

# DISRUPTIVE LITERACY

## A ROADMAP FOR URGENT GLOBAL ACTION

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## CHAPTER 1

# The Literacy Octopus

## *One Measure, Multiple Benefits*

*Being a non-literate member of a community has innumerable disadvantages, including the inability to:*

- *Carry out basic financial transactions such as compare the quality and quantity of goods purchased against the price charged*
- *Fill out forms to apply for jobs, loans, services, etc.*
- *Comprehend public circulars and articles in the news media*
- *Use conventional and electronic mail to communicate and conduct business*
- *Make use of the internet and other technology to improve one's life and professions*
- *Comprehend directions and safety directives on the street, on medicines, etc.*
- *Help children with their education; be aware of one's basic rights and responsibilities as a citizen of India*
- *Appreciate works of literature*
- *Pursue employment in medium- or high-productivity sectors that require literacy*

– **National Education Policy (India)**, 2020, Chapter 21.2

*In my view the imposing tower of misery which today rests on the heart of India has its sole foundation in the absence of education.*

– **Rabindranath Tagore**

Indian leader, poet and Nobel laureate

If you are reading this line, you are, by definition, literate. In all probability, your entire circle of friends and family is literate.

You, like us, live in the Literate World.

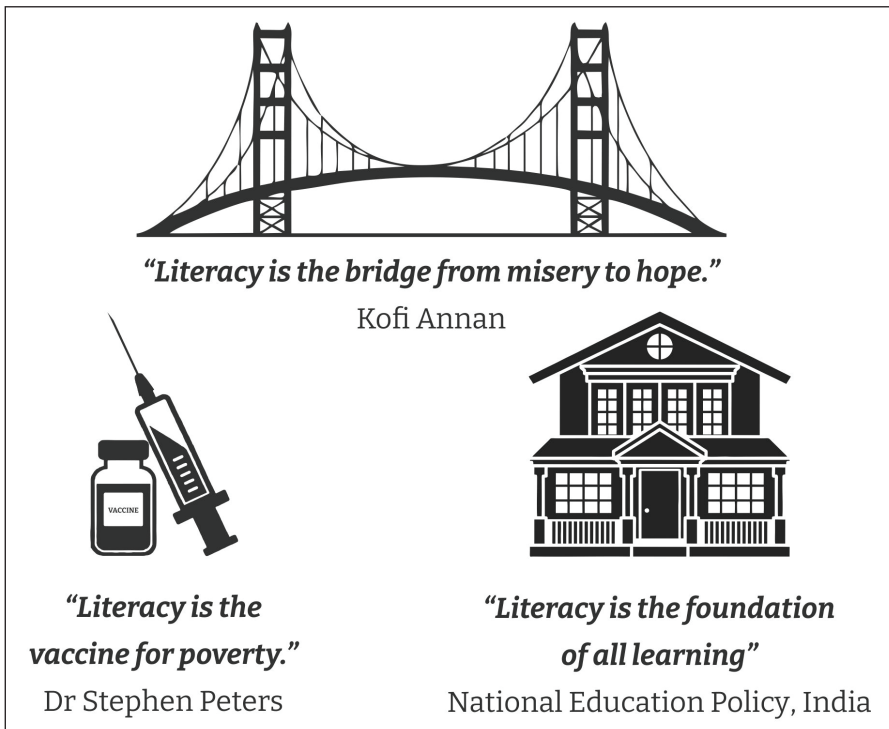
We in the Literate World use our ability to read and write and manipulate numbers all the time, often taking it for granted. From the

market to the meeting room, from hospitals to home, our use of the written word and numeral is as ubiquitous, essential and unnoticed as the air we breathe.

Yet have you ever imagined what it is like to be illiterate? To not be able to fill in a form without asking for help? To not be able to help your child with their homework? To not be able to understand your doctor's prescription? To fear that you might be cheated, just because of your inability to read a form and sign your own name?

There's another world out there: the Illiterate World. Its citizens walk the same streets that we do. They are working in low-paid jobs, minding our children, cleaning our buildings and driving our vehicles. But have we ever taken the time to realise that their lives are very different to ours; and that much of this difference has its root in the (in)ability to read and write?

This book is all about how we can rapidly achieve universal literacy. The current chapter asks why literacy matters in the first place, examining how it shapes our lives. The next two chapters examine why so many children and adults are unable to read and write.



**Figure 1.1:** Literacy is Central to Human Wellbeing and Development

A child cannot reach her full potential without the foundation of literacy. In the same way, without the foundation of universal literacy, a nation cannot reach its social and economic potential.

Literacy is important in and of itself: reading and writing are enjoyable and enlightening. But literacy also affects a host of critical life issues. The ability to read and write has a significant impact on our self-confidence, health outcomes, income and civic participation.

Literacy is like a key that opens not one but many doors of opportunity. Literacy is like an octopus, whose tentacles reach every corner of our social, civic, familial and economic lives. Here, we look into the significant impact of literacy on eight crucial areas of life.

### **Income**

‘100 minus 35 leaves 65, not 75, auntie,’ we explain, handing back the extra 10-rupee note. The shopkeeper grins sheepishly, embarrassed by her error in giving back too much change.

There is a strong positive correlation between literacy and income level.<sup>4</sup> This is true both at the individual level (literate people earn more) and the national level (countries with higher literacy rates tend to have higher per capita Gross Domestic Product [GDP]).<sup>5</sup>

Literate people tend to be more confident, and literacy opens opportunities for them to work in the formal economy, and thus have greater job security. For people who remain in the informal sector, like the shopkeeper above, basic literacy and numeracy skills are crucial to succeed in their daily business.

### **Health**

‘*Hamara form bhar do, please, bhaiya.*’ (Please can you fill this form for me, brother.)

We are standing in the bustling ground floor of a government hospital in Lucknow, the capital of Uttar Pradesh (India’s most populous state). As we fill out one registration form, several other patients come to ask us if we can help them complete their forms as well.

In another instance, I (Tom) was admitted in a COVID-19 ward along with some 40 other patients. The doctors asked patients to regularly check their pulse, blood pressure and oxygen saturation levels, and report via WhatsApp. It quickly became apparent that many of my fellow ward-mates couldn’t read and understand numbers on the thermometer, forget about being digitally literate!

### *Diving Deeper: What is Literacy?*

Literacy is sometimes regarded as just being able to sign a name. However, it involves much more than that. ‘Literacy’ is a term that is often used to connote foundational literacy and numeracy (FLN), which means the ability to read and write with comprehension in at least one language, and count and perform simple mathematical operations. Literacy further involves the confidence to use these skills in everyday life. Literacy is not binary but rather a continuum. Some people are more literate than others, that is, better able to use reading, writing and arithmetic in their everyday lives.<sup>6</sup> Sadly, many people who are counted as ‘literate’ in government surveys can neither read with comprehension nor write confidently. Hence, they are not functionally literate.

Numerous studies have demonstrated that literacy has a positive impact on public health. This is because reading increases the ability of people to engage well with the healthcare system, from the very basics—being able to read a medicine label—to life-and-death decisions, like going to a proper hospital before it is too late. Literacy has a particularly powerful effect on lowering infant mortality. A Cambridge University study of Indian districts found that an increase of just 4 percentage points in literacy had the same effect size in lowering infant mortality as a 25 per cent reduction in the poverty rate.<sup>7</sup>

In recent months, the COVID-19 crisis has once again highlighted the role of literacy in public health. How are people who are illiterate supposed to use Arogya Setu (India’s contact tracing app) or book themselves a vaccination slot?

### **Population Growth Rate**

*Hum do, hamaare do!* (Two of us, two of ours!)

The slogan is memorable from family planning campaigns over the years in India. While access to family planning services is key, arguably the best contraceptive has nothing to do with pills.

There is a strong body of evidence showing that growth in literacy rates leads to a decline in fertility rates, thereby curtailing the population growth rate.<sup>8</sup> This is primarily through young women becoming more empowered within the family to decide when to have children and how many children to have. Literacy also enables couples to better understand the different contraceptive options available and choose what suits them best.

### *Diving Deeper: Literacy Inequalities Around the World*

Low levels of literacy are a problem in many low-and-middle-income countries (LMICs) worldwide. Much of Africa and South Asia are illiteracy hotspots. Further, even some high-income countries struggle with low literacy skills.

While steady progress has been made, the world still has some 770 million illiterate adults.<sup>9</sup> Another 617 million children and adolescents (aged 6–14) lack basic reading and maths proficiency.<sup>10</sup> Globally, 260 million children are out of school, and 53 per cent of 10-year-olds in LMICs still lack basic reading skills.<sup>11</sup> According to UNICEF, since the COVID pandemic this figure has worsened drastically—now some 70% of children lack basic literacy!<sup>12</sup>

This book has global scope, relevant for many countries worldwide. While we use many international examples, our focus is naturally on India where it is more deeply informed by our experiences. India has by far the largest population of illiterate adults globally and a huge learning crisis in its schools. Some of India's districts have as low literacy rates as almost anywhere on earth: for instance, Alirajpur (Madhya Pradesh) has an adult literacy rate of just 36 per cent. In India, half of Grade 5 students can't read a Grade 2 text in their mother-tongue.

**Table 1.1:** Comparison of India and the World on Literacy Metrics

<i>Demographic</i>	<i>Metric</i>	<i>India</i>	<i>World</i>
Adults	Literacy (%)	74% <sup>13</sup>	86% <sup>14</sup>
Adults	Number of Illiterates (millions)	252 <sup>15</sup>	773 <sup>16</sup>
Primary School age (6–11 y.o)	Number of Illiterates (millions)	50+ <sup>17</sup>	387 <sup>18</sup>
School age (6–17 y.o)	Out-of-School Children (millions)	32 <sup>19</sup>	260 <sup>20</sup>

### **Civic Participation**

People who are illiterate struggle to engage meaningfully as citizens in the civic process. It is hard to make informed choices if you cannot read newspapers and access written information. When large swathes of the population are illiterate, democracy suffers. In contrast, literate people are generally more able to have informed engagement in civic and public life.<sup>21</sup>

Democracy is much more robust when people can read and analyse information for themselves. Recent research has shown that literacy rate is strongly correlated with the desire to be governed democratically.<sup>22</sup>



Throughout history, democracy has advanced when the common people are empowered to scrutinise the government's decisions. Many democracies have, at least on paper, strong systems to ensure transparency and hold the government accountable. For instance, India's Right to Information Act enables citizens to ask pertinent questions of any government official and mandates a response within a month. Literate citizens are much more able to use such mechanisms to ensure their rights are upheld.

### **Access to Government Services**

Literate people are generally more aware of their rights and more capable of accessing them. Many countries have numerous schemes to help the poor. In India, this ranges from ration cards (subsidised food grains) to *Aayushman Bharat* (health insurance) to *Awas Yojna* (public housing). Often, the poor cannot access these schemes directly and instead are dependent on middlemen, who charge substantial fees. Low literacy skills and lack of awareness are the main culprits.<sup>23</sup>

In some of the slums where we teach, we have been asked by many families to assist them in accessing government schemes. Some of the people get in a real tangle with faults in their paperwork, for instance, due to their name being spelt differently on their various documents. Those who can read are generally better able to manage their documentation.

### **Social Equality**

'My husband was so amazed when I signed my name rather than using a thumb impression,' Mona excitedly told her friends. She had recently learned to read and write in our Global Dream ALfA Program (for details on Global Dream, see Part D).

Equalising access to information is a great force for social equality. Historically, there have been enormous gender, geographical and caste differentials in literacy rates. This entrenches social inequality. Learning to read can be an important step on a disadvantaged person's journey of empowerment, both by having more voice within the family and by being more able to engage with broader society. The struggle for universal literacy goes hand-in-hand with the struggle for gender and racial equality.

### **Self-confidence in Social Interactions**

We once sat in the home of a young woman who had expressed a desire to learn to read. Before beginning, she poured out her heart. 'I'm afraid even

to leave the slum. What if I want to come home, but I don't know which bus to get on? I cannot even read where the buses are going; I will just be lost in the city! I have never gone anywhere.'

This woman was 22 years old, yet was terrified of taking public transportation. Lack of literacy often leads to lack of confidence. Added up over millions of individuals, a literate nation is a confident nation.

There is a sense of shame in using a thumb impression. People who are illiterate often have to depend on strangers to read and fill forms. They live in fear of being cheated. In contrast, literate people are generally more able to interact with the world confidently and are less fearful of others cheating them.<sup>24</sup> And that confidence in daily interactions impacts their aspirations. It shapes what they can achieve for themselves and their families.

### **Children's Future**

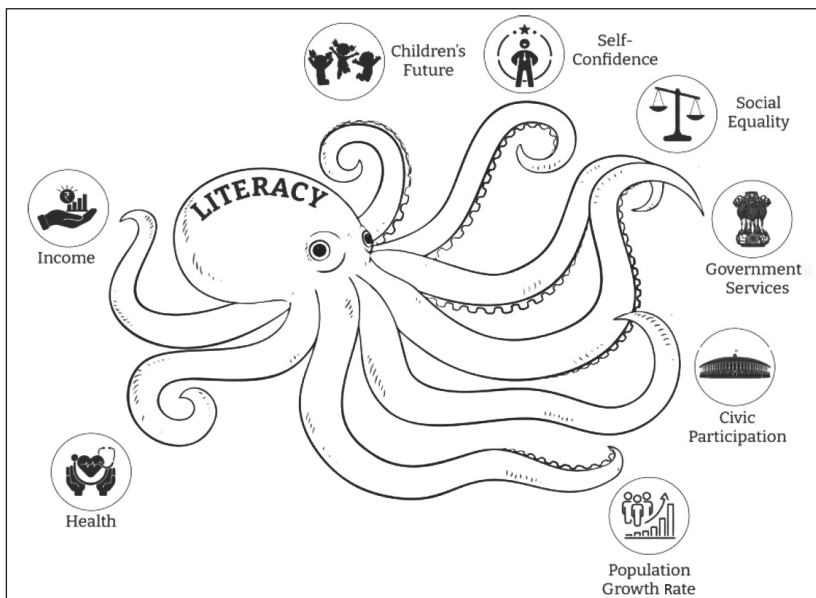
In 2015, our NGO conducted a large-scale literacy survey of Lucknow, the capital of Uttar Pradesh.<sup>25</sup> The survey directly tested the literacy of some 1.5 million people, finding a strong correlation between adult and child literacy rates at the local level. Literate parents are more likely to ensure their children learn how to read, and these literate children, in turn, grow to become literate parents who value education.

Indeed, it is our conviction that literacy holds immense benefits for adults and children alike which led us to write this book. Often adult literacy is considered an entirely separate topic to children's education, but we believe that these are as closely linked as two sides of the same coin.

We cannot solve the problem of illiteracy for adults without addressing the same for children. With the COVID-19 pandemic forcing millions of children to drop out of school, the pool of illiterate adults will swell unless immediate action is taken to bring the children back into the educational fold.

Conversely, it is difficult to resolve the crisis of child illiteracy without addressing adults' literacy. Community and parental involvement are crucial to ensuring children are enrolled and attending school.<sup>26</sup>

Taking these eight factors together (Figure 1.2, overleaf), you can see how increasing literacy rates is one of the key drivers helping populations become healthier, wealthier and more socially and civically engaged. To bring it back to a personal level, consider the stories of three people at different stages of life and see what practical differences literacy is making for them.



**Figure 1.2:** Literacy as an Octopus: How Reading and Writing Affects Many Spheres of Life

### *Stories Behind the Statistics: A Tale of Three Literacy Learners*

#### *Believing in a Child's Potential*

With a father who drank and a mother with various health issues, education was not prioritised for Shaniya or her siblings. At nine years of age, she had never been to school, but had a passion for learning and was keen to join our literacy classes. After just 11 hours of instructional time (44 sessions of approximately 15 minutes each), spread over three months, she went from total illiteracy to being able to read simple stories. Impressed with her rapid progress, Shaniya's mum managed to enrol her in school. Three years on, Shaniya is a confident young woman in Grade 6.

#### *The Boy Who Liked Maths*

Humaid was a 14-year-old when we first met him. He was already semi-literate, having studied for a few years in a madrasa (Islamic education centre). However, he struggled with several *matras*<sup>[1]</sup> and was a very slow reader. He had recently moved to the city with his older brother

<sup>[1]</sup> In Hindi and many Indian languages, a *matra* is the symbol for a vowel when it is preceded by a consonant.

and was keen to resume his education. After brushing up his matra skills for several weeks, we began reading newspapers together. We quickly discovered that his real passion was maths. Together, we swept through basic operations before moving on to topics like geometry and algebra. Eventually, we were able to help Humaid enrol in Grade 10 National Institute of Open Schooling. Greater literacy and numeracy skills have also opened up employment opportunities, and he has since worked as a bus conductor and accounts assistant—jobs he wouldn't otherwise have accessed.

### *The Shopkeeper Who Learned to Read*

Reshma, 35, helped her husband run a shop by the side of the road in one of the slums where we teach. Reshma heard about our class, and kept sending us messages via her nephew. Eventually, we visited her shop and ran a first lesson in the cramped space. From her warm smile and insistence on getting down to work, it was apparent how determined Reshma was to learn how to read. Reshma and her husband would often order chai for us, and we would all drink tea together as she worked through the Global Dream ALfA Program. In time, we progressed to numeracy, which was highly relevant for her job. The self-confidence Reshma has gained, and her practical skills, are of great benefit to her and her family. It was a joy for us, too: we felt a helper's high to see her smile!

Those are the stories of just three people who learned to read and write through the Global Dream Program. What about the hundreds of millions who still cannot? The next two chapters consider the sobering question: given how beneficial literacy is, why are so many children and adults still unable to read and write?

## **Reflection Questions**

1. This chapter lists eight crucial areas linked to literacy: income, health, population growth rates, civic participation, access to government services, social equality, self-confidence, and impact on children. Which of these areas are most important to you as an individual? Are any of these factors surprising to you?
2. Think through a typical day in your life, from your preparation in the morning to your work to your leisure time. How often do you find reading, writing or arithmetic essential in your everyday life?

## CHAPTER 2

# The Illiteracy Time Bomb

## *Why can't the Children Read?*

*There can be no keener revelation of a society's soul than the way it treats its children.*

– Nelson Mandela

*The global disruption to education caused by the COVID-19 pandemic constitutes the worst education crisis on record.*

– UNESCO, UNICEF, World Bank combined report  
'The State of Global Education Crisis'

*The ability to read and write, and perform basic operations with numbers, is a necessary foundation and an indispensable prerequisite for all future schooling and lifelong learning. However, various governmental as well as non-governmental surveys indicate that we are in a learning crisis: a large proportion of students currently in elementary school—estimated to be over five crores (50 million) in number—have not attained foundational literacy and numeracy.*

– National Education Policy (India), 2020, Chapter 2.1

'A, la, ga ... ala-ga ... alag'

After a little struggle, the young teenager was excited to read a three-letter word in his very first session with us. We were conducting a diagnostic test to determine his reading level before starting the lessons. He knew most of his letters but struggled to join them into words.

'Did you go to school at all when you were younger?', we inquire.

Shadab is taken aback. 'I am in school now,' he responds. 'Grade 6. I got back from school an hour ago.'

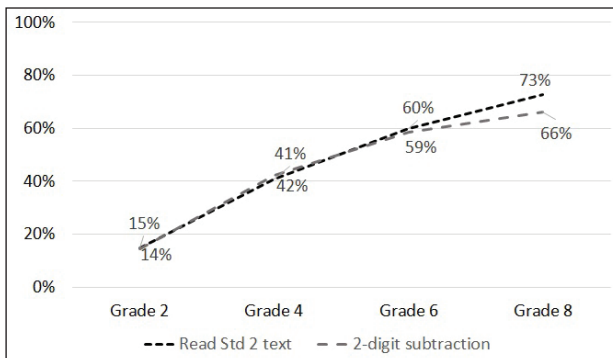
Now it's our turn to be surprised! How could he not have acquired the simple skill of reading in school? As he continued to study with us, we were pleased to see him learn to read in just 46 sessions of about 15

minutes each over two months (12 hours)—a feat he hadn’t accomplished in six years of school.

Shadab is not alone. An estimated 50 million primary school students (Grade 1–8) in India cannot read, write or do basic arithmetic: the very foundations of learning!<sup>27</sup> If a few children do poorly in classes, we say they are failing at school. But if a considerable proportion of children are not learning the basics at school, then we must reverse the phrase: it is the schools which are failing our children! Research shows that, taught the right way, almost all children can learn to read.<sup>28</sup> So how is it that so many are not learning this key skill?

Our survey of Lucknow was conducted in 2015, in conjunction with the government of Uttar Pradesh, with 3,957 primary and pre-primary teachers as enumerators. We found that, on average, just 22 per cent of illiterate students learn to read with each additional year of schooling.<sup>29</sup> Take a moment to let this figure sink in. Suppose we have a class of 30 students in Grade 5, of whom 15 are unable to read. Just three of these children will likely become literate over the next year; the Grade 6 class will still have 12 students who can’t read.

‘Surely half the students will not be unable to read in Grade 5’, you may be thinking. Unfortunately, that is the exact situation many of our schools find themselves in, as has been shown by numerous studies.<sup>30</sup> The Annual Status of Education Report, Rural (ASER, 2018) showed that just 15 per cent of Grade 2 students could read a Grade 2 text. By the end of primary school, only 50 per cent of Grade 5 students could read a Grade 2 level story. Even by Grade 8, 27 per cent of students were still unable to master the simple text. There is an identical story with low numeracy levels. By Grade 8, one-third of students were still unable to solve a two-digit subtraction problem. And this is before the COVID-19 crisis—which



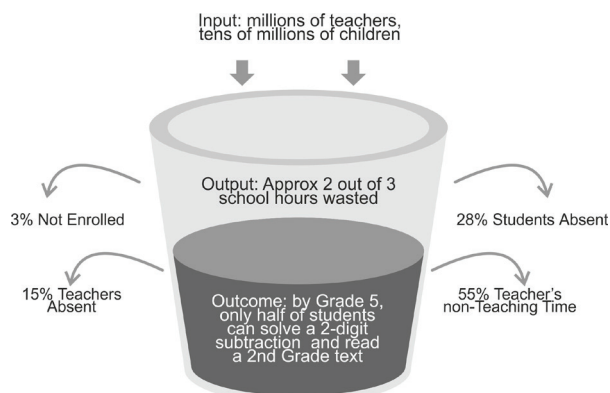
**Figure 2.1:** Reading and Arithmetic Levels of Indian Rural Primary and Upper Primary Students (ASER, 2018)

has meant two years of educational disruption, and for many, a regression as they have forgotten earlier learnings.<sup>31</sup>

And it's not just India. According to a World Bank report (2019), 53 per cent of children in LMICs are in Learning Poverty, defined as not being able to read a simple text by age 10. The COVID-19 crisis has exacerbated this, with the rate of Learning Poverty now estimated to have risen to 70 per cent.<sup>32</sup>

Without dramatic and timely intervention we will lose much of this generation to illiteracy. If we cannot reach these children, many will miss out on literacy for their whole lives, swelling the number of adults who do not have such foundational skills.

The literacy crisis facing children in India and many LMICs can be understood using a simple framework, which we call The Leaky Bucket (Figure 2.2). To understand why the literacy outcomes are so poor, we need to realise that there are huge inefficiencies and losses in the education system. In order to turn around the destiny of tens of millions of children like Shadab, we need to address five key issues holding back our education system.



**Figure 2.2:** The Leaky Bucket of Indian Public Primary Schools<sup>33</sup>

## Student Enrolment

The first factor of learning potential loss is that some children are not enrolled in school to start with. India has made great strides in student enrolment, having now reached a figure of 97 per cent enrolment for primary schools.<sup>34</sup> The government at all levels is to be commended in its efforts to roll out education throughout the nation, from the densest slums to the remotest villages. However, in some LMICs, low student enrolment remains a huge problem. In Sub-Saharan Africa, some 20 per cent of primary-school-age children are out of school.<sup>35</sup>

In India, too, there are still millions of children who have never been to school, and tens of millions more who drop out prematurely. It is quite common, in particular, for children to drop out after completing Grade 5 or Grade 8. At the national level, 28 per cent of 14–15-year-olds are out of school; in Uttar Pradesh, the figure is a whopping 38 per cent.<sup>36</sup> According to the National Sample Survey Organisation, some 32 million children (aged 6–17) were out-of-school in 2017–18: and this is likely to have at least doubled due to COVID-19.<sup>37</sup> Two of the primary reasons young people drop out of school are child labour and underage marriages.

### *Stories Behind the Statistics*

#### *Danish: A Day in the Life of a Child Labourer*

Danish's father died of lung cancer when he was 10. From this tender age, he was thrust into a work schedule that would break most adults:

- 7 am to 1 pm: School. Even after his father's death, Danish continued school until finishing Grade 8 at the age of 13.
- 1:30 pm to 5 pm: Arabic and Urdu lessons and religious education at the madrasa.
- 5 pm to 7 pm: Manual labour at the screen-printing shop, an illegal child labour mill in his slum. He started at age 10, soon after his father's death. Some of the children working there are as young as five or six.
- 7 pm to 11 pm: Pharmacist's assistant, pulling medications off the shelves at the local slum medical dispensary. Danish started that work before his father died, and did it for the first two years unpaid, then began earning ₹60 (\$0.80) per week.
- 11 pm to 3 am: Back to the screen-printing shop. For the first three years, he only made ₹50 (\$0.70) per week for those six hours a day.
- 3 am to 7 am: Sleep. Though, understandably, he often slept at his desk at school as well!

At age 13, Danish dropped out and started screen-printing for 13 hours each day, getting a raise to ₹80 (\$1.10) per day. Since turning 16, he's moved on to work as a salesman and a driver, but without 10th pass or 12th pass credentials, Danish will likely remain stuck in the cycle of poverty.

That's the life of just one child labourer. There are millions of children across India and around the world working similar back-breaking schedules, with their daily survival hanging by a thread.



COVID-19 has had a disproportionate impact on girls, with an estimated 10 million more children likely to be married in the next five years, globally, due to the pandemic.<sup>38</sup> We have experienced this ourselves in slums where we work, with girls as young as 16 being married off illegally, the COVID-19 restrictions being a convenient excuse to push through a low-cost wedding. As well as putting girls at risk of early pregnancy and domestic violence, underage marriages also terminate many young women's dreams of further study. The spike in poverty caused by COVID-19 has put numerous out-of-school children at greater risk of trafficking, as reported by several NGOs working on these issues.<sup>39</sup> Millions more children also risk being pushed into child labour due to the COVID-19 pandemic, as many parents have lost jobs and fallen further into poverty. Globally, this could lead to the first rise in child labour after 20 years of progress, according to the International Labour Organisation and UNICEF.<sup>40</sup>

### **Student Attendance**

Along with non-enrolment and dropping out, the second factor impeding learning is that many children enrolled on paper have extremely inconsistent attendance. In India, ASER (2018) found that just 72 per cent of primary and upper primary students attend school on any given day!<sup>41</sup> Why do many children attend school so intermittently? Some students fall ill frequently due to unsafe water, poor nutrition, or an unsanitary environment. Others have parents who are migrant workers, often going back and forth between village and city depending on work availability, seasonal agriculture, festivals and family events.

There is a vicious cycle between lack of attendance and lack of literacy. Our experience working in many slums attests to the fact that students who don't attend school regularly often struggle to learn how to read, making them more vulnerable to taunts from other students and punishments from the teacher, thereby further reducing their motivation to attend. Breaking this cycle—especially for children who suffer from attention or behavioural issues—can require great patience and perseverance.

The COVID-19 pandemic has derailed education for tens of millions of students from disadvantaged backgrounds, in part due to being on the wrong side of the digital divide. ASER (2020) found that only one-third of students had received any learning materials or activities in a reference week during the pandemic, and one-third of students had not been in contact with their teachers at all for six months, from March to September

2020.<sup>42</sup> Many of these students have had extremely sporadic attendance from then until the present, too.

Internationally, the quantity of learning loss due to the pandemic is mind-boggling. At its peak, over one billion children in low- and middle-income countries were affected by school closures. Simulations suggest that the current generation of school-children will lose around \$17 trillion of lifetime earning due to this educational crisis.<sup>43</sup>

### *Stories Behind the Statistics*

#### *Bolu: Getting Literate Five Minutes at a Time*

Bolu was an eight-year-old boy who came from a family with many struggles. He roamed the alleyways with his friends rather than attending school. When we invited him to our class, several neighbours mocked him, saying he was too stupid a child and would never learn anything.

After the first few sessions, it became clear that Bolu had some attention issues and had no idea how to focus on or comprehend letters. We had to keep his lessons very short (at most five to six minutes). Still, he could be a troublemaker, often running away before he had finished the session. Over time, we saw him improve gradually, more able to focus, more willing to listen to instructions, more in control of his actions and emotions.

Even as Bolu progressed in the program, he continued to have attention and behavioural difficulties. But no matter how many times he ran away, we encouraged him to come back and read the next day. Finally, after one year and 115 extra-short lessons, Bolu could read storybooks competently and pass the literacy post-test (Grade 3 level).

We were especially encouraged when Bolu's father began taking him and his brothers to the government school every morning—the first time anyone in their family had attended school! We are certain that Bolu's progress in the Global Dream Program and the demonstration that he could learn was an important part of him being mainstreamed into the classroom. But while we were able to show patience with Bolu, schools are often not so flexible for children with attention and behavioural issues. Sadly, several years after entering, Bolu still has only intermittent school attendance.

While students from middle-class families typically have access to smartphones and internet connectivity, those who are socio-economically

disadvantaged often lack it. As ASER (2020) found, some 62 per cent of families have at least one smartphone, but many of them may have only one phone which is used by older members, and some don't have data on their phone. A study by Azim Premji University found that a shocking 92 per cent of Indian children have lost at least one literacy skill, and 82 per cent have lost a numeracy skill.<sup>44</sup> The pandemic is thus further widening existing educational disparities and severely reducing student attendance, not just in India but in LMICs around the world.<sup>45</sup>

### **Teacher Attendance**

Even if a child is enrolled in school and attending regularly, it is still no guarantee that they are learning. The third factor leading to learning loss is low teacher attendance. How will the children learn when no one shows up to teach? Lack of regular teacher attendance is a huge issue in many classrooms. According to a 2005 World Bank study, 25 per cent of government teachers in India were absent on any given day.<sup>46</sup> More recent studies show that the average government school teacher has an absenteeism rate of 15 to 20 per cent.<sup>47</sup> These missing work days cost the taxpayer a staggering ₹100 billion (\$1.4 billion) annually.<sup>48</sup>

Teacher absenteeism is not a problem unique to India but rather is prevalent in many LMICs. A recent UNESCO study of Sub-Saharan and Eastern African countries found absenteeism rates ranging from 15 to 45 per cent.<sup>49</sup> Even if the teachers are marked as present, late arrival and early departure are common issues. The atmosphere of impunity has grown to such an extent that some teachers hire substitutes to sit in class for them at a fraction of their own salary.<sup>50</sup>

What can be done to improve teacher attendance? The UNESCO report identifies factors such as greater monitoring and accountability by school heads and boosting parental and community involvement. This can be a challenge, particularly in rural areas of India where the majority of children studying in government schools come from low-caste, disadvantaged backgrounds, whereas teachers often come from better-off communities and may live some distance from the neighbourhood of the school.<sup>51</sup> This dynamic often impedes social cohesion between teachers and the community. Part B of this book discusses some of the structural changes needed to ensure that all teachers are attending school.

### **Teachers' Non-teaching Time**

Compounding the problem of teacher absenteeism, many teachers who are physically present in the classroom are not actively teaching. Many

diligent teachers want to do their jobs well, but much of a teacher's time is taken up by non-teaching activities: taking the roll, marking student work, filing documentation.<sup>52</sup> Add to this the extra roles often given to teachers: from administrative tasks to disaster relief work, from encouraging the uptake of family planning to running elections.<sup>53</sup> The National Institute of Educational Planning and Administration, India, recently found that, during an election period, just 19 per cent of teachers' time was spent teaching!<sup>54</sup> Further afield, a UNESCO report found that between 4 and 27 per cent of teachers' classroom time was lost to non-teaching activities in various Sub-Saharan African countries.<sup>55</sup>

### **Poor Pedagogy**

All the four factors discussed above—student enrolment, student attendance, teacher attendance and teacher time spent on task—are relatively easy to quantify. Multiplying together these numbers for Indian government primary schools yields a very disturbing figure: at any given moment of a school day, less than one-third of 10-year-olds are attending school with the teacher present and teaching in the classroom!

97 per cent student enrolment × 72 per cent student attendance ×  
85 per cent teacher attendance × 45 per cent teacher time spent  
teaching = 27 per cent of time used constructively.

Yet the rates of learning are so low that even these four quantifiable factors do not explain why such a large proportion of children attend school for years without learning the basics of literacy and numeracy. For a child like Shadab, even considering that two-third of school hours may have been wasted, five years' enrolment in school still corresponds to over 1,300 instructional hours!<sup>56</sup> Surely, this should have been enough for him to learn the simple skill of reading?

Poor pedagogy is the missing factor that prevented Shadab, and millions of his peers, from learning these basic skills at school. Even when students and teachers are present, and lessons are being held, the way those lessons are conducted is often highly problematic.<sup>57</sup>

School teachers in India and many LMICs rely predominantly on rote learning, which research shows is an ineffective technique. It is understandable. They themselves were taught this way in their own schooling experiences. Teacher trainings seem to often not have a substantial impact on teaching practice.

Please be assured that we are not blaming teachers as individuals. Rather, it is the education ecosystem as a whole that needs to be

transformed. The same teacher moving into a different environment may do a much better job.

Curriculum and Teaching-Learning Materials (TLMs) are also crucial to a child's learning. Unfortunately, much of our current curriculum is teacher-centric and difficult for children to follow on their own. There is a disconnect between most children's learning levels, and what is expected of them in the curriculum. For instance, the curriculum keeps marching ahead at pace with each grade, even while millions of children like Shadab remain stuck, unable to comprehend their textbooks simply because they can't read. Part D offers a deep dive into the science of how literacy and numeracy can be taught more effectively. For now, suffice it to say that the style of teaching common in many of our schools is not helping our children realise their full potential.

### **What about Recent Initiatives?**

While we've painted a depressing picture of the state of children's literacy, surely there are some positive signs of improvement in the education system? This section discusses some of the legal and policy mechanisms in place to reform the education system and work towards universal child literacy. Great legislation and policy has been enacted over the past few years, but this needs to be complemented by urgent action at the ground level.

In India, the Right to Education Act (RTE, 2009) establishes the right to a compulsory, free and quality education for all children aged 6–14 and charges governments and parents with the duty to ensure this right is realised.

The RTE, combined with the mid-day meal scheme (a free feeding program for all government primary students), has succeeded in lifting enrolment rates to the point that the vast majority of children now go to school at least some of the time. However, the RTE's intentions to improve the quality of education have proven much tougher to implement.

The RTE has an inputs-based approach; it assumes that learning will occur if certain quantifiable, tangible inputs are in place. Hence, it stipulates pupil-teacher ratios (30:1 in primary and 35:1 in upper primary), distance requirements (must have a primary school within 1 km) and minimum infrastructure (all schools must have a dedicated play area, etc.).

These are all good and necessary improvements. However, the focus on inputs in no way guarantees learning outcomes. As we've seen, there are other crucial, less tangible factors that have a greater impact on the quality

of education. While having a library is important, even more crucial are teacher motivation and pedagogy—without which the students may not be able to learn to read and thus can't take advantage of the library! Though essential, the *physical environment*—the presence of desks and chairs and blackboards—does not ensure that learning will take place if the teacher doesn't know how to create a *social environment* conducive to learning.

What of India's recently launched policy, the National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN)? NIPUN is like a breath of fresh air in clearly acknowledging the scale and depth of the child literacy crisis and in setting clear and ambitious goals. It is fantastic to see government commitment to ensuring all children attain foundational literacy and numeracy by Grade 3, within five years. It invites the state governments to work out the details and ensure its implementation.

In order for NIPUN to be successful, it requires changes to the whole educational ecosystem: not just the teacher, but also policies, curriculum, assessments, monitoring structures, training and more. To quote the World Bank: 'Classroom-focused interventions need systems-level support.'<sup>58</sup> A teacher who could not meet the foundational literacy goals for their students before the COVID-19 crisis will remain unable to do so without a transformation of the whole educational ecosystem. Part B discusses some of these crucial system-level changes needed to ensure all children are learning well in school.

What about other low-and-middle-income countries around the world? There are many encouraging examples of governments enacting serious policy reforms and striving to ensure quality and equality in education. On the whole, though, we reach the same conclusion: existing institutions will not bring the scale or pace of change required. Urgent actions are required to change what we teach, at what stage, and the way we teach it—without which, we will repeat the same mistakes of the past. We need disruptive learning solutions—not more of the same old methods, or those that only marginally improve the status quo. Incremental change is insufficient. We need transformative, low-cost, replicable, scalable, sustainable, evidence-based approaches, such as Global Dream Accelerating Learning for All.

We've seen numerous factors preventing children from learning even the basics of foundational literacy and numeracy. Moreover, children are not the only group suffering from low literacy levels. The next chapter asks the tough question of why so many adults around the world, particularly in India, are still unable to read.

**Reflection Questions**

1. What are the five factors that hold back children's literacy? Visit a local school and observe. Are these factors present?
2. Talk to a child who attends school intermittently or not at all. Ask them or their parents for the reasons.
3. What was the most shocking statistic for you in this chapter?

**Consider Your Context**

This chapter primarily analyses the problems of India's education system, including non-enrolment and dropping out, low student attendance, teacher absenteeism and time being spent on non-teacher activities. Research your country's situation, and compare its figures to India's, to create a 'Leaky Bucket' diagram (2.1) for your own country. What are the recent legislative and policy initiatives to try to improve the education system in your country? How effective have they been? How can they be more effective?