Improving education and training in rural India

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A fast growing economy

India is one of the fastest growing economies in the world and estimates from Morgan Stanley indicate that their GDP is expected to double by 2031.

According to World Bank estimates, India has nearly 940 million people aged between 15-64. While the official literacy rates published by the National Survey of India stand at 78%, another recent survey by the National Statistical Office (NSO) has revealed that around 12.6% of students dropout of school, 19.8% discontinue education at the secondary level and 17.5% dropped out at the upper primary level – meaning almost 50% leave education early.

The majority of those leaving education early, come from India’s 900 million+ rural population.

The reasons for this are numerous and complex, but include financial constraints, competing demands on people’s time and a simple lack of interest.

Meanwhile, during the last decade, rural India has seen a dramatic increase in the availability of internet connectivity. Now, according to a report by the ‘Internet & Mobile Association of India’ and ‘Nielsen’, rural India has 227 million active internet users, most of which are smartphone users. The prevalence of smartphones in households with children has doubled from 29.6% in 2018 to 63.7% in 2021.

With the proliferation of access to the internet, it is hoped that education opportunities can be opened up, in academia and beyond. However, according to the 2021 Annual Status of Education Report (ASER), an increase in using smartphones for online studying wasn’t yet being observed.

We wanted to understand the story behind those numbers and help answer the question; How can access to academic education be improved in rural India?

The first step towards finding an answer was to carry out an extensive quantitative and qualitative in-person research project across rural India. We were particularly keen to understand;

- How is academic education perceived among rural populations?
- What are the practical realities of life in rural India?
- Why do people currently drop out of education early?
- How and why do people in rural India use smartphones?

This is what we found...

How is academic education perceived among rural populations in India?

Education is viewed as a gateway to better opportunities.

According to data from MOSPI (Ministry of Statistics and Program Implementation), literacy rates in rural India jumped from 60% in 2003 to 73.5% in 2021. Several government initiatives such as the mid-day meal scheme, which provides a nutritious meal to students free of charge, and online educational apps from NCERT (National Council of Educational Research & Training) have contributed to this shift.

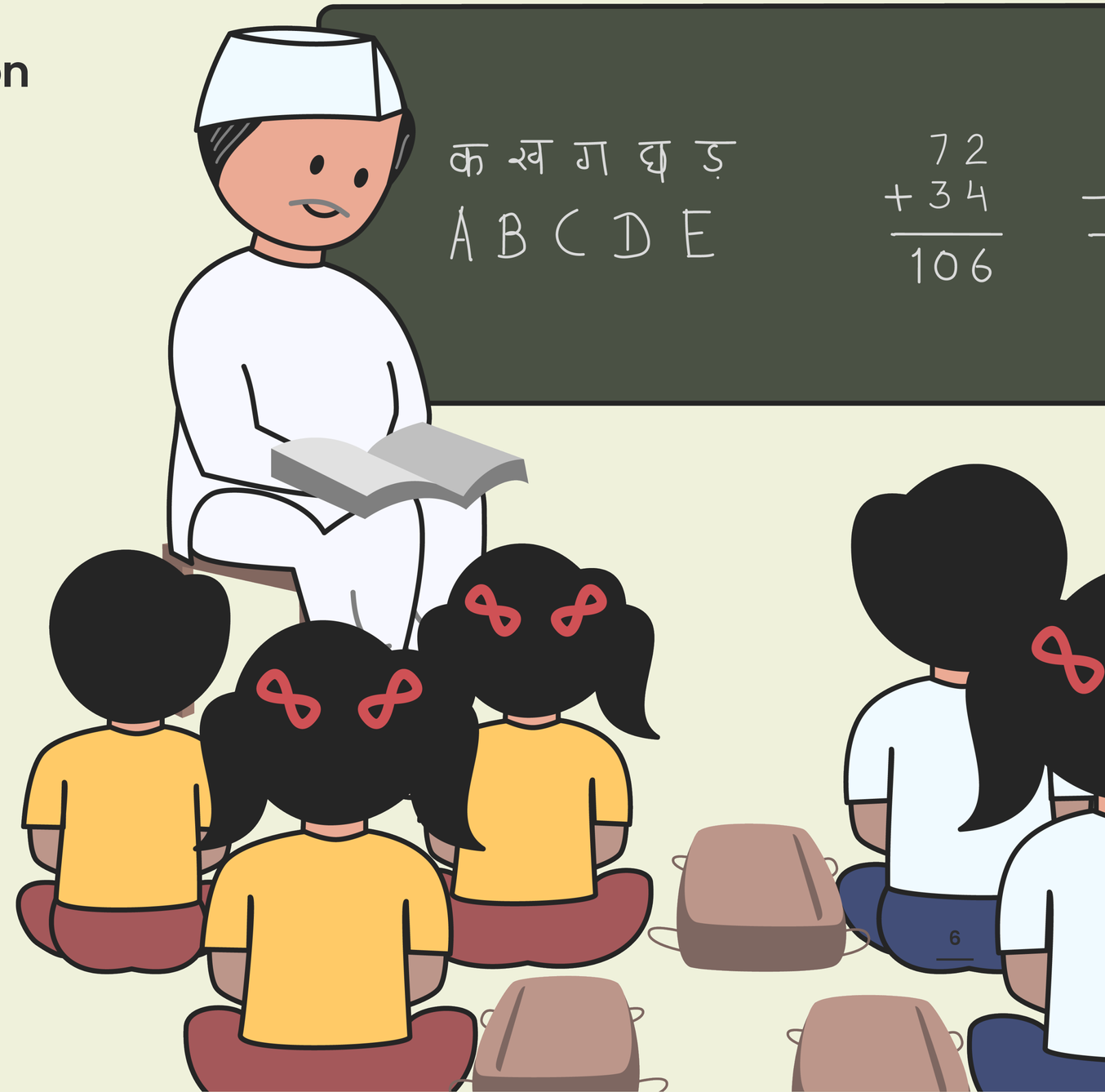
The soaring literacy rate suggests that the perception and awareness of academic education among the population of rural India has shifted over the previous two decades and our research suggests this is likely to continue, as parents who benefited from an academic education themselves, frequently felt empowered to provide the right support and environment to their children to also pursue an academic education.

Our research found that a high proportion of children who had academically educated parents went on to study in private schools that offer superior infrastructure and training facilities.

Often these children were encouraged to attain a college degree and were able to focus on their studies without competing priorities such as needing to earn additional money for the family, or providing childcare to siblings.

> ***For example, one parent told us; "[Academic] education is a gateway to a better job, a better life". Another added, "An educated farmer is an empowered farmer. I have been able to get a step ahead in life because of my education". That viewpoint was matched by a student pursuing their college degree, who said; "Education helps provide job opportunities. I am doing my degree because it will help me qualify for jobs".***

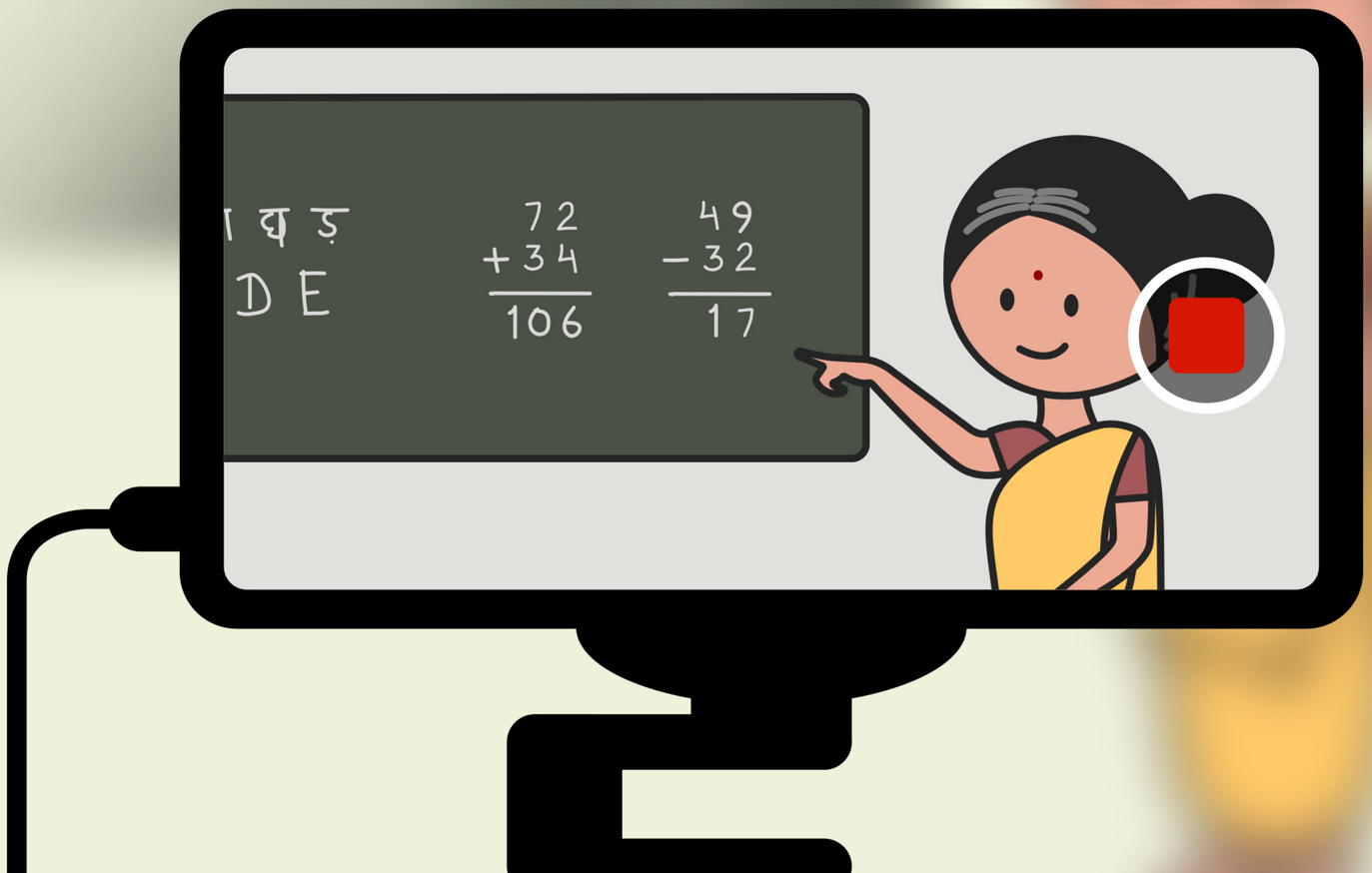
On the other hand, parents who had not themselves received an academic education, were less likely to consider it a high priority for their children. The financial realities of everyday life in rural India often meant that earning additional income for the family, or helping with household tasks, take on a greater importance and as a result a higher rate of children drop out of academic education.



The Covid pandemic transformed the digital habits of rural India.

From social media to video sharing and messaging platforms, new ways of interacting with people emerged, partly due to the strong sense of community and camaraderie that exists.

Our research found that this sense of community led to people often offering support to one another. On a basic, informal level, people would help each other navigate through apps and features on their smartphones. Meanwhile, we also found academically educated adults and senior high school students willing to offer tuition or guidance to younger students.



Certain career choices are considered safe.

The sense of community and togetherness within villages, also meant that the opinions of people within the community were highly regarded.

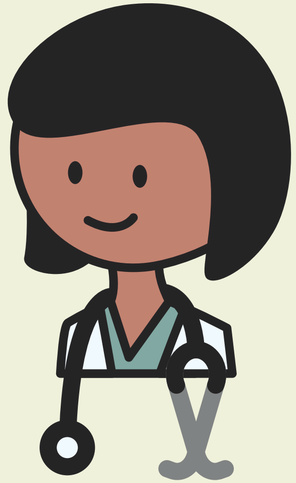
Our research found that the younger demographic often looked up to people in their own communities and attempted to emulate them. During our conversations, we heard several teenage kids speak about a particular relative who had become a successful entrepreneur, or an acquaintance who had made it big in the finance industry. As one participant put it, there is an underlying belief that “If someone from my village has done it, I can do it too”.

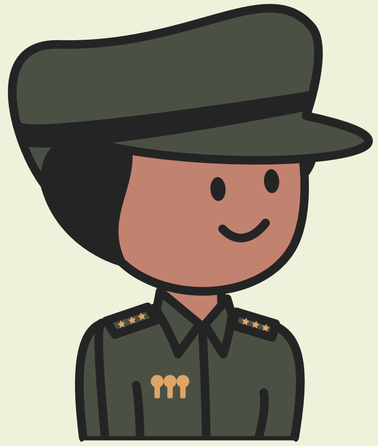
Our research indicated that certain professions, such as; engineering, medicine, teaching and government jobs, are considered ‘safe’ or ‘dependable’ and are therefore held in high esteem and sought after. Again, the regard in which these careers are held was often drawn from people knowing people who worked in these areas.

This was particularly true of government jobs. There was also the perception that government jobs were ‘recession-proof’ and once somebody had landed one, they were very unlikely to lose it regardless of the economic situation. This financial safety was a powerful motivational factor.

> ***For example, one student told us; “My parents think I should complete my studies and take a nice government job.”***

Meanwhile, we found little awareness of alternate career choices. Our research suggested that people felt anything that fell outside of these conventional professions was likely to be considered a hobby.





The availability of facilities and infrastructure in rural villages also limits the scope of careers that are accessible to people.

For example, people who aspire to be an artist, photographer or designer are likely to need to relocate to a larger urban area in order to access the necessary equipment, facilities and training.

We also observed a sizable percentage of younger people who saw immense business potential in rural India and were drawn toward entrepreneurship in order to be a part of realising it.

One participant in particular captured this tension between convention and innovation when they told us;

> ***"My parents think I should do a government job, but I would like to go into business. For instance, I love the transport industry. I haven't told my parents that I would love to go into this yet. Many successful people work in transport. It's an important industry".***

What are the practical realities of life in rural India?

Financial limitations drive educational decisions.

Our research showed that for many people, their financial situation dictates their priorities. Even if academic education is a path people would like to pursue, circumstance can dictate that when this is an option, it must remain a lower priority than other things.

One research participant summed up this delicate balancing act when they told us;

> ***"My parents believe education is important, but school and pragmatism need to be balanced - meaning that I still had to work throughout my schooling to financially support the family".***

Another similarly described the situation; "Both my brothers dropped out of school. They took up employment at a poultry farm to support the family".

While a third participant's experience highlighted the difficulty of attaining an academic education despite the strong desire to do so; "My parents think education is important but they don't have the money to finance me. I work full-time at a store and rarely attend college. I don't learn much".

Often, both parents are required to spend as much time as possible earning income. As such, children are often asked to stay at home and take care of their younger siblings. Then, by the time they reach secondary school, earning an additional income to support the family is of a greater necessity than continuing to pursue an academic education.

As the quote from one student above shows, even in families with a more stable income, there isn't enough disposable income to finance college education and teenagers are often expected to finance their own education and juggling work with academic studies can hamper the amount of academic knowledge gained.

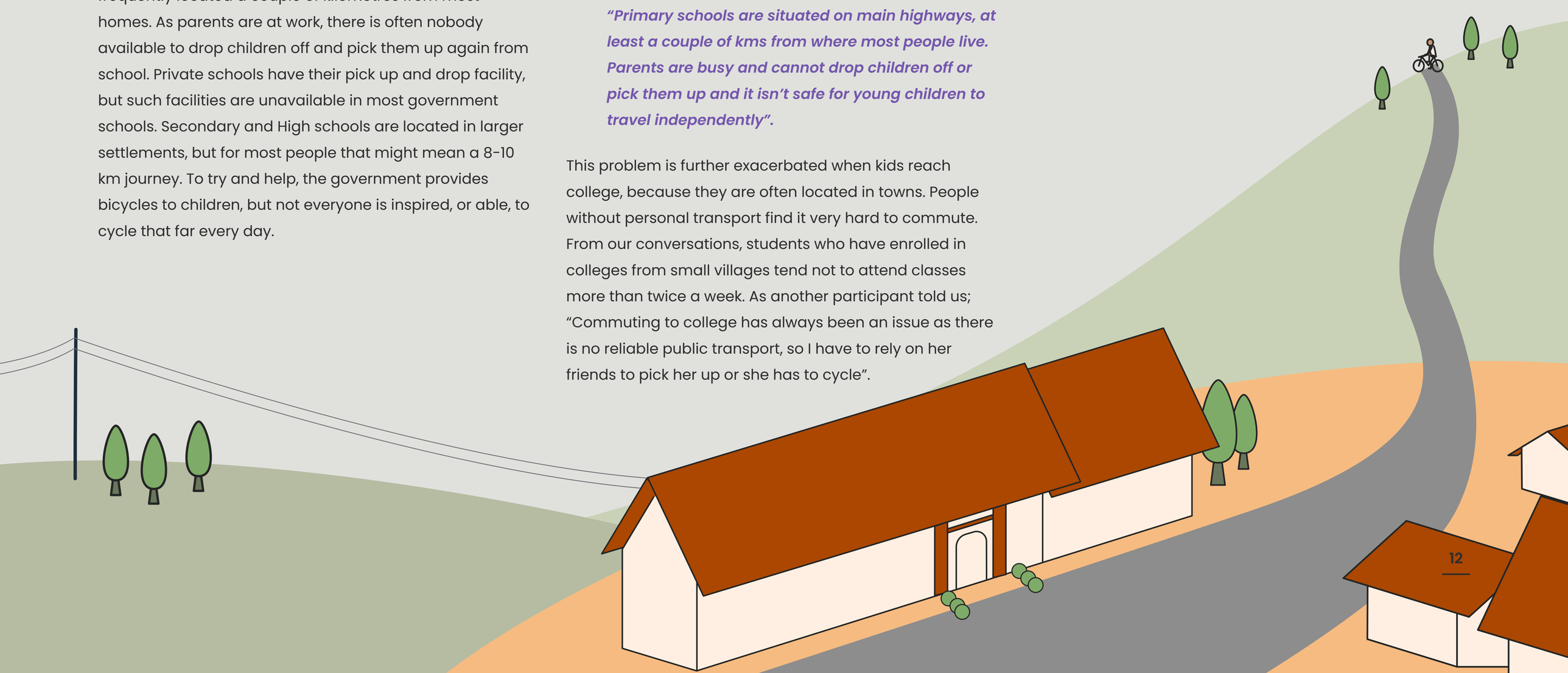
Commuting to schools is a major challenge.

While most villages have primary schools, they are frequently located a couple of kilometres from most homes. As parents are at work, there is often nobody available to drop children off and pick them up again from school. Private schools have their pick up and drop facility, but such facilities are unavailable in most government schools. Secondary and High schools are located in larger settlements, but for most people that might mean a 8-10 km journey. To try and help, the government provides bicycles to children, but not everyone is inspired, or able, to cycle that far every day.

One parent we spoke to underscored the challenge;

> ***"Primary schools are situated on main highways, at least a couple of kms from where most people live. Parents are busy and cannot drop children off or pick them up and it isn't safe for young children to travel independently".***

This problem is further exacerbated when kids reach college, because they are often located in towns. People without personal transport find it very hard to commute. From our conversations, students who have enrolled in colleges from small villages tend not to attend classes more than twice a week. As another participant told us; "Commuting to college has always been an issue as there is no reliable public transport, so I have to rely on her friends to pick her up or she has to cycle".



A poor teacher to student ratio and the school facilities available adversely affect the quality of education.

Our interviews with teachers highlighted that many primary schools have just two teachers. These teachers teach students from different grades simultaneously in the same room. Kids from Grades 1 and 2 are taught in the same room. Meanwhile, Grades 3, 4 and 5 are also taught simultaneously in a single room.

As well as different grades, these teachers are teaching three different subjects (for three different grades) in a single room. This has two major drawbacks, in that it is both distracting for the students and that it means teachers are often unable to offer anyone personal attention. As a result, children are commonly left with shaky educational foundations making it difficult to build on them with ease.

As one teacher told us; “There are just one or two teachers for an entire primary school. It is a mammoth task for one teacher to teach so many students and all the subjects. Teaching three subjects in a single room is distracting for students and they don’t understand much. Teachers are unable to give them any personal attention”.

A student described the same thing from their point of view saying; “I went to a government school in my village. The experience was not great. I was bored and I felt that I wasn’t smart enough, so I would often skip class”.

Unfortunately, there is not the provision in place to help students feeling this way, as another teacher admitted “The onus is completely on the child to learn. No-one follows up or pushes children if they fall behind or lack interest”.

The teacher to student ratio problem is further exacerbated by the amount of non-teaching activities that are assigned to teachers. Examples of these activities include:

- Operations and administration tasks in the primary schools
- Collecting census data
- Organising awareness campaigns in villages
- Facilitating vaccination

One teacher estimated; “80% of our time goes into non-teaching activities. We only get to teach 20% of the time”.

Why do people currently drop out of education early?

Poor support systems restrict learning and growth opportunities.

Given the competing priorities and a lack of academic knowledge, day-to-day life in rural India is often not conducive to providing a consistent home environment that enables academic learning. This can affect the number of students who are able to complete homework.

In India, some children automatically move from 8th to 9th Grade, regardless of their academic performance. Very few students are tested on their knowledge and understanding of the concepts they are expected to know by this point. This results in some students reaching Grade 9, at which point they are expected to pass exams, without strong academic foundations and often without having experienced mock exams that could help prepare them for these next steps.

Students who then need additional support or tuition can struggle to find a reliable source of assistance. Senior students may offer help, but this is provided on an ad hoc basis. Consequently, as children find Grade 9 a big step up from Grade 8, it is at this point that around 50% of students become disheartened and drop out.

As one student told us

> ***"Most of my friends dropped out after Grade 8 to help support the family. They are all helping out on the farm, or doing household chores".***

For those students who do graduate from Grade 9, little to no assistance is available to prepare them for entrance exams into higher education, or for job interviews. As one student explained; "I never learned how to apply for jobs. I am unaware of what is available and I don't understand how to prepare for interviews or build my resume. I applied for apprentice positions and for a police constable position but I couldn't pass the entrance assessments".

Social and cultural stigmas prevail when there is a lack of economic resources.

We found that in rural India an expectation for girls ‘to take care of the house’, while boys are considered the ‘breadwinners’ for the family remains prevalent. Therefore, when finances are limited, we found that some families preferred to invest in the boys’ education as they presumed girls would get married and settle in another household.

In some cases we observed a contrast in their self-confidence, ability to learn independently, technology adoption and future career goals can be observed between boys and girls.

One participant was explicit in what role they foresaw for their child;

> ***“She is a girl. Her future would be about getting married and taking care of her husband’s household. Why does she need to study more?”***

How and why do people in rural India use smartphones?

Let’s recap, rural India has 227 million active internet users, most of whom use a smartphone, with the prevalence of smartphones in households with children doubling from 29.6% in 2018 to 63.7% in 2021.

Before we could establish whether this increase of smartphone availability and usage might play a role in helping to improve access to academic education in rural India, we needed to understand how and why people in rural India are currently using them.

We found that the English language is a challenge for many people in rural India and that they rely heavily on visual cues, audio search and translations when using smartphones. Unsurprisingly, we observed that most of our adult research participants were most comfortable with applications available in their native languages. As one participant said,

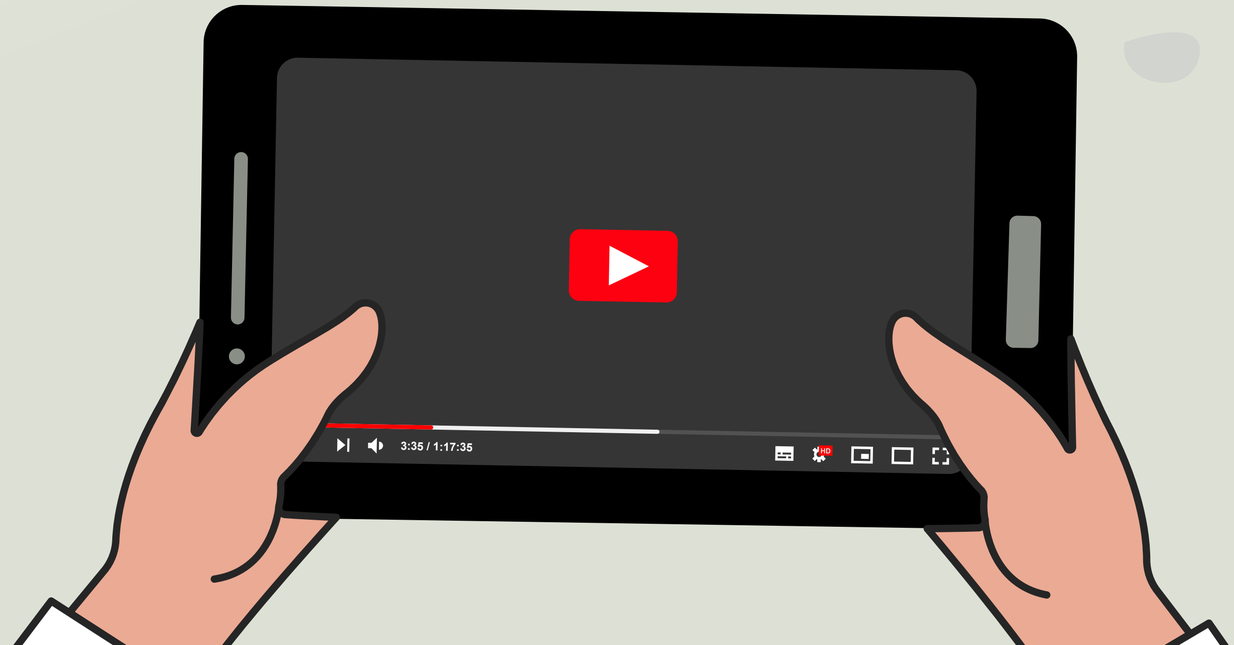
> ***"I love to learn new things, but I can only use applications if they are in Marathi".***

We also found that people were often left uninspired, even fearful, of exploring new apps outside of those they used regularly such as Google and Meta. For example, one participant confided, "I feel that something may go wrong. If I press the wrong button somewhere, I may lose money. One of my relatives has lost a lot of money due to clicking on a wrong link when playing rummy (card game) online".

Due to their widespread usage within the community, these were apps that people were confident they could ask others for help with. For example one participant told us; "I will ask a friend from the village for help. He knows smartphones. We call him 'hacker'". Another said; "I use Google a lot. If I don't understand something, I can quickly search and read-up or watch things related to that topic. I also extensively use Google Lens to translate words into Hindi, or to use pics shared by my friends to find items on shopping apps".

Other applications that we observed being commonly adopted were those that helped with farming or services provided by the government. For example, a number of academically educated people within the community used a variety of apps to understand new and emerging farming techniques, gain better yields, purchase equipment at competitive market prices and sell their produce at the right market rates. “I take advice from experts about farming and weather. That helps me make the right decisions to achieve the maximum yield. With their guidance and my efforts I have installed an irrigation system across my 17 acre farm” said one participant.

Among children we found a strong desire for easily digestible content usually in the form of a video, instant messaging or other storytelling formats. Many children also frequently used smartphones for gaming or social media. However, we did not observe much use of smartphone for studying.



“Most of my smartphone time is spent on WhatsApp. It’s very easy to use. On YouTube we instantly get results and most of the time we get helpful video results.”

Visual cues and audio search are extensively used in villages, but the exploration of digital products is narrow.

As most people who live in rural India are not fluent in English, they rely heavily on visual cues and audio search when navigating the internet. However, most people can recognise a certain limited set of icons and understand the tasks that can be performed through them. However, introducing fresh or complex iconography can cause confusion.

The Covid pandemic forced many people in rural India to adopt Zoom and WhatsApp for meetings, seminars and community announcements. Despite the lockdown restrictions being lifted, digital mediums are still extensively used to plan meet-ups and make community announcements.

Our research found the younger section of the population spending a lot of time on Instagram, while the older demographic tended to prefer Facebook. All sections expressed joy at the instant gratification available to them on these platforms through 'likes', 'comments' and 'shares' they received for their content. One student described this, when they told us:

> ***"I frequently share my friend's stories or posts on Instagram, and I am happy when they reciprocate".***

We also noticed that the village community consumes a large amount of video content - particularly in shorter formats - either on social media platforms or through sharing with their friends and family. Connected to this, we observed YouTube being extensively used for upskilling – be it to learn how to assemble a desktop computer or pick up a musical instrument.

Digital education can supplement but not replace in-person education.

While children have access to smartphones and a world of digital content, currently they typically use them more for gaming or social media than for studying.

We observed that without parental guidance, young children struggled to study through smartphones, a problem compounded by poor internet quality, high internet prices, unavailability of devices and power shortages; making digital learning difficult even with guidance.

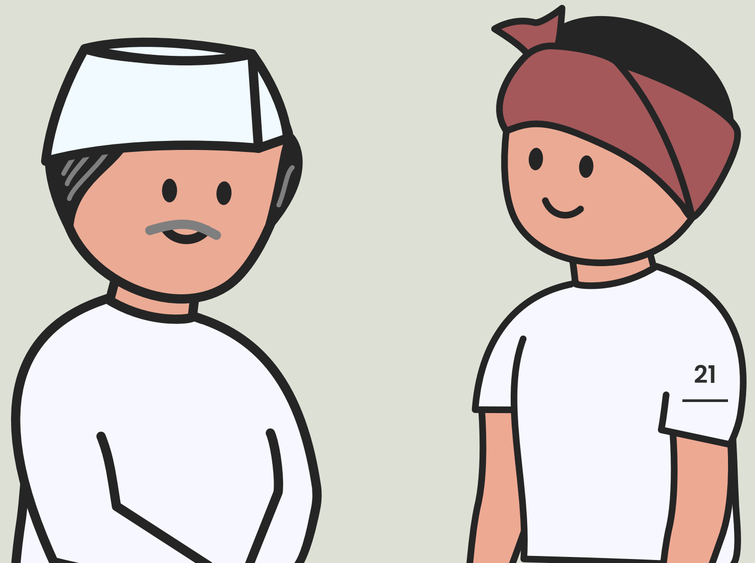
However, given that when there is interesting content in a storytelling format, primary school aged children are excited by it and therefore receptive to watching it, there is scope to use video content to provide additional access to academic education. Some moves have been made towards this and the government has already created modules on their 'DigiLab' app. We also found that Hindi poetry and basic arithmetic work really well in this format.

However, when it came to other topics such as advanced arithmetic, English or science, we found children were typically less motivated to watch video content. Additionally, these more complex subjects were less easily understood by children in this format and they required more one-on-one assistance.

Overall, students and parents told us they prefer in-person learning as it allows for practical coaching and interactions with peers and teachers. Several respondents (both children and adults) described how an in-person setting and eye contact with a teacher or mentor are essential for them to pick up something new. For example one told us; "I would prefer classes in person. I would be able to learn more in the physical presence of a teacher".

With that said, many village children past the age of 15 use smartphones for education and upskilling with ease and several of them pick up a variety of new skills by watching instructional videos on YouTube. "I think we should study using mobiles as well as in person in class. Mobile is a new technology. It is helpful for us to use it" said one.

We also found that many adults, who were unable to complete their academic education and went into employment, use digital tools to continue learning, both to support their job and enhance their incomes. For many people, the availability of a mentor and in-person guidance was important in helping support this. One participant summed up their motivation by telling us; "If these platforms can help me in my work, I can commit my time. That time commitment will pay off in the long run, because it will increase my business earnings and help my family".



How can access to education be improved in rural India?

With these insights, we can return to our central question of how access to academic education could be improved in rural India.

Our research highlighted that one of the key challenges is articulating the value of an academic education, against competing and more pressing priorities.

As several adults had sub-optimal experiences at school, they believe that their kids would also not greatly benefit from education. Once a certain degree of awareness has been created amongst the lower income and marginalised sections of rural India, students and parents will figure out a way to overcome these challenges and move ahead.

We observed people in rural Indian villages placing a very strong emphasis on their community reputation and what people around them think of them and peer recognition was a key emotional driver. Given this, if advocates of academic learning are seen within communities then the pursuit of and academic education is likely to be perceived within the community as desirable and popular, both for individuals themselves and for their children.

In our view, revamping primary education is a must. The teacher to student ratio needs to be improved and the administrative burden on teachers should be lifted so that they can focus their entire attention on the students. In our discussions with teachers, they insisted that if children get the care and attention required, they are more likely to be inspired to study further, either in person or online.

Another very important aspect in a village ecosystem is community help and support. Educated adults are frequently willing to lend a helping hand to kids who are having a difficult time at school, while skilled professionals are ready to impart their practical skills, knowledge and guidance to people in their community. However, this isn't very well organised at the moment meaning the guidance and help that is offered is sporadic and inconsistent.

Creating an organised support system will go a long way in academically educating and upskilling rural India. This can then be complemented with the right digital learning platforms to unlock scale. Our study found that discretionary spending capacity in villages is limited and there is little disposable income available for digital educational content and platforms developed for use by people in rural India must keep this in mind.

In conclusion, there is no silver bullet which can immediately improve access to academic and skills-based education in rural India, but by focussing on the areas identified by our research, we can make a start.

The single most important step that our research highlighted would build on the tendency of people to look up to successful people from their own community and attempt to emulate them. By supporting role models in the community to mentor and inspire the next generation, access to education - both academic and skills-based - could be improved dramatically.

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