be expected of them.

### Children Lose Their Enthusiasm in Whole Class Instruction

Traditional education reduced the material of education largely to a diet of predigested materials... If the pupil left it instead of taking it, if he engaged in physical truancy, or in the mental truancy of mindwandering and finally built up an emotional revulsion against the subject, he was held to be at fault. No question was raised as to whether the trouble might not lie in the subject matter or in the way in which it was offered.<sup>24</sup>

- John Dewey, 1938

If there was just one bored schoolboy, if only one schoolgirl hated math, we might say the student was the problem. But when so many young people consider school a tedious experience and complain about the same subjects year after year, it's time to admit that the system deserves some blame.

Imagine if your workplace treated you the way traditional schools treat our children. How well would your attention hold if your employer forced you to listen to the same person speak day after day while you took notes and repeated what you were told? How important would you feel if thirty other people were regularly sitting and listening to the same material, forced to follow along at the same pace? Would you be happy working that job for twelve years? Would you ever begin to get bored?

If such an experience bores adults, our children's energetic young minds will struggle even more.

The issue is not only their minds but also their spirits. Why are we producing students who have no intrinsic desire to learn, who are only in the classroom because it is required, and whose happiest moment of the school day is the moment the bell rings to mark the end? Remember how excited those little children were on their first day of school! Yet how quickly that enthusiasm dies. There has to be a better way.

When we take a step back and look at the traditional model as a whole—the fragmentation and enforced passivity, the reliance on basics and postponement of thinking, the memorisation of facts and rehearsal of skills and the emphasis on transmitting right answers—the effects on the quality of students' learning aren't encouraging. But beyond achievement, we also have to consider how kids come to regard what they're doing, the impact on their continuing motivation to learn. Of course, not all students will react the same way to anything. But, as a rule, it's hard to deny that their excitement about learning is almost visibly drained away by the Old School approach.<sup>25</sup>

– Alfie Kohn, 1999

None of these insights are new. By the early 1900s, researchers like John Dewey and Jean Piaget had developed profound wisdom about how children acquire knowledge. They saw that the factory education of their time was not in line with best practices. In 1899, John Dewey wrote that the typical child had to 'leave his mind behind because there is no way to use it in the school.'<sup>26</sup>



High School classroom in New York, USA. 2009 Photo by US Department of Education

Researchers already knew what was wrong back then. And yet little has changed.

Our systems have been captured by inertia. Teachers use a traditional style because that is how they were taught. Parents are more comfortable with those methods because they're familiar from their own experiences. Administrators know that change is riskier than stability. Thus, the system never progresses—no matter how far children fall behind, no matter how bored they get, no matter how little school prepares them for life, no matter how many studies show the superiority of other methods, no matter how many experts tell us that there's a better option ... the inertia wins out.

The features of our children's classrooms that we find the most reassuring—largely because we recognise them from our own days in school—typically turn out to be those least likely to help students become effective and enthusiastic learners. That dilemma is at the heart of education reform.<sup>27</sup>

– Alfie Kohn, The Schools our Children Deserve

Many teachers do want to innovate. They work hard to decorate their classrooms in a relevant and inspiring manner, bring audiovisual elements into their lectures, and create engaging worksheets for their students to complete. Administrators search far and wide for new content programmes and high-tech classroom additions like smart boards and laptops. But so long as educators remain stuck in outdated worldviews, such innovations will be nothing more than window dressing. A 'printrich environment' or a 'technology-based curriculum' can't compensate for the shortcomings of a teacher-centred pedagogy, a passive class of students, and learning via rote memorisation.

We won't transform education by playing around at the edges. The most fantastic horse-and-buggy could never do a car's job. No matter how many options you add to a landline telephone, it won't be a smartphone. Even the greatest directors of silent movies would be astonished by what is required to create a twenty-first century film. If we want to bring education into the modern era, we can't remain satisfied with modified versions of the same old thing. We have to try something new.

# The Reading Wars and the Missing Peace

Reading is more than a skill; it is a ticket to freedom.

Reading is critical to understanding the world and one's place in it. Sceptics might argue that reading has lost its sheen in an age of videos and podcasts. Yet the written word remains the backbone of knowledge dissemination. Without the ability to interpret texts, an individual is rendered vulnerable in an increasingly complex society.

Reading is about more than decoding words on a page: it is about unlocking doors to education, employment and empowerment. From medical labels to road signs, bank forms to ballot papers—literacy can make the difference between poverty and plenty, confusion and clarity, and even between death and life.

Given how vital reading is to a flourishing life, you might assume that everyone would know how to read. Yet, this is not the case. We saw some shocking statistics in the previous chapter. For instance, 70 per cent of 10-year-olds in low- and middle-income countries can't read a simple text with comprehension. UNESCO reports that the world has some 770 million illiterate adults—about the same figure as in 1950.<sup>1</sup>

So, we may not have achieved universal literacy yet, but surely there should be consensus on how to get there? For something as foundational as learning to read, surely the experts would have long since figured out the optimal way? Surprisingly, the answer here, too, is 'no'.

### The Reading Wars

For decades, experts have argued about the best way to teach kids to read. Some prefer phonics, an approach that focuses on the relationship between letters and sounds. Others espouse whole language, which emphasizes word recognition from contextual cues. The debate has occasionally grown so heated that it has been called the 'Reading Wars'.<sup>2</sup> Classrooms are the battleground, with educators caught in the crossfire trying to discern the best strategies to lead their students towards literacy. Those favouring phonics assert the critical importance of a solid foundation. If students cannot sound out words, they argue, how can they progress to complex texts and passage comprehension? In their view, reading is a jigsaw puzzle, where every sound and syllable has its rightful place. 'First, focus on the individual trees, and only then will the overall forest gradually emerge into view', phonics advocates suggest.

In contrast, the whole-language camp argues that the human brain is wired to seek meaning. In this perspective, focusing too narrowly on individual sounds can disrupt the flow of language, inhibiting a child's instinctual drive to understand stories. Whole language proponents warn against missing the forest for the trees, suggesting that children will learn the nitty-gritty details of phonics once captivated by the love of reading.

	Phonics	Whole Language
Primary Focus	Understanding the relationship between letters and sounds.	Immersion in text and holistic understanding of language.
Instructional Method	Systematic and sequential teaching of phonetic rules.	Exposure to literature and deriving meaning through context.
Key Benefits	Improved word recognition and spelling. Effective for at-risk students.	Fosters a love of reading. Can be tailored to individual interests.
Potential Limitations	May not foster a genuine love for reading if too rigid.	May not provide enough structure for students who struggle to decode.

Table 1: The Reading Wars

So, what does the evidence suggest?

Many early studies indicated that structured phonics is more effective than whole language. In 2000, the National Reading Panel (US) found, 'The meta-analysis revealed that systematic phonics instruction produces significant benefits for kindergarten through 6th grade students and children having difficulty learning to read.'<sup>3</sup> John Hattie's widely cited meta-analysis, 'Visible Learning', gave phonics a substantial effect size of 0.7, compared to a near-negligible 0.06 for whole language.<sup>4</sup>

However, more recent reports suggest that the case for phonics is not so clear-cut. A 2020 meta-analysis (a study of 12 papers which themselves synthesised the findings of many studies) found no statistically significant difference between phonics and whole language.<sup>5</sup>

Unfortunately, neither phonics nor whole language has been adequate to attain universal literacy. Most systems with either technique take over a year to teach reading, even when successful. Indeed, the above study argues that 'the failure to obtain evidence in support of systematic phonics should not be taken as an argument in support of whole language and related methods, but rather, it highlights the need to explore alternative approaches to reading instruction.'

The name 'reading war' shouldn't distract us from the common ground. Even the most diehard proponents of phonics still want their kids to understand and enjoy what they are reading. Even a fanatic for whole language knows that it is essential that children be able to sound out and decode words. The debate concerns the best order and process for teaching reading rather than the desired goal. Phonics focuses on the *mechanics* of reading and believes *meaning* will follow, while whole language switches the emphasis.

As we wrote this chapter, multiple recent articles on the reading wars were published on major news sites.<sup>6</sup> Some new strategies aim for a pedagogy that incorporates the strengths of both phonics and whole language. One technique aptly called 'Balanced Approach'<sup>7</sup> uses a variety of teaching methods, including read-aloud, guided reading, shared reading and close reading.<sup>8</sup>

Another method recently gaining traction is called 'Science of Reading', which draws upon the latest research on how children learn to read to emphasise five pillars: phonemic awareness, phonics, fluency, comprehension and vocabulary.<sup>9</sup>

# Is There an Alternative?

Amidst all the debate, we must not forget that hundreds of millions of children and adults worldwide cannot read at this very moment. For them, this discussion is more than a quibble between academics. For their sake, it is crucial to develop a way of learning to read that addresses their felt needs as soon as possible.

Is there a missing pedagogy that could combine the best of both phonics and whole language, bringing peace to the reading wars? Is there a way for children to learn to read in months, not years?

Accelerating Learning for All (ALfA) is a fresh attempt to help people learn to read in a way that is both effective and enjoyable, both methodical and meaningful.

The guiding principles of ALfA are:

• Known to Unknown. ALfA draws from learners' existing oral knowledge of the environment. This approach connects learning to

the brain's neural framework, allowing learners to incorporate new learning quickly and holistically with little instructor intervention.

- **Concrete to Abstract.** Focusing on real-world images and sounds before introducing abstract symbols ensures that students can connect symbols to their actual meaning from the beginning, rather than memorising meaningless letters first and figuring out what they mean later.
- Asking Questions. Learners ask each other questions and respond. They also make up their own questions based on texts. This develops a better understanding of the text and also develops critical thinking.
- **Peer Learning.** In ALfA, children work in pairs, taking turns to read words and sentences. These interactions speed up learning, and mean the entire class remains engaged.

Of course, none of these elements is entirely new. The practices of scaffolding from existing knowledge, asking questions to elicit thought, and learning from interaction with other students are all parts of ancient education systems. But ALfA combines these ingredients with some of the best elements of phonics and whole language to create a unique programme.

The stories of some hypothetical learners might help. Consider three children—Abdul, Babli and Chandni—from the same neighbourhood and similar family backgrounds. Let's see how their journeys unfold as they attend three schools with widely different approaches.

# First Steps

It's Abdul's first day. He feels excited but slightly nervous as he walks through the school gates.

The teacher points to her alphabet chart and chants 'a se anaar' (the equivalent of 'a for apple'). The whole class repeats, 'a se anaar'. The subsequent letters follow: 'aa se aam', 'i se imli' and 'ee se eekh'. Abdul enjoys it initially—it is a sing-along song. After a few weeks, he has memorised the whole alphabet. He feels proud of his achievement, and his parents are glowing.

But one day, a visitor came to the class. Instead of asking children to chant the whole alphabet, he points at a random letter and asks students what it is. Abdul quickly recites the alphabet up to that letter to jog his memory. Then, the guest writes another character on the board. This time, without the order of the alphabet chart, Abdul is lost. This version of *phonics*, which emphasises the early memorisation of the alphabet, is prevalent in India and many other nations. It is problematic at multiple levels: the alphabet is boring, abstract, and doesn't have meaning or connection to their life. Worse, the 'repeat after me' method means that children need not even look at the letter—the key to actual reading. Their eyes and minds wander as their ears and mouths do all the work.

Let's see how a different student, Babli, is doing in her school.

The teacher starts by reading a story out loud from the textbook. Babli opens her reader and browses through the pictures. She understands the story from listening to the teacher. She can see the funny-looking symbols on the page. But she has little idea how the symbols relate to the story. Babli sees that some other children—perhaps those whose parents have been practising reading with her—are following along in their books. But both her parents are uneducated, and she can't recognise a single letter.

In this classroom, the *whole language approach* is failing Babli. Without the ability to decode letters and blend them into words, she can't develop into a fluent reader and is left passively listening to the stories others read to her.

Now let's find out how Chandni is doing in her classroom.

Soon after Chandni enters the class, the teacher calls her forward and asks her to identify a picture. Chandni sees that it's a batakh (duck). Now the teacher asks her to repeat the first sound in 'batakh', while she points to a funny squiggly shape beneath the image. It takes Chandni a while to work it out, but she gets there. Ba-takh... Ba-takh ... the first sound is /b/!



They repeat the process with a picture of sapera (snake charmer), and Chandni works out that its first sound is /s/. Now the teacher asks her to join the two sounds: /b/ and /s/. Chandni has never done this before, but after a few tries, she gets it: '/b/-/s/...../b/-/s/...../b/-/s/.....bas!' Only three minutes into class, Chandi has already read her first word.

In the *ALfA* process, children learn to decode letters through picture prompts. Like phonics, ALfA helps children decode. But rather than being told what the sound is, they work it out themselves. Like whole language,

ALfA encourages children to think about the meaning of words and sentences. But rather than guessing words from the context, the children blend the sounds to form meaningful words.

If this sounds surprisingly simple and elegant, you're not alone. When we started trying this approach in some of Lucknow's slums, our learners (both children and adults) were astonished and delighted that they could read words with meaning from the first lesson, without needing to memorise the whole alphabet or have someone else read to them.

But how do you convert a one-on-one literacy programme to something that can work in a school setting, where classes often have 40 or more kids and diverse learning levels? Let's go back to Chandni's classroom:

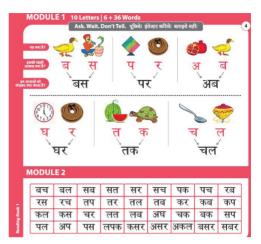
The rest of the class has been carefully watching how Chandni worked out how to read the word. After a few demonstrations with other children, the teacher tells them it is time to start reading in pairs. First, one child asks the questions: 'What is this picture?', then 'What is its first sound?' and, later, 'What do these sounds join together to make? Each time, the other child in the pair responds with the answer. Then the pair swaps roles for the next word.

Chandni is delighted when they reached the end of the first lesson. She has not just learned to read a few words herself, but was also able to help another boy read. In this way, it takes only a handful of lessons before most pairs can decode the ten letters introduced in Lesson 1 and blend them to form a meaningful sentence, 'Bas par ab ghar tak chal' (Go home now on a bus).

The paired learning process can work beautifully. But what if some pairs don't make progress? What if some kids rely on the pictures rather than learning to recognise the letters independently?

As Chandni's class progresses, the teacher unobtrusively observes the pairs at work. She notices that some struggle to decipher the picture's first sound (decoding). Others cannot join the letters to form a word (blending). But rather than rushing in to help, she encourages such pairs to seek help from their neighbouring pairs.

Meanwhile, some pairs have already moved on from the first module. Module 2 is a set of new words made up of the letters introduced in Module 1, with a significant difference: there is now no picture prompt above the letter. Chandni gets stuck at first. But then her partner prompts her to look at the top of the page and find the same character in Module 1. After carefully comparing the squiggles that denote the letter  $\overline{a}$  (ch), she finds it and is reminded of the sound by the picture chamach, /ch/. A few words later, taking turns to read a word each with her pair, Chandni again encounters the letter  $\overline{a}$ . This time, she



finds it quicker in Module 1. By the third time, she remembers that this symbol makes the sound /ch/ and doesn't need to look up anymore.

We can see how the ALfA process kickstarts Chandni's journey towards literacy. Within just a day or two, she has:

- Understood how to use a word's first sound to represent a letter
- Blended two sounds to form words.
- Learned to identify ten specific letters.
- Joined these letters to form six words, which together make up a meaningful sentence.
- Joined the same letters in different combinations to make 36 more words.
- Increased her interpersonal confidence as she asked questions and responded to her partner.

# Feedback and Homework: Tests vs. Games

It is now a few months into the school year. Let's check again on how our children are doing in their classrooms.

Abdul and his classmates are preparing for a test. Their teacher writes some answers on the board for them to copy. Abdul has lovely handwriting, neatly mimicking his teacher's style. He has memorised several of the poems from his textbook and can recite them wordperfect. There's only one problem: He can't actually read the poems' words, nor the answers he's copying into his notebook. All he knows to say is that which he's memorised by heart. When the test comes, Abdul and many of his classmates do poorly. As a result, the teacher

# gives Abdul and his classmates more homework—copying sentences ten times over in their notebooks—hoping this will fix things.

All learning systems have some way for teachers and students to gain feedback. Unfortunately, the dominant approach—periodic tests is stressful, time-consuming and often counterproductive.' Rather than leading to introspection or reform, low test scores are usually taken to show the need for a 'back to the basics' approach of more memorisation and more homework.

In the ALfA classroom, feedback is instead low-stakes, specific, instantaneous, and calls for immediate correction. Peer learning enables a 'control of error' throughout the process as children help each other, including catching mistakes.

As Chandni and her classmates work their way through the ALfA book, there are patches that they struggle with. Chandni doesn't recognise the picture 'kshatriya', and her teacher suggests she ask three other kids first, helping her learn to be resourceful and take the initiative. Thankfully, the third kid she asked knew the answer. Chandi mispronounces some words, but most of the time, she notices her error and 'auto-corrects' to the correct pronunciation once she realises what word it is. Other times, her partner spots the mistake and points it out immediately. But they don't just give negative feedback; Chandni and her partner often affirm each other with a 'well done', high five, or just a smile.

The teacher wants to keep tabs on the learning progress, so she occasionally invites the class to play a game using picture and letter cards. These are a couple of Chandni's favourites:

\* Matching Game. Half the class is given picture cards, and the other half is given corresponding letter cards. On the teacher's 'get set, go', everyone tries to find their partner with the corresponding card. (The teacher sometimes uses this at the start of the day to make new pairs.)



Primary school children enjoy the matching game. Lucknow, April 2023

<sup>\*</sup> See Chapter 7 for a more detailed analysis.

\* Word-building Game. Everyone receives a letter card, and children must find a partner whose letter can be matched to theirs to form a word.

Once Chandni has learned to read, she picks up writing quickly. Rather than being given sentences to copy for homework, she is given a few letters to make as many words as possible. This homework leads to a partner activity—she and her pair write words at home and check them the following day, learning new words from each other. Sometimes, she does this at home with her siblings or friends—repeating the learning process to recognise the first sounds of different household objects.

### **Building Fluency and Holistic Literacy**

Let's fast forward several years and check our children's progress.

Abdul is now in Grade 5. He is working hard and has finally learned all his letters, successfully piecing them together to form words. He can read, but haltingly. Rather than asking his own questions based on the stories he reads, he tries to figure out which questions will come on the exam and looks up their answers. He hopes that if he works hard to memorise those answers, he will be able to impress his teacher and parents. This, it seems to Abdul, is the primary purpose of study—to satisfy others' expectations, not one's own curiosity.

Literacy is much more than the ability to decode and blend sounds. It's more than the ability to understand words and sentences. Literacy involves the love of language, confidence in interacting with and interpreting texts, learning to speak with a rich vocabulary, and making texts of one's own.

In another classroom, things are remarkably different.

Chandni learned to read fluently long ago and has now finished most books in the school library. When she and her pair read stories from the textbook, they don't just answer the questions; they make up more questions to ask each other. Chandni likes to write her own stories and share them with her friends. If asked to write an essay, she chooses her topic and writes in her own words. For her, writing is a collaborative process which gives rise to a rich representation of ideas.

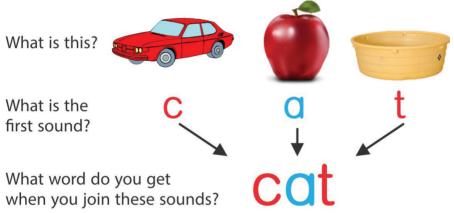
# Cognitive Benefits of the ALfA Method

Let's examine the cognitive benefits of the ALfA approach in more detail.

First, the programme makes constant connections to the learner's preexisting knowledge. Learning is a constructive process. The brain

incorporates new information by connecting neurons, not dumping things into an empty box.<sup>10</sup> Rather than introduce the alphabet in the abstract, we employ objects, words, and ideas the child knows, then connect the new letters to the concepts already in their heads.

Second, we moved from 'concrete to abstract' to scaffold learning with a manageable cognitive load. The learner connects the concrete image of a 'bat' to the spoken word /bat/, then isolates the sound /b/ that /bat/ starts with. They then link the sound /b/ to the visible symbol 'b'. (Not ever using the name 'b'.) After two more picture-to-sound-to-letter sequences, the three letters are combined to decode the written word 'bag'. This sequence ensures the brain makes explicit connections at every step, enhancing comprehension and retention.



Third, students teach themselves and each other, not relying on a teacher to tell them the answers. Since they recognise the picture, know the spoken word, say the sound that starts the word, and see the letter displayed alongside its associated sound, all necessary information is present. The learners just need to put it together. This self-guided and peer-driven learning is far more cognitively active than listening to someone else talk.

Fourth, every child in the classroom is on task throughout the lesson. Since both partners must pay attention for the lesson to progress, there isn't room for anyone to check out mentally. Unlike the teacher-centred model, where only a tiny proportion of students are thinking with purpose at any one time, here we have a class full of student pairs thinking and working hard simultaneously.

Fifth, the learner gets immediate feedback. In a traditional class, students don't get feedback until they're tested. However, in the ALfA system, the learner receives a response from their learning partner after

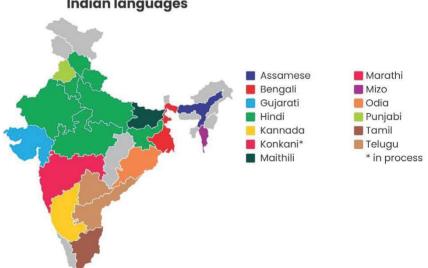
every word. That feedback speeds up the learning process and ensures children aren't left confused for days. Unlike the conventional examination system, where the teacher only discovers children's errors much later, we've designed the ALfA system to enable early intervention.

Finally, the whole process moves at the learners' pace. If the day ends with the learner not showing proficiency in the box words (Module 2), they repeat it the following day. There's no rush to move forward at someone else's pace-each child controls their progress. When students achieve clarity and decode that lesson's words competently, they proceed to the next task. On any given day, different pairs can be working on different modules.

### ALfA in Different Languages

We first developed the ALfA approach for Hindi reading, but it is now available in thirteen Indian languages and another twenty international languages. You might wonder how a single approach fits diverse languages with their scripts, vocabulary, grammar, and syntax. The best way to answer such questions is by checking out the ALfA books in your mother tongue. Still, for the purposes of this section, we'll discuss some of the similarities and differences of ALfA in three languages: English, Hindi and Arabic.

The core of the ALfA process is always the same regardless of the language: known to unknown, asking questions, and peer learning. Other principles of ALfA have been worked out in different ways in different



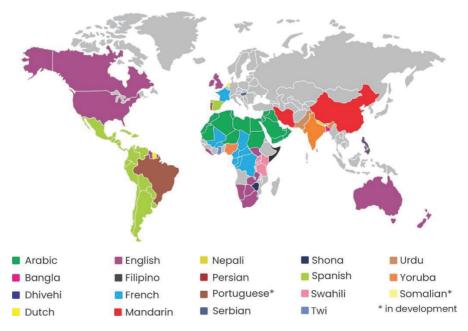
#### Indian languages

languages. For instance, take the notion of scaffolding from simple to complex. In Hindi, this means that learners start learning words without matras and only later go on to learn one matra at a time. Similarly, in Arabic, the latter half of the programme introduces diacritical marks – little symbols which change the vowel sound as part of a syllable.

In contrast, English doesn't have modifiers but deals with its unique complexities. Our English Book 1 teaches only each letter's most common phonic sound. For instance, 'c' always makes the sound /k/ in Book 1, and 'g' the sound /g/. Book 2 introduces the less familiar sounds that letters make, as well as digraphs (*ch-*, *sh-*, etc.) and blends (*-nd*, *fl-*, etc.). ALfA materials in all languages scaffold from simple words to more complex words, sentences, and passages, but this looks different from one language to another.



# ALfA International Languages



If the ALfA programme is not yet available in your mother tongue, you're welcome to serve your community by helping to create it. Our vision is for all children to have access to swift, high-quality literacy programmes, regardless of their mother tongue. Like-minded educators like you can

turn this dream into a reality. The replication process is more creative than a simple translation, since each language has unique features. If you have a passion for literacy and want to help replicate the ALfA materials in your mother tongue, contact us today via our website (www.dignityeducation.org, scan this QR code).



### Learning a Second Language

Learning to read in your mother tongue is more straightforward than learning to read a second language, and the consensus is that children should receive at least the first few years of education in their first language.<sup>11</sup> Literacy in the mother tongue provides a strong foundation to acquire more languages, even from a young age.

Research shows numerous benefits from multilingualism—from better decision-making and reduced biases to slower cognitive decline and greater plasticity.<sup>12</sup> But can the ALfA programme help people learn to read a second (or third or fourth) language? At the outset, it may seem that the ALfA programme is ill-suited for foreign language learning. After all, the foundation of moving from a known picture to an unknown letter only works if the word for the image is known!

However, evidence from the field suggests that ALfA can still be effective for children learning second languages. In our recent 'Fast Track to FLN' summer camp, we found that young kids substantially improved their English reading in as little as fifteen days.<sup>13</sup> How does the ALfA programme work in this context?

- 1. Most of our pictures are simple words that even second or thirdlanguage speakers know. Many Indian schoolchildren speak little English but still recognise and name pictures like 'car', 'apple' and 'pen'. Similarly, we have used the ALfA Hindi programme for Assamese children who migrated with their families to the Hindi belt of North India and found they have no problem recognising simple pictures like 'batakh', 'patang' and 'ghari'. Children who don't recognise the requisite pictures can learn them through quiz games with picture cards.
- 2. Although ALfA is, at the surface, a programme that focuses heavily on reading, the paired learning process also helps learners develop their

oral language. Children's listening and speaking skills grow parallel with their reading by asking each other questions.

3. Insofar as learning to read is like cracking a symbolic code, children who learn to read in their mother tongue using the ALfA programme often improve their second-language reading swiftly with ALfA, as they are already familiar with the logical scaffolding.

# Adult Learning

Children exhibit more plasticity in their brains than adults, making it easier for kids to form the neural connections crucial to learning new skills such as reading.<sup>14</sup> This cognitive disadvantage for adults is compounded by social factors such as shame in admitting one's illiteracy, as well as gender expectations. And making mistakes while trying to read a simple text in front of others can be deeply embarrassing. We've found that many adults accept defeatist notions such as 'time has passed me by' or 'I'll never be able to learn'.

In this challenging context, the ALfA pedagogy shines even brighter:

- While many conventional literacy programmes start with the alphabet or with phonic drills, ALfA employs words with meaning from the very first lesson. This approach is motivating for people who might otherwise give up early.
- The paired learning context reduces embarrassment compared to reading in front of a large group.
- While adult learners may have lower plasticity than kids, they tend to have more patience and discipline. The self-paced and self-driven structure of ALfA appeals to them. One of our first adult learners demanded to take the book home so he could keep working on it with his wife!

The ALfA process has enjoyed success in several adult literacy programmes. Chapter 10 tells the story of Kurauni village, where hundreds of women learned to read Hindi in a few months using the ALfA books. And in Chapter 11, you'll see how Literacy Chicago has taken up the ALfA English materials to help American adults improve their literacy skills.

You've now read how ALfA enables children and adults alike to learn how to read and write. But acquiring complete FLN skills requires more than literacy – the 'N' in 'FLN' stands for 'Numeracy', a need just as crucial in the modern world and perhaps even more lacking. Our next chapter turns to the question of arithmetic.