राष्ट्रीय डिज़ाइन संस्थान
NATIONAL INSTITUTE OF DESIGN

DESIGN PROJECT -I

RESEARCH STUDY ON

EDUCATION IN MIDDLE SCHOOLS OF RURAL INDIA

Submitted by

BHAWNA | GARIMA | MITI | TRISHA
STRATEGIC DESIGN MANAGEMENT '20

JUNE- JULY 21

ACKNOWLEDGMENT

We would like to express our deepest appreciation to all those who provided us the possibility to complete this project. A special gratitude we give to our anchor faculty of this project, Mr. Jitender Singh Rajput, whose contribution in stimulating suggestions and encouragement, helped us to coordinate our project. With this, heartfelt gratitude to our discipline head, Mr. Guru Prasad, who always gives us new perspectives to look at.

Furthermore, we would also like to acknowledge with much appreciation the crucial role of the members of Invest India, PSA Office of India. A special thanks go to our peers and seniors for critical and insightful discussions which aided our design process. Last but not least, many thanks go to every research participant who took time out of their busy schedules and shared their opinions with us which strengthened the objectives and goals of our project.

Thanks and regards,

Garima | Mishi | Tarisha | Bhawna

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abstract

The education system and its peripheries have been an enticing subject to study and research upon for many entities for ages. At different levels either the importance of primary education is emphasized or the upliftment of higher education is taken into consideration. For years, the significance of Middle school has been undermined. The most critical and shaping years of a student's life are simply ignored or treated indifferently. Catering to this negligent approach we decided to conduct our research and propose design solutions on optimizing the education imparted in government middle schools of rural India. There is a need to study the current education system, the factors associated, challenges, shortcomings, and the attitude of its stakeholders for holistic development. The idea is not to bring about revolutionary changes but to study, observe, analyze, synthesize and hence create impactful research insights based on interesting research methodologies and creatively designed tools in order to plant tiny seeds of solutions for the growth of future sustainable models.

INTRODUCTION

Education is a great leveler and is the best tool for achieving economic and social mobility, inclusion, and equality. Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, morals, beliefs, and habits.
There is no second opinion about the crucial role that education plays in shaping an individual's personality.

On April 1, 2010 Right to Education Act (RTE) was implemented. India joined 134 countries to emphasize the significance of free and compulsory education for children of age groups 6-14 years.

The policy document that supports RTE states:
"We have had a vision for quality education for all, and now for the first time in the history of Indian education we have the RTE with a separate Chapter to ensure that this vision is implemented. (Government of India, 2011: 56)."

Under this act, four key areas must be developed for the positive transformation of the education sector :
availability, accessibility, acceptability, and adaptability. There is a 19.4% increase in enrolment in primary school from 2006 to 2009 and an improvement of the infrastructure for the school. (Chintakula, 2020, Nov 11)

> Education is the most powerful weapon *which you can use to change the world.*

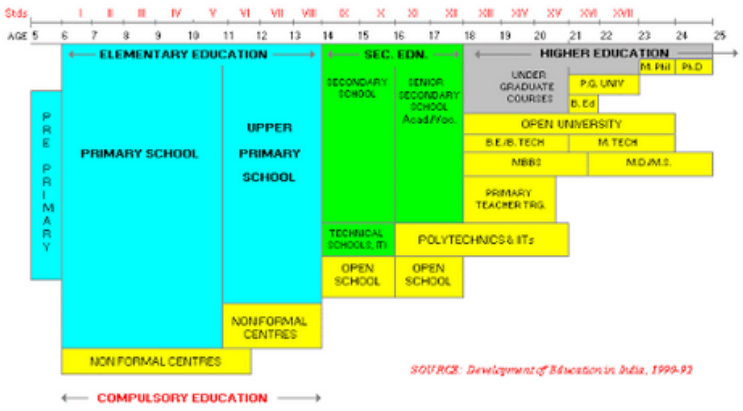
BACKGROUND

A right to education has been recognized by some governments and the United Nations. Global initiatives aimed at achieving Sustainable Development Goal 4, which promotes quality education for all. In most regions, education is compulsory up to a certain age.
As per a survey revealing, India's organized sector has only 34 million people which forms very small strata of the total population. This statement itself says a lot about the Indian literacy rate and the education system.
Education is the doorway to the wider world and an exposition on rural infrastructure is incomplete without an assessment of the extent to which we have been able to open this door for the children of rural India. Rural India is home to 70% of the nation's population. The rural population resides mainly in villages — the 2011 census reports roughly 800 million people living in more than 600,000 villages. Although most of rural India's workforce remains primarily involved in agriculture, a cumulative process of diversification through the increasing importance of non-farm activities has been taking place in recent decades.

India has the largest education system in the world after China. However, issues of quality education and access remain challenges in some parts of the Country. The role of education in facilitating social and economic progress is well accepted. Access to education is critical to access emerging opportunities that accompany economic growth. Keeping in view of this accepted fact there has been a major thrust on education since independence, but as far as ensuring quality education in rural India is concerned it has always been one of the biggest challenges for the governments.

Within this structure there are four basic types of school:

1. Government schools, including those run by local bodies;
2. Private schools, aided by the government;
3. Private unaided schools; and
4. Unrecognized private schools (the first three being recognized by the government)



structure of education in India from pre-school to higher education

RESEARCH PLAN

Phase 01	• DEFINING KEY AREAS • SECONDARY RESEARCH PART I • DEFINING RESEARCH AREA • FRAMING THE RESEARCH QUESTION
Phase 02	• SECONDARY RESEARCH PART II
Phase 03	• PRIMARY RESEARCH PLAN • EXPLORE RESEARCH TOOLS • DATA COLLECTION
Phase 04	• DATA ANALYSIS • RESEARCH INSIGHTS • PROBLEM IDENTIFICATION • DESIGN DIRECTIONS

EDUCATION IN RURAL INDIA

Eighty-seven percent of the schools in India are in the country's villages. Government statistics and independent surveys have revealed that over 90 percent of the rural schools at the elementary level are run by the government.

Right to Education is the primary right of every citizen of India, whether a child resides in a high profile society or in a faraway not-so-developed secluded village. In India, the condition of rural education is still improving, the conditions of these rural schools are still very poor. There are very few schools in the rural areas and children have to travel far distances to avail themselves of these facilities and most schools in these locations do not provide drinking water. The quality of education is also very poor. The teachers get very little income, so most of the time the teachers are either absent or they do not teach properly. (Pandey, 2020)

If a country's rural education sector is working well, it reflects on the entire economic state of a country. Here is how we can upgrade the rural education scenario in India. With 65% of the population residing in rural India, education in rural belt truly deserves much more attention.

According to a survey report called the Annual Status of Education Report (ASER), more than 50% of the students in 5th standard attending rural schools are not capable of reading a second standard textbook and are unable to solve basic mathematical questions.

As per a survey revealing, India's organized sector has only 34 million people which forms very small strata of the total population. This statement itself says a lot about the Indian literacy rate and the education system. The prevalence of illiteracy is common among rural individuals, apart from poverty, there are a number of causes, leading to illiteracy. Lack of literacy skills, education, and awareness lead to an increase in unemployment. Illiteracy is a social issue that is prevalent among rural individuals, especially those belonging to deprived, marginalized, and socio-economically backward sections of society. This social problem is not only detrimental to the lives of the individuals but imposes impediments within the progression of the entire community. As a result of illiteracy, they also remain unaware in terms of policies, programs, and strategies that have been put into operation to promote their well-being. In India, 75.7% of males and 62% of females are literate, in rural India 72.3% Male and 56.8% are Females in the year 2014 (NSS Report). The percentage increase in literacy rate from 2001 to 2011 is 26% female, 10% male, 14% total.

In rural communities, there is a number of causes that lead to illiteracy among individuals. These have been stated as follows:

- Lack of Financial Resources
- Parental Illiteracy
- Lack of Educational Facilities
- Lack of Teaching-Learning Methods
- Lack of Interest in Studies
- Transportation Problems
- Shortage of Teachers
- Engagement in Employment Opportunities
- Child Labour
- Social Disputes
- Large Families

Education is fundamental for achieving full human potential, developing an equitable and just society, and promoting national development.

LITERATURE REVIEW

One of the primary goals of the schooling system must be to ensure that children are enrolled in and are attending school. Through initiatives such as the Sarva Shiksha Abhiyan (now the Samagra Shiksha) and the Right to Education Act, India has made remarkable strides in recent years in attaining near-universal enrolment in elementary education. However, the data for later grades indicates some serious issues in retaining children in the schooling system.

The Gross Enrollment Ratio (GER) for Grades 6-8 was 90.9%, while for Grades 9-10 and 11-12 it was only 79.3% and 56.5%, respectively - indicating that a significant proportion of enrolled students drop out after Grade 5 and especially after Grade 8. As per the 75th round household survey by NSSO in 2017-18, the number of out-of-school children in the age group of 6 to 17 years is 3.22 crore. (NEP. 2020)

Demand & Supply Law in education explains that building schools and hiring teachers is useless if there is no strong underlying demand for education; conversely, if there is a real demand for skill, Demand for education will naturally emerge, and supply will follow.

For parents and children the value of the foregone earnings and the forgone labor market experience is much larger because teenage children can work and earn money.
Getting children into school is a very important first step: This is where learning starts. But it isn't very useful if they learn little or nothing once they're there. Moreover, the evidence from India suggests that even when teachers are in school and are supposed to be in class, they are often found drinking tea, reading the newspaper or talking to a colleague. Overall, 50 percent of teachers in Indian public schools are not in front of a class at a time they should be.

Education leads to wealth. Parents seem to see education primarily as a way for their children to acquire (considerable) wealth. Seventy percent thought that a secondary-school graduate would get a government job, when in fact 33% of them actually get those jobs.

Parents see education as a lottery ticket, not as a safe investment and that is usually the perception of education. Parents, like everyone else want schools to deliver what they understand to be an "elite" education to their child—despite the fact that they are in no position to monitor whether this is what is actually being delivered or give any thought to whether their children will benefit from it. The education sector is in dire need of a revamp. Make it attractive to invest in a business requiring educated labor and there will be a need for an educated labor force, and therefore a pressure to supply it. And then, the argument continues, since parents will start to really care about education, they will also put pressure on teachers to deliver what they need. If public schools cannot provide quality education, a private-school market will emerge. Most of the time parents don't see a return on investment for their kids when they are educating them. (Banerjee & Duflo, 2011, 26 April)

The design of PROGRESA,
a transfer program "with strings attached." PROGRESA was the first conditional cash transfer (CCT) program: It offered money to poor families, but only if their children regularly attended school and the family sought preventive health care. They got more money if the children were in secondary school than in primary school and if it was a girl who went to school rather than a boy. To make it politically acceptable, the payments were presented as "compensation" to the family for the wages lost when their child went to school instead of working. (Banerjee & Duflo, 2011, 26 April)

So why are schools failing?
Both the curriculum and the teaching are designed for the elite rather than for the regular children. A combination of unrealistic goals, unnecessarily pessimistic expectations, and the wrong incentives for teachers contributes to ensuring that education systems in developing countries fail their two basic tasks: giving everyone a sound basic set of skills and identifying talent. (Banerjee & Duflo, 2011, 26 April)

Parental engagement in their children's education is known to be an important predictor of children's academic success. However, adults with less education (ALEs) in developing countries face several challenges in supporting their children at home, particularly after the children reach middle school. According to the 2011 Census of India, 188 million adults had studied only till primary school (5 years of education or less), and another 170 million adults had studied till secondary school (between 6 and 10 years of education). Thus, there are still a large number of illiterate and less-educated adults in India. We call them "adults with less education". The children of ALE parents do not get the same kind of home environment and financial support that children of educated parents do.

ASER report 2018 states that 44% of the children attend primary school even before the age of 5. Also, enrollment in schools is steadily rising. In 2018, 98% of children of age 8, and 87% of children of the age 15-16 are enrolled in schools in rural India [4]. However, educational outcomes have in fact fallen. For example, in 2018, only 44% of standard-5 children and only 69% of standard-8 children in government schools could read standard-2 level text. In 2008, the corresponding numbers were 53% and 83% respectively. The ASER report lists several factors that contribute to this low educational outcome. Inadequate family support and poor parental engagement are two of them.
Most importantly, we need to work with the ALE parents and their children to help them develop such an academic culture at home. (Ranjan Padhi et al., 2020,)

TEACHERS IN RURAL AREAS

The main problem India now faces is that all the pedagogical innovations are fit to improve the quality of urban education while the rural learners and their education remain largely neglected.

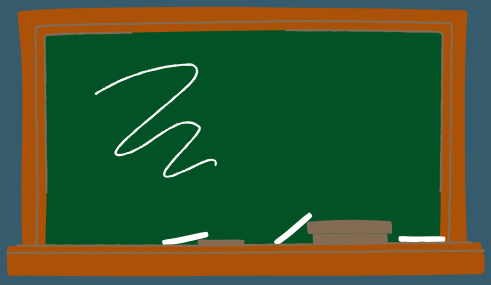
1. Non-permanence of teachers is demotivating
Most of the schools in rural areas are run by the government. They appoint ad hoc teachers, instead of permanent ones, who are poorly paid as compared to the huge remuneration of a full-time Trained Graduate Teacher (TGT). Moreover, promising career prospects, which is quite a motivation booster, is almost nil for the non-permanent teachers. This leads to dissatisfaction, eventually resulting in a dearth of teachers because they move away to more permanent jobs.

2. Late or blatantly absent
Lack of accountability of teachers and school authorities has raised the rate of absenteeism. School Development and Management Committees (SDMCs), comprising parents and members of the local community, have been entrusted with the responsibility of overseeing teachers and their duties. However, research suggests that the committee has hardly seen success.

3. Non-teaching duties
Moreover, non-teaching duties like election invigilation often keep teachers away from schools. Furthermore, teachers often have to report for duty far away from their homes. With an inadequate transport system in rural India, the distance only adds to their woes and often results in absenteeism

4. Exemption from TET
Several states have exempted candidates from Teachers' Eligibility Test (TET) as only 20 per cent of the aspirants clear it. This wrong move in an attempt to quickly fix the issue of dearth of teachers has deteriorated the quality of education in the states even further. However, quality of teachers is a major concern not only in these states, but across the entire country.

5. Lack of quality teacher training
There are many private teacher-training institutes in India, but the quality of the training they provide is unsatisfactory. Continuous professional development is a motivator for teachers, and enough attention is needed in this regard.



THE LEARNING ECOSYSTEM

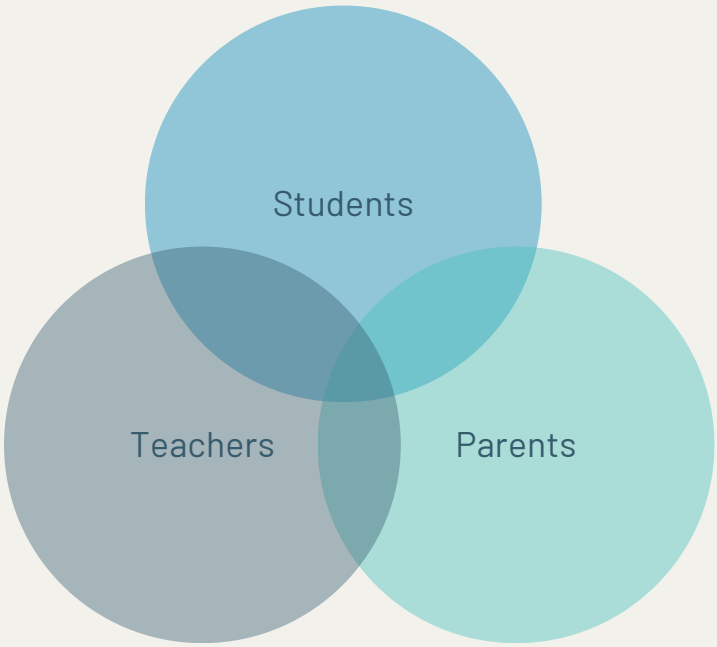
The Learning Ecosystem comprises of 3 main components - Students, Teachers, and Parents. Each component plays a vital role in the education system. This triad balances each other and cannot successfully exist without the other.

Teaching is recognized as one of the most challenging and respected career choices, absolutely vital to the social, cultural, and economic health of our nation. A teacher's role is to make informed and intelligent decisions about the practice to achieve various outcomes with and for students in their classes. A teacher's role is to make judgments about how best to help their students learn in the environments in which they teach.

Without the support of parents or guardians, the delivery of education by teachers is unfulfilled. Research from the National Coalition for Parent Involvement in Education shares that “no matter their income or background, students with involved parents are more likely to have higher grades and test scores, attend school regularly, have better social skills, show improved behavior and adapt well to school.”

At the heart of this ecosystem and the main beneficiary are the students. A Student's role in the educational system is to learn what they are being taught, and most importantly find ways to apply that learning outside the school environment. This application will only happen when the student learns, implying the importance of good delivery of education and the support of parents.

There is need for the Sustenance of a stable learning ecosystem.



LEARNING TRIAD

EDUCATION POLICIES AND SCHEMES

The following are the largest policies by the government for the education sector

Sarva Shiksha Abhiyan

This program was introduced in 2001 and is one of the biggest projects in India. The Sarva Shiksha Abhiyan (SSA) is a flagship program for children to get Universal Elementary Education (UEE). This program covers the entire country and works in partnership with local and state governments. SSA is mainly useful for children between the ages of 6 to 14. The program aims to universalize education and improves its quality by a time-bound implementation strategy and context-specific planning. It includes children from all social classes.

Right to Education (RTE) Act

The Right to Education (RTE) Act was enacted in 2009, and this Act made education for every child between 6 and 14 years a fundamental right. It also set the basic norms that must be followed by every elementary school in the country. Thus, children got the right to receive free elementary education. The Right to Education Act has made it compulsory to reserve 25% in private schools for children from economically weaker families.

National Program for Education of Girls at Elementary Education (NPEGEL)

The NPEGEL program has been initiated by the Government of India to reach girls, especially the girls that are not enrolled in a school. The program was started in July 2003 and this program is a significant component of the SSA. The program provides extra support for improving the education of girls. Some objectives that come under this scheme are the development of learning materials that are gender-sensitive, gender-sensitisation of teachers, provisions like stationary, uniforms, and workbooks. The main focus of this program is to break gender stereotypes and to make sure girls get a good education at the elementary level.

Beti Bachao, Beti Padhao

This scheme initiated in 2015 is one of the most famous central govt. schemes for girl education. The main aim of this government scheme was initially to protect girl children from female foeticide and infanticide and later, provide assistance for their education. Other objectives of the plan include stopping the practice of gender-determination tests and discrimination against girl children. The Beti Bachao, Beti Padhao scheme ensures the protection of girls and their survival and makes sure that girls participate in educational activities alongside boys. This scheme thus spreads the awareness that girl children are not a burden.

Midday Meal Scheme

Otherwise known as the National Programme of Nutritional Support to Primary Education, this plan was launched in 1995 to provide mid-day meals to children studying in primary class. The main objective of creating this scheme was to eliminate classroom hunger of children and to increase attendance and enrolment of children at schools. This scheme also aims to improve the interaction between children of all castes and religions. It also addresses the issue of inadequate and improper nutrition among children. Women are also socially empowered since the scheme creates employment opportunities. Thus, this scheme can help in developing children emotionally and socially.

Kasturba Gandhi Balika Vidyalaya

Launched in 2004, the KGBV scheme aims at setting up residential schools for girls belonging to minority communities at the upper primary level. This scheme is mainly implemented in the parts of the country where girls aren't enrolled in school. This scheme provides reservation of 25% to girls from families below the poverty line and the rest 75% to the girls belonging to ST, SC, OBC, and other minority communities. The main idea behind this scheme is that by setting up residential schools, girls from disadvantaged groups of the society can access quality education.

Infrastructure Development in Minority Institutes (IDMI)

To improve the quality of education, the scheme has been started to improve infrastructure in unaided/aided minority schools. The salient features of this scheme include expanding facilities that will help the education of children from minority communities. The entire country comes under this scheme, but preference is given to places that have a minority population above 20 per cent. The scheme also encourages educational facilities for children with special needs, girls, and others who are mostly held back in society.

DIKSHA

DIKSHA (Digital Infrastructure for Knowledge Sharing) is a national platform for school education, an initiative of National Council for Education Research and Training (NCERT), Ministry of Education. DIKSHA itself was launched by the Hon' Vice President of India on Sept 5th, 2017 and has since been adopted by 35 states/UTs across as well as CBSE and NCERT and by crores of learners and teachers. DIKSHA is built on open source technology, made in India and made for India, which incorporates internet scale technologies and enables several use-cases and solutions for teaching and learning.

SKILL INDIA

Skill India or the National Skills Development Mission of India is a campaign launched by PM Modi on 15 July 2015 to train over 40 cr people in India in different skills by 2022. It is managed by the National Skills Development Corporation of India.
The recent systematic literature review conducted by Cabral and Dhar (2019) has identified the significance of skill development wherein the implementation of such schemes to mitigate poverty, utilize demographic dividend, socio-economic empowerment of under privileged sectors, achieve economic growth, reduce social challenges, and economic inclusion.

NGO's Strengthening the Education System in India

Non-governmental organisations work at the grassroots level to help underprivileged children access quality education. India is a vast country with a huge demographic and geographic divide, and NGO's play a key role in bringing people together.

TEACH FOR INDIA: The Fellowship is an opportunity for India's brightest and most promising youth, from the nation's best universities and workplaces, to serve as full-time teachers to children from low-income communities in under-resourced schools for the modern world.

MANAV SADHNA: Guided by Mahatma Gandhi's message to Love all, Serve all, we help transform underprivileged communities through a range of initiatives. Although there is great diversity amongst these programs, they are all based on the people's participation and evolve according to the needs of the community.

GYAN KUNJ ORGANIZATION: Gyankunj's prime objective is to bridge the gap in the academic opportunities provided to children from well off families and the cavity in the education of students from low-income groups families, i.e. academic exposure to digital devices, the utility of the internet, institutional grooming in verbal and written skills.

PRATHAM: It was established in 1995 to provide education to children in the slums of Mumbai. Today, it has grown in scope and reach with a focus on high quality, low cost, and replicable interventions which address the lapses in the education system. With a mission of 'Every child in school and learning well,' the organization has addressed several issues such as learning levels, dropout rates, child rights, and teacher training.

THE AKSHAY PATRA FOUNDATION: Established in 2000 and headquartered in Bengaluru, the organization addresses malnutrition and supports the right to education of disadvantaged children. Working on a public-private partnership model, it provides fresh and nutritious meals to children in government and government-aided schools as an implementing agency of the government's midday meal schemes.

BACHPAN BACHAO ANDOLAN: It was founded by the Nobel laureate Kailash Satyarthi and works towards a child-friendly world where all children are free from exploitation and abuse. It identifies, releases, rehabilitates, and educates children in servitude. It achieves this through prevention, direct intervention, coalition building, mass mobilization, and legal action.

SRINIVASAN SERVICES TRUST: Srinivasan Services Trust which is the social arm of a two-wheeler manufacturer is committed to eliminating imbalances in rural education in India by helping improve school infrastructure, mobilising quality teachers and offering career counselling.

EDUCATION MODEL IN OTHER COUNTRIES

Although most students change school at some point during their education, systems around the world vary significantly. For example, in England, children transition in Year 6 at age 11, whereas in the United States (US), the age and grade of transition differ per school and per state, with children transitioning between the ages of 10 and 14 to a middle or high school (5th and 8th grade, respectively). While it is the norm to transition, it is possible that children may also attend schools in which they complete their education in one institution, though these are uncommon in the United Kingdom. To avoid switching between locale-specific terms, for the entirety of this review, primary education refers to schooling before children transition to a middle school, high school (United Kingdom), secondary school, or a gymnasium around the ages of 10–14, while secondary education refers to schooling after this transition.

Short overview of the organization of Brazil and Finland's educational systems

The organizing principles of the educational systems and the cultural features of each society shape and define the learning environments and processes in the micro-level of a classroom, determining the experience of learning and how students make meaning of such process. In this study, the most relevant elements in which to contextualize the Brazilian and Finnish education systems are related to (1) implementation of a core curriculum; (2) development of ideas on equality and equity; and (3) use of standardized testing to steer educational outcomes.
For over four decades, the National Core Curriculum has steered the Finnish educational system. As a state political entity, it sustains the idea of equality as the main strategy of the welfare state, which characterizes the history of curricular thinking and the goals of education in Finland (cf. Sahlberg 2011a, b; Simola 2005). It also supports the development of a completely publicly funded education system, including daily school meals and health services, resulting in equal opportunities for individual growth and a homogeneous educational path. Additionally, there are no ability-tracking structures or educational barriers separating comprehensive school students from pursuing academic or vocational education, and there are flexible accountability structures that place a strong emphasis on trusting schools (Aho et al. 2006).

On the other hand, the Brazilian educational system only recently started implementing its version of the National Core Curriculum. Previously, the Ministry of Education and the National Council of Education defined guiding principles for all levels of education, with schools having had the prerogative to design their curricula according to local contexts and budgets. This situation contributed to inequality, considering the country's history and socio-geographical constraints (Arias et al. 2004). Additionally, the public system does not meet the country's demand, with significant gaps (at all levels) that are supported either through the private sector or areas and populations that are not properly assisted (Azevedo and Santos 2012). To address such an unequal system, standardized quality assessment in education has played a role in steering the implementation of education policies or programs (Kauko et al. 2016). Contrary to Finland, national testing systems are used for each level of education, and during the past decade, Brazil has joined international large-scale assessment processes, utilizing the results to implement different educational policies (Shiroma and Schneider 2012).
Considering these distinctions it would be expected that students from both nations experience schooling very differently (and diversely).

However, we understand that the contrast between these two social realities is an opportunity to identify core elements present in students' perceptions about learning, which reveals then frameworks for understanding learning experiences. To establish grounds for common analysis, we carefully chose two schools to participate in this study that could offer the same 9-year comprehensive education, with 200 school days annually and an average of four-and-a-half hours of study daily. Both schools are teacher-training schools that are part of public universities, and besides English, both offer two additional foreign-language courses, as well as an extensive art curriculum.

Method

Considering the objectives of the present study, we chose to pursue investigative procedures through a qualitative approach, structured and guided by a constructive-interpretative process connected to culture and social history (González-Rey 2002). The constructive-interpretative perspective considers researchers' subjectivity as an essential element in constructing hypothetical indicators that will guide the construction of the corpus and its analysis. The method is not predetermined, but rather active and dialectic, allowing for interpretation of data that can lead to new processes of collection and analysis (González-Rey and Mitjánz 2015).

WHY FINLAND HAS THE BEST EDUCATION SYSTEM IN THE WORLD?

- No standardized test- they have national matriculation exam.
- Responsibility over accountability for teachers- masters degree is required.
- Cooperation above competition.
- Make basics a priority- what constitutes happy, harmonious and healthy students.
- Education should be an instrument to balance out social inequalities.
- Free school meals
- Ease of access to healthcare.
- Psychological counseling
- Individualized guidance.
- Starts school at 7, given free reign in the developing childhood years to not be chained to compulsory education.
- After 9th grade/age of 16 , nothing is compulsory.
- Upper secondary schools-3 years- prepare students for matriculation test.
- Vocational training program - prepare students for various careers.
- Longer breaks in between lectures.
- Environment for holistic learning.
- Same teacher up to 6 years- teacher acts as a family member or mentor ,mutual trust and bonding happens.
- Less homework-half an hour.
- Teachers learn curriculum planning, set standard and goals for teaching, assessment and evaluation, school improvement, leadership.
- Teachers decide theirs own curriculum.
- Schools don't charge from parents, they get funds from taxation.
- Focus on problem solving rather than winning arguments.

UNDERSTANDING THE MIDDLE SCHOOL

WHY MIDDLE SCHOOL?

Middle school is a critical period of psychological and academic development for children. It's a time when they are more clearly defining their identities and building the foundations for their future success in high school, college, and beyond. The middle grades are the "make it or break it" years, when some students begin to disengage from school, increasing the likelihood of high school dropout. For students, the middle school years can be a time of both great vulnerability and great responsiveness to change. These years
are highly formative for behavior patterns in education and health
that have enduring, lifelong significance.

Secondary Education is the most significant stage in the educational hierarchy as it prepares the students for higher education and the world of work. The policy at present is to make secondary education of good quality available, accessible and affordable to all young persons in the age group of 11-14.

Fifty years after the first junior high schools were established, educators began to call for middle schools–new schools that had a different grade organization and a more developmentally responsive program–in order to provide a more gradual and appropriate transition between the elementary and high school years. Alvin Howard became one of the first to advocate the creation of a 6–8 school that would recognize the earlier onset of puberty of young adolescents. The "junior high school" concept was introduced in 1909. In the late 19th century and early 20th century most American elementary schools had grades 1 through 8. As time passed, until the 1940s, junior high schools increased quickly. The installation of junior high schools was made in order to provide more academic and social opportunities for adolescent students prior to entering high school. As years passed, the model changed to middle schools serving grades six through eight.

The challenge for middle schools is to help provide the building blocks of adolescent development and preparation for adult life.

> *cThe middle grade is the last best chance that we have to get youngsters on the right path toward academic and career success.*
>
> *Sandy Kress, AUTHOR*
> *EDUCATION NEXT*

BEHAVIOURAL AND PSYCHOLOGICAL STUDY OF MIDDLE SCHOOL STUDENTS

Middle school comprehends early adolescent years and one of the the most tender stages of ones life. This is the time when students are going through drastic cognitive and bodily changes.The transition from primary to secondary education is a normative event for most children around the world, which typically occurs when children are early adolescents (mostly between the ages of 10–14).

From ages 11 through 14, a child develops in four main areas:

- Physical development. Adolescence is a time of change throughout the body. A growth spurt usually occurs near the time of puberty. Girls begin to develop breasts and start their periods. Boys grow facial hair. Both boys and girls grow pubic hair. Boys may lag behind girls in height during these years, but they usually end up taller.

- Cognitive development. This is how the brain develops the abilities to think, learn, reason, and remember. Kids this age typically focus on the present, but they are starting to understand that what they do now can have long-term effects. They are also beginning to see that issues are not just clear-cut and that information can be interpreted in different ways.

- Emotional and social development. As they start to move from childhood into adulthood, adolescents feel the urge to be more independent from their families. Often, friends replace parents as a source of advice. When at home, adolescents may prefer spending time alone to being part of the family. Still, family support is important to help them build a strong sense of self.

- Sensory and motor development. Kids this age may be a little awkward or clumsy. Their brains need time to adjust to longer limbs and bigger bodies. Getting regular moderate exercise can improve coordination and help the child build healthy habits.

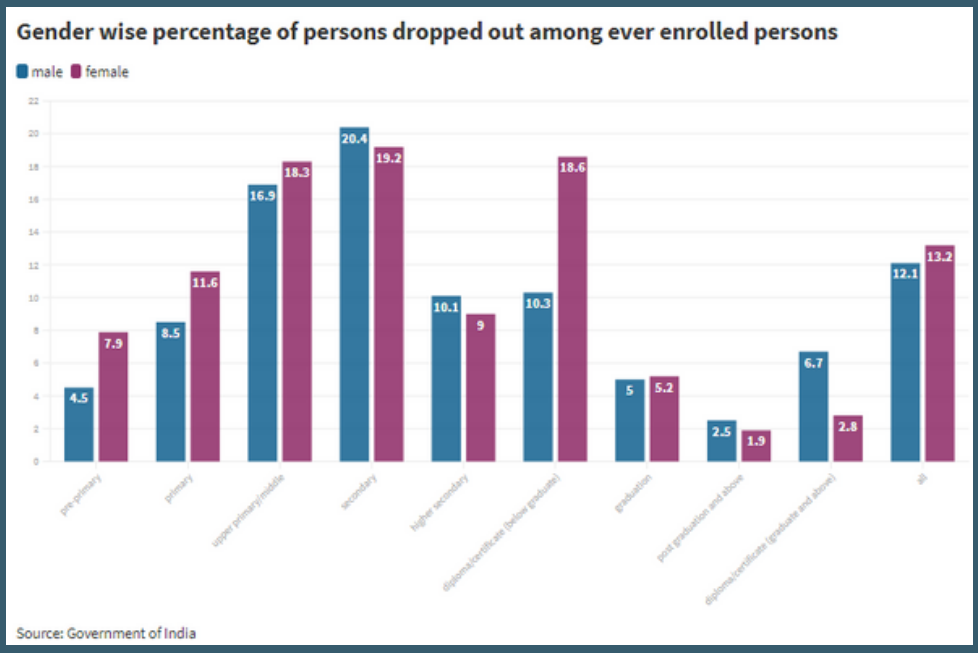
Early adolescents have concrete, black-and-white thinking. Things are either right or wrong, great or terrible, without much room in between. It is normal at this stage for young people to center their thinking on themselves (called "egocentrism"). As part of this, preteens and early teens are often self-conscious about their appearance and feel as though they are always being judged by their peers.

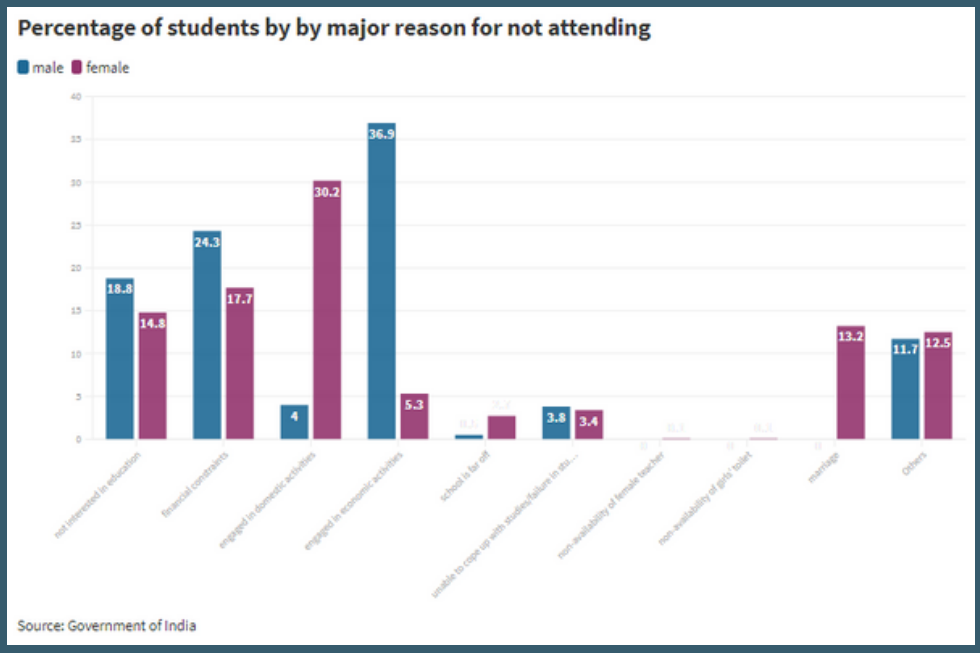
The brain continues to change and mature in this stage, but there are still many differences in how a normal middle adolescent thinks compared to an adult. Much of this is because the frontal lobes are the last areas of the brain to mature—development is not complete until a person is well into their 20s! The frontal lobes play a big role in coordinating complex decision-making, impulse control, and being able to consider multiple options and consequences. Middle adolescents are more able to think abstractly and consider "the big picture," but they still may lack the ability to apply it in the moment.

Children in this age group might also:

- Focus on themselves; going back and forth between high expectations and lack of confidence.
- Experience more moodiness.
- Express less affection toward parents; sometimes might seem rude or short-tempered.
- Feel stress from more challenging school work.
- Develop eating problems.
- Feel a lot of sadness or depression, which can lead to poor grades at school, alcohol or drug use, unsafe sex, and other problems.
- Have more ability for complex thought.
- Be better able to express feelings through talking.
- Develop a stronger sense of right and wrong.

1 out of every 8 students stops studies midway; girls leave due to marriage and domestic work, boys to support family





HOW HAS THE PANDEMIC AFFECTED EDUCATION?

There is a discernible gap between the rural and urban education system for which rural children face many difficulties and with pandemic the gap only widened. Inequities in education along class, caste and gender lines have always existed, but the pandemic has worsened it tremendously, While urban India has witnessed a boom in online education for past two years, in sharp contrast students in rural areas are suffering.Across India, children are at risk of discontinuing studies, child marriages are up, and more children are being pushed to work. The impact of the digital divide would have been limited if the decision to shut schools was not a centralised one. If that decision was left to local authorities, many schools in remote regions would be running now,

According to the Annual State Education Report survey, two-thirds of rural children in India reported they did not receive learning materials or activities at all during the period of the pandemic.Additionally, one in three children had no learning activity during this time. Lack of tools, inadequate number of schools and infrastructure, financial burdens and low digital literacy hinder them from receiving the schooling they desire. Gender also plays a role in the education of rural children with high rates of withdrawal from school among girls. Communities must be made aware of and encouraged to adopt gender-free education systems built on the foundations of equality and quality.

Almost 60% of children were unable to access online learning methods, and 70% of the parents found online classes to be ineffective for learning. The teachers' survey also revealed that in at least 80% of the cases, only an hour or less per day was spent by teachers per grade on online classes.The disruption of education caused by Covid-19 has adversely impacted rural India wherein children could not cope up with the normal owing to lack of adequate digital infrastructural support.There is also an urgent need to provide a holistic solution to ensure quality education at the grassroots level.

Some of the major challenges that can be enlisted in this context are:

Digital Literacy and Infrastructural Support
These are prominent hurdles that come in the way of enabling online education in the rural regions of India. Though the power and network infrastructure have improved leaps and bounds in the remote areas of the country, there is still a room for improvement. Teachers and students in villages are becoming more accepting towards digital means of learning, but the infrastructural facilities there have not developed fully to become at par with what online learning require. Steady flow of electricity and lack of high speed internet still pose major problems for the rural population.

Limited availability of technological devices
While we look at the domain of digital learning, it is imperative to consider the availability of the right devices to every student for accessing digital content. Not a lot of people in rural India have access to personal laptops or computers, and phone screens are not conducive to long learning hours. Also, data packs and their costs can be a big deterrent both for teachers as well as learners, especially for live classes. Many students either don't have personal laptops/smartphones or they are available for a limited time. Hence, the learning remains restricted with the limited availability of technological devices.

Lack of Familiarity with Digital Technology
While Smart Classrooms and Digital Learning have already made a way in urban educational setups, some rural countries still rely on traditional teaching methods for their lessons. Therefore, shifting from traditional pedagogical methods to the digital one cannot happen overnight. Teachers as well as students require proper training and more user-friendly platforms to make them familiar with digital technology so that they can be comfortable teaching/learning using them.

Shortage of Teachers
Shortage of teachers or the poor teacher-to-student ratio in villages pose another challenge towards making learning entirely digital in such areas. To make complete digitization of education in rural areas, this ratio needs to be improved and a large number of skilled and well-trained teachers are required so that each and every student receives complete attention even during an online class. While the contemporary online classroom solutions are designed to facilitate engagement and intuitiveness among students towards learning, a teacher's guidance and attention remain indispensable for learners.

With the Covid-19 putting a halt on classroom learning sessions, online learning has paved a new way to retain normalcy for students and teachers. It is heartening to see that not only urban educational institutes, but the state-run schools in rural areas have also gone digital and resorted to online classes to avert academic losses. Although, not every village and town in India is infrastructurally developed to sustain online education, it is motivating to see many rural schools and colleges adapting completely to e-learning during these times. Also, many affordable and low-bandwidth e-learning solutions are coming up with multi-lingual platform to facilitate easy and convenient online learning classes in rural India.

In the last few years, we have observed substantial changes in rural India regarding education, infrastructure and other facilities. With the continuous support from government and innovations coming up in digital technology, online learning will be made affordable and accessible.

The disruptive effects of the Covid-19 pandemic are borne disproportionately by already disadvantaged social groups. When all educational institutions across India shifted to online and distance learning modes in March 2020 to comply with a nationwide complete lockdown, the already significant disadvantages encountered by rural Indian schoolchildren were exacerbated. Rural schoolchildren have historically been disadvantaged in terms of educational quality and opportunities compared to their urban counterparts, as stressed by two recent large-scale survey reports – the Annual State of Education Report 2020 (ASER) and the Household Social Consumption on Education in India (2017–2018) survey.

Against the backdrop of a yawning rural–urban digital divide, state governments employed a mix of methods to implement distance learning for rural schoolchildren. The ASER 2020 survey highlights that these efforts have yielded disappointing results. During the reference week, approximately

- 20 per cent of rural children had no textbooks at home
- 28 per cent of students had received no educational assistance from family
- 29 per cent of children had not engaged in any educational activity
- 66 per cent of children had not received any instruction from their school
- only 11 per cent had attended live online classes
- 32 per cent of children with smartphone access had not received any materials.

In addition, access to devices and the internet does not guarantee ability of use for educational purposes. As the key indicators of household social consumption on education in India show, only 20 per cent of people in the 5–35 age group had basic digital literacy, while only 8.5 per cent of women knew how to use the internet.

This experience offers three broad insights into the nature of Indian rural education where future development efforts can be directed.

1. Teaching schoolchildren is a specialised, professional activity

Their lofty status in predominant Indian cultures notwithstanding, the public perception of teachers (especially government and rural teachers) is not favourable.

School teaching is also perceived as something any educated person can manage. It can be hoped that with millions of families now tasked with their children's education, there will be a greater appreciation of the work of schoolteachers, which should subsequently lead to more efforts towards enhancing their salaries and professional capacity.

2. Educated parents and a conducive home environment are essential

School closure suddenly shifted the locus of all educational activities to the child's home and family. While the number of first-generation learners in rural India is steadily decreasing (see ASER Centre, 2019, pp. 304–305), many students still do not receive educational or motivational support at home. Better educated parents are more capable of supporting their children's education through direct assistance, having higher expectations, and providing more resources. Therefore, adult and lifelong education should be treated as important aspects of improving rural education (Atchoarena & Sedel, 2003). With limited physical space and money for educational resources in most rural households, a positive study environment at home can be created through simple acts such as not assigning household/farm chores to children, not turning on the television when the children are studying, and by asking them questions about what they did in the school that day (Weiner, 1991).

3. Limited ways in which technology can support education

Even if issues of access to suitable devices and network connectivity were resolved, technologies cannot meet the pedagogical and social requirements of rural education. Technologies require the support of traditional educational inputs such as dedicated learning environments, hands-on classroom activities and supportive family environment. Most importantly, they require capable teachers who can use them along with other pedagogical materials to suit the needs of individual students. For rural students, teachers are often the only source of motivation and guidance which are essential in ensuring students continued enrolment. Future policymaking efforts would be remiss to focus on EdTech at the cost of traditional educational inputs (Atchoarena, Wallace, Green, & Gomes, 2003).

Prolonged school closure can seriously affect lifetime educational achievements of rural Indian children (Azavedo, Hasan, Goldemberg, Iqbal, & Geven, 2020). Prompt remedial actions and policy measures must be adopted to ensure these children are not denied of their fundamental right to education.

According to the key indicators of Household Social Consumption on Education in India report, based on the 2017-18 NSSO, fewer than 15% of rural Indian households have internet access (as opposed to 42% urban Indian households).

Sr No	State	Rural		Urban	
		Operate Computer (%)	Access Internet (%)	Operate Computer (%)	Access Internet (%)
1	Andhra Pradesh	1.5	10.4	11.6	29.5
2	Assam	3.7	12.1	30.8	46.9
3	Bihar	2.7	12.5	20.0	38.6
4	Chhattisgarh	3.2	10.6	22.0	34.6
5	Delhi	NA	NA	34.7	55.8
6	Gujarat	4.4	21.1	20.1	49.1
7	Haryana	5.9	37.1	29.5	55.5
8	Himachal Pradesh	10.5	48.6	28.3	70.6
9	Jammu & Kashmir	3.5	28.7	16.0	57.7
10	Jharkhand	1.3	11.9	15.6	40.2
11	Karnataka	2.0	8.3	22.9	33.5
12	Kerala	20.1	46.9	27.5	56.4
13	Madhya Pradesh	2.3	9.7	17.2	35.4
14	Maharashtra	3.3	18.5	27.4	52.0
15	Odisha	1.8	5.8	17.2	31.2
16	Punjab	9.4	39.4	26.7	57.1
17	Rajasthan	6.4	18.5	26.6	49.9
18	Tamilnadu	11.6	14.4	24.7	24.8
19	Telangana	1.6	9.9	17.6	41.9
20	Uttarakhand	7.0	35.2	32.5	64.3
21	Uttar Pradesh	4.0	11.6	22.3	41.0
22	West Bengal	3.3	7.9	23.0	36.0

Source: 75th round of National Sample survey conducted between July 2017 and June 2018

Before the COVID-19 lockdown in India, no one estimated that the face of the Indian educational institutions could change so drastically. Schools that never allowed students to carry an electronic gadget turned into learning centers for online classes. Both teachers and students are getting familiar to this new normal, which is definitely more challenging for the teachers to handle with this situation. The teachers also face challenges in designing effective lessons and changing of teaching when shifting to online learning; this can also be resolved through workshops and training.According to the key indicators of Household Social Consumption on Education in India report, based on the 2017-18 NSSO, fewer than 15% of rural Indian households have internet access (as opposed to 42% urban Indian households).

Availability of electricity is a significant challenge to taking advantage of education online. In a recent 2017-18 survey, the Ministry of Rural Development found that only 47% of Indian households receive more than 12 hours of electricity and more than 36% of schools in India operate without electricity. This suggests that while students from families with better means of living can easily bridge the transition to remote learning, students from underprivileged backgrounds are likely to accede to inefficiency and a lack of adaptation, either because of the inaccessibility of the technology or the low education of their parents to guide them through tech-savvy applications. Non-availability of technical infrastructure and irregular interrupted internet connectivity all across India is the biggest challenge in front of the students and teachers.

IMPACT ON TEACHERS AND STUDENTS Both teachers and students are facing many hurdles during online education. At home, a lack of basic facilities, external distraction and family interruption during teaching were major issues noticed. Educational institution support barriers such as the budget for purchasing advanced technologies, a lack of training, a lack of technical support and a lack of clarity and direction were also noticed. Teachers also faced technical difficulties. The difficulties were grouped under a lack of technical support; it included a lack of technical infrastructure, limited awareness of online teaching platforms and security concerns. Teachers' personal problems including a lack of technical knowledge, course integration with technology are damper their engagement in online teaching

Positive impact on education system: Though the outbreak of COVID-19 has created many negative impacts on education, educational institutions of India have accepted the challenges and trying their best to provide seamless support services to the students during the pandemic. Indian education system got the opportunity for transformation from traditional system to a new era. The following points may be considered as the positive impacts. Develop the use of soft copy of learning material- In lockdown situation, students were not able to collect the hard copies of study materials and hence most of the students used soft copy materials for reference. Improvement in collaborative work- There is a new opportunity where collaborative teaching and learning can take on new forms. Rise in online meetings- The pandemic has created a massive rise in teleconferencing, virtual meetings, webinars and e-conferencing opportunities. Enhanced digital literacy- The pandemic situation induced people to learn and use digital technology and resulted in increasing the digital literacy. Improved the use of electronic media for sharing information- Learning materials are shared among the students easily and the related queries are resolved through e-mail, SMS, phone calls and using different social medias like WhatsApp or Facebook. Worldwide exposure- Educators and learners are getting opportunities to interact with peers from around the world. Learners adapted to an international community. Better time management- Students are able to manage their time more efficiently in online education during pandemics. Demand for Open and Distance Learning- During the pandemic situation, most of the students preferred Open and Distance Learning mode as it encourages self-learning providing opportunities to learn from diverse resources and customized learning as per their needs.

Negative impact on education system: Indian education system has suffered a lot due to the outbreak of COVID-19. It has created many negative impacts on education and some of them are as pointed below: Educational activity hampered- Schools are closed and classes have been suspended. Different boards have already postponed the annual examinations and entrance tests across India. Unpreparedness of teachers and students - Teachers and students are unprepared for online education; they were not ready for this sudden transition from face to face learning to online learning. Parents' role- In urban area some educated parents are able to guide but some may not have the adequate level of education needed to teach children in the house. Digital gadgets: Especially in rural area many students have limited or no internet access and many students may not be able to afford computer, laptop or supporting mobile phones in their homes, online teaching-learning may create a digital divide among students. The lockdown has hit the poor students very hard in India as most of them are unable to explore online learning according to various reports. Create Difference: This online teaching-learning method creates a big gap between rich vs poor and urban vs rural students.

SECONDARY RESEARCH INSIGHTS

DATA SOURCES: ARTICLES | BOOKS | GOVT.DOCUMENTS | POLICIES | JOURNALS | RESEARCH PAPERS | PRINT

Factors impacting the education for 6th-8th std

Intermediate between Primary and Senior School

Secondary Education is the most significant stage in the educational hierarchy as it prepares the students for higher education and the world of work.

Drop-Out Rates

The GER for Grades 6-8 was 90.9%, while for Grades 9-10 and 11-12 it was only 79.3% and 56.5%, respectively - indicating that a significant proportion of enrolled students drop out after Grade 5 and especially after Grade 8.

Lack of engagement due to growing age issues

High drop out rates after middle schools due to poor health and problems of malnutrition, low immunity,menstruation etc. Due to puberty changes many students also face mental health issues like depression, self-doubt, body insecurities etc.

Impact of Extracurricular activities

Incorporation of extra curricular in school helps build life skills and a child's personality. Children learn coordination, teamwork, social skills etc. These activities also improve long term memory and expands awareness on opportunities in life beyond traditional academics.

Digital Divide

The internet density in rural areas, is still low at 25% compared to the internet density in urban areas (90%).
Gender digital divide leads to fewer women accessing internet services.
There is lack of investment in New Digital Revolution.

Influences and Identity Development

This is an impressionable age and also a time when they are more clearly defining their identities, developing traits, are more open to learning and building the foundations for their future success in high school and in life.

Financial challenges

Due to poverty many students are unable to bear school and its related expenses and prefer to work and support their families financially instead.

OUR RESEARCH QUESTION

Optimizing the middle schools in rural India by making them more engaging.

IMPORTANCE OF ENGAGING EDUCATION

Engaging, by definition simply means charming and attractive. Engagement in classrooms is critical for student success. “student engagement” is defined and measured, the term is generally used to describe meaningful student involvement throughout the learning environment. Thus, “student engagement” is best understood as a relationship between the student and the following elements of the learning environment:

- The school community
- The adults at school
- The student’s peers
- The instruction
- The curriculum

According to research, there is a large correlation between "student involvement and participation in the schooling process" and students completing school. Maximum engagement in high school classrooms has "been a significant predictor of continuing motivation and commitment as well as overall performance in high school and college.”

Facilitating student engagement initiatives, by providing them with opportunities to participate in community activities leads to motivation, and creates a positive impact on all concerned. It encourages students to learn more and thus promotes individual growth. Modern academics and education enthusiasts believe that learning is a continuous process.

Here are some of the top reasons why implementing student engagement programs is important:

- Provides another dimension to the learning process.
- Allows students the opportunity to interact more with others, and gain perspective.
- Fosters better relationship among participants.
- Inculcate the idea of leadership into the minds of students.
- Enhances the student’s interpersonal skills.

Research indicates that student engagement declines as students progress from upper elementary grades to middle school, reaching its lowest levels in high school. Some studies estimate that by high school 40 to 60 percent of youth are disengaged. Given the serious consequences of disengagement more and more educators and school administrators are interested in obtaining data on student engagement and disengagement for needs assessment, diagnosis, and preventive measures.

HYPOTHESIS'

Urban Govt. schools have more engaging form of education for middle school compared to rural govt. schools.

Children in rural India drop out of schools after middle school due to financial problems in the family, hence choosing to work to support the household.

Government schools and education system changes in rural India are developed at a much slower pace as compared to government schools in urban India.

Children in rural India drop out of schools after middle school due to lack of encouragement and involvement of parents in their education.

Govt. schools that invest in development in terms of quality of education produce students of high calibre.

Infrastructure plays vital role in school system to keep students engaged in school.

Students in rural India are not aware about opportunities and the path to take for their future.

Education is not priority for the ST communities and they don't encourage children for the same.

Pandemic has affected the quality of education, interest of learning and sincerity towards examinations.

OUR GOALS AND OBJECTIVES

- To make middle school interesting and more engaging for students to reduce the current drop out rates in rural villages.
- To encompass proposed goals under NEP for schools in rural India by imparting quality education, practical learning, and digitalization.
- To come up with possible short term and long term innovative solution-based approaches.

Bagdola, Rajastan

PRIMARY RESEARCH

PRIMARY RESEARCH PLAN

A brief visit to villages to visit schools, interact with middle school children and their parents, along with teachers and other concerned authorities of the village.

Phase 01	IDENTIFYING AREAS OF ENQUIRY MAPPING RESEARCH PARTICIPANTS AND RESEARCH LOCATIONS
Phase 02	EXPLORING, CREATING AND ITERATING RESEARCH TOOLS
Phase 03	IMPLEMENTING RESEARCH TOOLS AND COLLECTING DATA

OUR RESEARCH ARENA

SAMPLING

The sample is the group of individuals who will actually participate in the research.
We have taken the non-probability sampling method as we were performing a qualitative approach to do our research.
In Non- probability sampling we have chosen 4 different types of sampling which were applied to our research.

1.Convenience Sampling
A convenience sample simply includes the individuals who happen to be most accessible to the researcher. we applied this approach for taking our interviews.

2.Voluntary Response Sampling
A voluntary response sample is also based on ease of access. Instead of the researcher choosing participants and directly contacting them, people volunteer themselves (e.g. by responding to a public online survey). while conducting surveys we have applied this approach.

3.Quota Sampling
This type of sampling is similar to Stratified sampling, except that the selection method used is not random. The population is divided into subgroups based on certain parameters and samples are selected from each subgroup as per the desired proportions (quota) pre-determined by the researcher.

4. Purposive Sampling
In this type of sampling, the researcher uses their own judgment to select the most useful sample for the research. It is often used when the researcher wants to gain detailed knowledge about a specific phenomenon rather than make statistical inferences.
For our research, we have considered kids under the age group of 10- 15 years to understand their views about education and schooling.

We have used mixed quota sampling and Purposive sampling for students following these criteria :

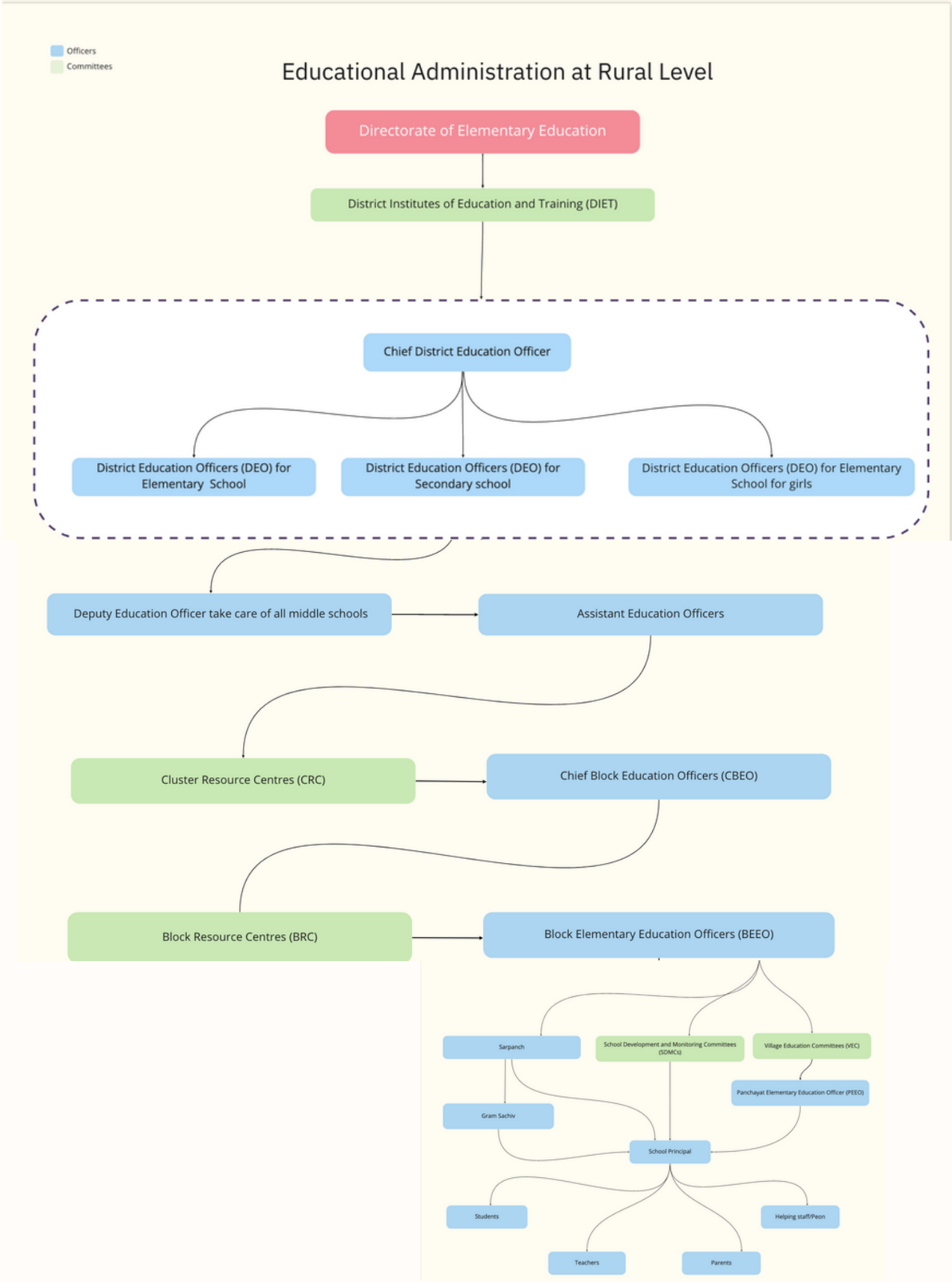
- Based on the location they live
- Based on the school they go
- Based on their Gender

We have mixed quota sampling and purposive sampling for taking interviews of teachers. Teachers who are teaching from class 1st to class 12th were selected based on the following criteria:

- Based on the location of the school
- Based on the subject they teach
- Based on the administrative role they play in school
- Based on the class they teach

Voluntary sampling was used for taking parents and other stakeholders for interviews and surveys.

STAKEHOLDER MAPPING



RESEARCH TOOLS

A RESEARCH TOOL IS A BECOMES A MEANS OF COLLECTING INFORMATION FOR YOUR STUDY IS CALLED A RESEARCH TOOL OR A RESEARCH INSTRUMENT.

In order to better understand the gravity of the of the situation and extract relevant information from our subjects we designed our tools accordingly. We primarily categorized them under three topics i.e.

Open to all (public)
Qualitative Quantification

One on one (private)
In-depth Interview
See- Saw

Secretive
Fly on the wall
Bee on the flower
Surveillance Eye

In addition to these, we experimented with a fourth tool:

Let's Check

wherein, we conducted few conjugated activities with students and their parents to check their implications on certain parameters such as practical knowledge, application of basic understanding and efforts in team work.

QUALITATIVE QUANTIFICATION

In Qualitative Quantification survey research we followed a less structured research methodology to gain in-depth information about people's underlying reasoning and motivations.The end goal was to develop a deep understanding of the topic, issue, and problems from an individual's perspective and then as a group to quantify.

IN-DEPTH INTERVIEW

To get qualitative data from few research participants belonging to various locations in Northern and Western India.

FLY ON THE WALL

We went to different locations and unobtrusively observed the everyday activities. We used it to observe situations in which people acted different than what they said and change in their behaviours after knowing the purpose of our visit.
A special form of fly on the wall is 'day in the life' in which users are shadowed during a full, regular day.
Shadowing and role reversal were also complemented with the same.

BEE ON THE FLOWER

Like a bee extracts nectar from a flower and converts it to honey with eternal shelf life we drew inspiration from it to design our research tool. The approach was to extract vital information from the subject in its natural environment thereby drawing pristine data for our research.

SEE SAW

A comparative study was conducted between rural government school students and urban government school students based on the same set of questions to understand the contrast of opinions.

SURVEILLANCE EYE

We observed the village people by interacting with them covertly, posing as someone "normal" in their environment.
After the first visit we deployed a secret under cover agent / spy to observe for us.

LET'S CHECK

This activity was conducted to understand what are the perceived value of education in children and what all future possibilities they see through education and how actively they work in teams.In this activity children need to make chart as team about what education bring to them.

This activity was conducted to understand what are the subjects students think important for their curriculum and what all facilities they think should be there in school and what is convenient timing for them to go to school. A4 sheet was given to student to write about these things.

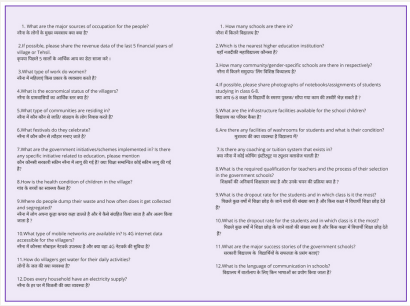
This activity was conducted to students were asked to showcase their creativity through sketching and colouring.A0 charts were given to students to sketch.

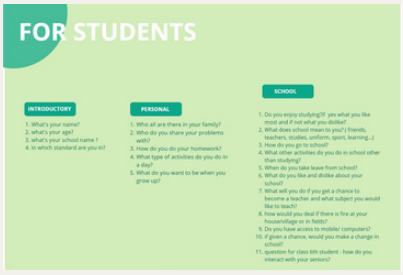
This activity was conducted to analyse parents involvement with children in their educational activities and learning. In this activity parents were asked to guide their children to communicate future possibilities with education. Parents can suggest their kids what should they do in their vision board which students were doing in activity 2.

IMPLEMENTATION

QUALITATIVE QUANTIFICATION

In Qualitative Quantification survey research we followed a less structured research methodology to gain in-depth information about people's underlying reasoning and motivations.The end goal was to develop a deep understanding of the topic, issue, and problems from an individual's perspective and then as a group to quantify.





Outcome:

1. There are many vacancies available for various subject teachers, extracurricular teachers, peons, and even guards.
2. Existence of multigrade schooling where there were no classrooms available.
3. The no-fail policy under RTE has created a wrong mindset that students can pass their examinations without studying.
4. Lack of clean washrooms, library, playground of the schools, even village and attractive walls.
5. There are no computer labs and if they do exist, they are not functional or accessible.
6. The playground area is not used properly.

IN-DEPTH INTERVIEW

To get qualitative data from few research participants belonging to various locations in Northern and Western India. A deep conversation with these participants helped us know the nity gritties of the situation which would have been difficult to extract otherwise. The process of interacting and knowing different people also highlighted few micro and macro level problems as well.

Daulha

Outcome:

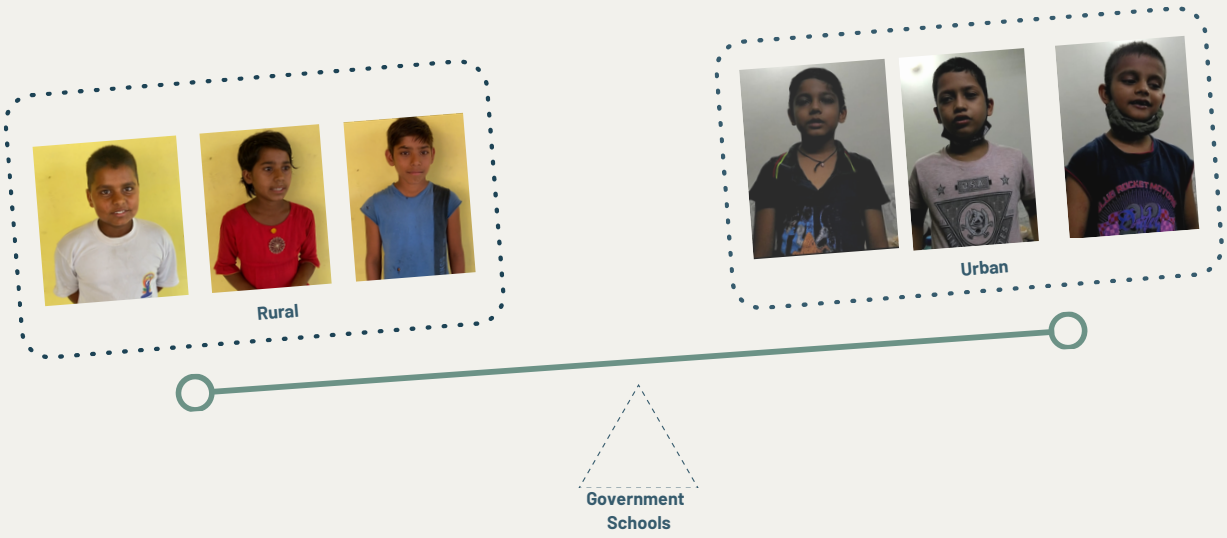
This open ended tool brought out some first hand problems faced by the stakeholders. The problems ranged from lack of facilities to disappointment in policies. While the village community shared how the administration keeps failing them, how they have lost land in the hand of empty promises, the students shared their keenness towards education and how much more they desire from their school.
Conversations with our stakeholders gave us new perspectives to look into.

Gujarat

SEE SAW

A comparative study was conducted between rural government school students and urban government school students based on the same set of questions to understand the contrast of opinions. As the name suggests the tool aided our research by stating the difference in thought process of both the set of students. The fulcrum i.e. Government school, its infrastructure, schemes, policies, facilities remains the common point between both the students sitting on the plank. It is the balance or unbalance of scales that depicts the actual condition of the School infrastructure and implementation of facilities as well as the education being imparted and being received at these schools.

RURAL		URBAN	
Gaurav	IAS Officer	**Aarav**	Doctor
Anjali	Army	**Harsh**	Pilot
Dheeraj	Army	**Viraj**	Chef
Poonam	IPS Officer	**Yash**	Physicist
Manish	Drawing Teacher	**Navya**	Choreographer
Dinesh	Police	**Subhodip**	Banker
Neeraj	Labourer	**Hiya**	Singer
Rahul	DJ	**Sarthak**	Data Scientist
Manisha	Teacher	**Sneha**	An event planner



Outcome:

1. While the rural students had been deprived of online classes or any learning for more than a year now due to weak digital infrastructure/lack of amenities, children in the city have made online classes a part of their daily routine.
2. There was a subtle difference in the understanding of the questions by the two groups of students. The urban took into account all aspects of their school life.

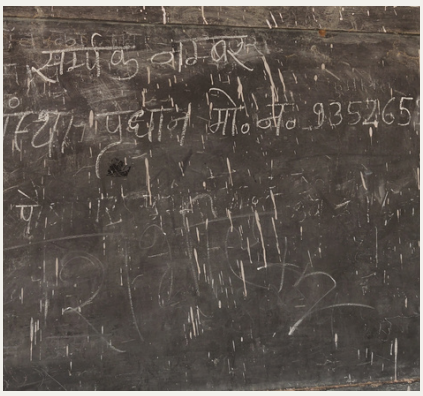
FLY ON THE WALL

We went to different locations and unobtrusively observed the everyday activities. We used it to observe situations in which people acted differently than what they said and change their behaviors after knowing the purpose of our visit.
A special form of fly on the wall is 'day in the life, in which users are shadowed during a full, regular day. Shadowing and role reversal were also complemented with the same.

Outcome:

- Many unmasked people including children
- Well-maintained Community Library
- Defensive attitude of HM
- Argument and no understanding between parents and HM
- Blame game between parents and teachers
- Children are very eager to learn
- Poorly maintained school building
- Non-functional smart classroom


powered by
GLOBUS



BEE ON THE FLOWER

Like a bee extracts nectar from a flower and converts it to honey with eternal shelf life we drew inspiration from it to design our research tool. The approach was to extract vital information from the subject in its natural environment thereby drawing pristine data for our research.

The purpose of this research tool was to interview the high school and passed out students of the rural government schools of the same village in order to understand the problems that were faced by them during their school days, memories associated with middle school years, developments they have seen over the years, challenges they faced and problems that have pertained over time and have remained unresolved.
These students are metaphorically compared to the bloomed flowers in this research tool, to draw nectar i.e. specific data for us to act as a honey bee and process this data to generate honey in the form of meaningful insights.

Outcome:

1. Not enough encouragement, motivation and attention is given to students.
2. Lack of practical knowledge and engaging activities in classrooms. Studies are more confined to bookish examples.
3. Don't like restrictions being put up in school. They want it to be a fun place to learn.
4. Girls of the village stop studying post 12th due to lack of college in the village.
5. Lack of good infrastructure, clean washrooms, library and playground.
6. There is no park in the village.
7. Poor network connectivity in the entire village acting as a hindrance for online studies too.
8. Teacher vacancies, staff vacancies leading to mismanagement at school.
9. Lack of availability of local teachers, students feel disconnected to ones coming from outside.
10. Facilities and funds are there but lack of facilitators.
11. nobody to teach sports, drama, dancing, etc.
12. Lack of career counselling for students.
13. There is an urgent need to look into negative peer pressure amidst students.
14. Bharti foundation by Aditya Birla group keeps hosting events but he feels it should be done frequently.

SURVEILLANCE EYE

Criteria for choosing:
complete stranger to us
localite but acts as jellyfish in water
Socially active
Aware of the happenings in his village, state, country as well as world
not biased
Not opinionated
Well connected to the villagers (every age group)
Reality checker and myth buster for us
Understands and speaks Hindi and English

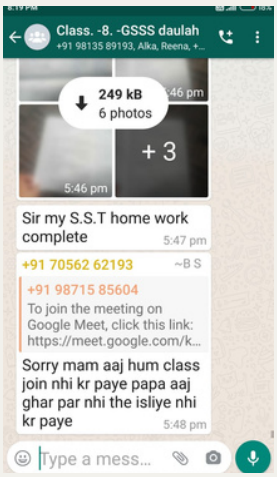
Traits of our Undercover agent:
Localite
Sharp and alert
Keen observer
Tactile
Resourceful
Motivated to bring about a change

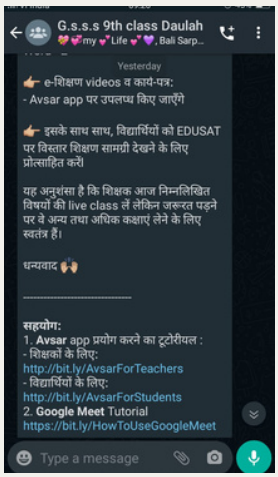
We observed the people by interacting with them covertly, posing as someone "normal" in the environment. After our first visit we deployed a secret under cover agent / spy to observe for us.

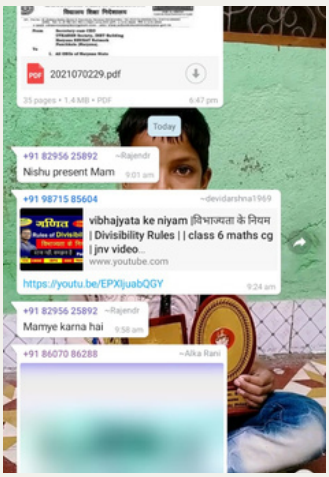
Our surveillance eye or the virtual connect with our undercover agent in Daulha village helped us in receiving the vital conceited content. The real scenario and flaws that were decorated by the officials for xyz reasons were sneakily revealed. This research tool helped us in extracting Whatsapp chats of class groups, study material and mode of communication between teachers and students, true condition of the schools, parks, community centre, library and the stakeholders, everyday lives of the students and their parents, etc.
In pandemic, this tool truly acted as a boon for understanding the ground reality of the situation and get deeper understanding.

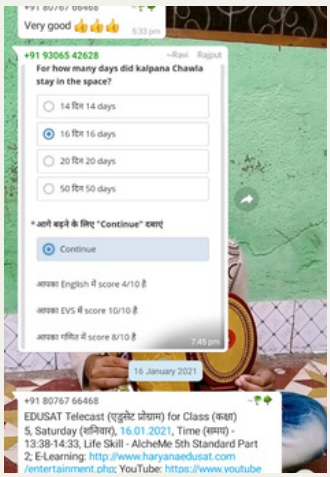
Outcome:

1. Segregation of all the data on Whatsapp has become very chaotic for teachers and students.
2. If the teacher has really looked up at the homework done by the students.
3. It looked burdensome for the students as there were so many videos to look at.
4. Lack of clarity
5. Very difficult to understand if the student has actually understood or not.
6. Students sometimes were not able to attend the class because she/he didn't have a phone at home.


Class. -8. -GSSS daulah
+91 98135 89193, Alka, Reena, +...
249 kB
6 photos
+ 3
5:46 pm
Sir my S.S.T home work complete
5:47 pm
+91 70562 62193
~B S
+91 98715 85604
To join the meeting on Google Meet, click this link: https://meet.google.com/k...
Sorry mam aaj hum class join nhi kr paye papa aaj ghar par nhi the isliye nhi kr paye
5:48 pm
Type a mess...


G.s.s.s 9th class Daulah
Yesterday
e-शिक्षण videos व कार्य-पत्र:
- Avsar app पर उपलप्ध किए जाएँगे
इसके साथ साथ, विद्यार्थियों को EDUSAT पर विस्तार शिक्षण सामग्री देखने के लिए प्रोत्साहित करें
यह अनुशंसा है कि शिक्षक आज निम्नलिखित विषयों की live class लें लेकिन जरूरत पड़ने पर वे अन्य तथा अधिक कक्षाएं लेने के लिए स्वतंत्र हैं।
धन्यवाद
सहयोग:
1. Avsar app प्रयोग करने का टूटोरीयल :
- शिक्षकों के लिए:
http://bit.ly/AvsarForTeachers
- विद्यार्थियों के लिए:
http://bit.ly/AvsarForStudents
2. Google Meet Tutorial
https://bit.ly/HowToUseGoogleMeet
Type a message

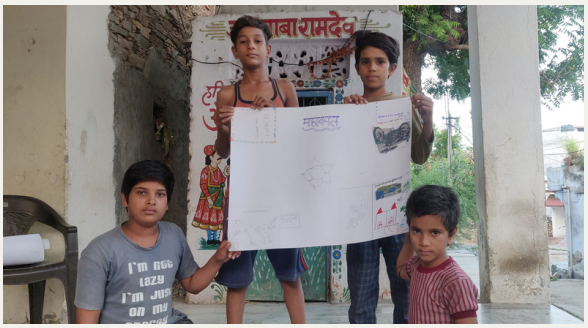

2021070229.pdf
Today
+91 82956 25892
Nishu present Mam
+91 98715 85604
vibhajyata ke niyam विभाज्यता के नियम | Divisibility Rules | | class 6 maths cg | jnv video...
www.youtube.com
https://youtu.be/EPXljuabQGY
+91 82956 25892
Mamye karna hai
+91 86070 86288


Very good
+91 93065 42628
For how many days did kalpana Chawla stay in the space?
14 दिन 14 days
16 दिन 16 days
20 दिन 20 days
50 दिन 50 days
* आगे बढ़ने के लिए "Continue" दबाएं
Continue
16 January 2021
+91 80767 66468
EDUSAT Telecast (एडुसैट प्रोग्राम) for Class (कक्षा) 5, Saturday (शनिवार), 16.01.2021, Time (समय) - 13:38-14:33, Life Skill - AlcheMe 5th Standard Part 2; E-Learning: http://www.haryanaedusat.com /entertainment.php; YouTube: https://www.youtube

LET'S CHECK

Activity: Vision board on where studies will lead us.

This activity was conducted to understand what are the perceived value of education in children and what all future possibilities they see through education and how actively they work in teams. In this activity, children need to make the chart as a team about what education brings to them.



Followed activity:

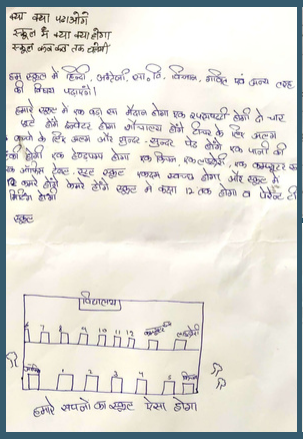
This activity was conducted to analyse parents involvement with children in their educational activities and learning. In this activity, parents were asked to guide their children to communicate future possibilities with education. Parents can suggest to their kids what should they do in their vision board which students were doing in the vision board activity.

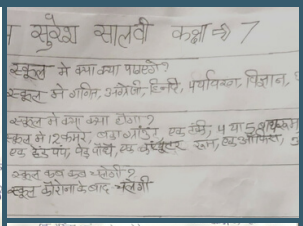
Activity: Let's make school together

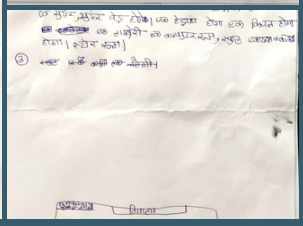
We wanted to know what thoughts and imaginations children have about their school and what problems they feel they are facing. So we conducted activity that should be there in the school? Team activity where our team member was working as maker and children were guiding what should be there in school.

Activity: Express your feelings through writing

This activity was conducted to understand what are the subjects students think are important for their curriculum and what all facilities they think should be there in school.

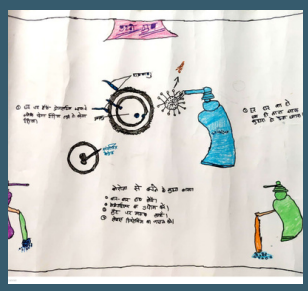


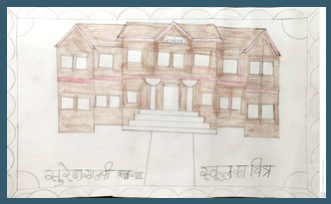




Activity: Draw whatever you like

This activity was conducted to students were asked to showcase their creativity through sketching and colouring. A0 charts were given to students to sketch.





Outcome:

1. Students are aware as well as concerned about the lack of facilities and have an idea of their ideal school.
2. no sense of working together, lack of teamwork, no sense of group projects.
3. everyone was working in their corner. understanding of the task was weak
4. No creative activities are done in schools.
5. No engaging activities in the school.
6. Casual approach.
7. No understanding of the process and discussion.

RESEARCH LOCATIONS

DAULHA, HARYANA

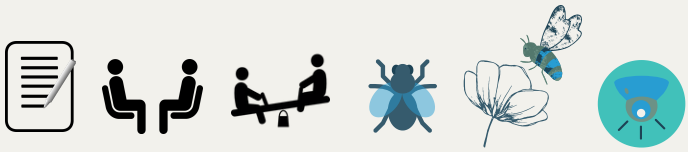
Daulha Village, situated in the Sohna Block of Gurugram in Haryana state. Our main objective is to study the current status of education in rural India, the impact of the pandemic on education in this village, and identify gaps in their implementation of education.

The visit started with a scheduled meeting with the village officials which included the Sarpanch, Members of the Gram panchayat, The Education Officer, the Block Development Officer, Gram Sanchiv, Anganwadi workers, etc.

Research Participants:

Education Officer & Headmistress | Gram Panchayat Members | Subject Teacher | Parents | Students | Alumini

Research Tools used:



Observations:

- The motivation of the village community towards education is high but the schools and students lack many vital facilities such as transportation, teacher vacancies, lack of facilitators, etc.
- The community library for self-study started by individuals of the village is an impressive step towards developing the education sector in Daulha, however, a few changes can help the center achieve more.
- The pandemic has caused serious hindrances in the delivery of education. There is a steep increase in the lack of interest in learning among students and a casual attitude towards exams.
- The education imparted towards students seems inefficient and incomplete. The children are lacking the benefit of the overall experience of learning which is more than academics.
- The infrastructure of the schools needs up gradation and holistic upliftment in terms of recreational spaces, sports ground, computer labs, library, washrooms,etc alongwith technological advancements.

"Aaj 26 acre dene ke baad bhi gaon ka vidyarthi vidya se dur hai"
-Sarpanch

Navavadaj | Behrampura Gujarat

From a peaceful corner of the Sabarmati Gandhi Ashram, Manav Sadhna (MS) has been humbly serving since 1995 to strengthen underprivileged communities in Ahmedabad through programs in Holistic Education, Nutrition, Health and Hygiene, Youth and Women's Empowerment, Senior Care, Livelihoods and more.

Research Participants:

Teacher | Parents | Students

Research Tools used:

Mansi (22/06/2021)
" I want to become an IPS officer. I like to sing Also."

Shubham (22/06/2021)
"I want schools to focus more on a practical learning"

Hiral (24/06/2021)
" I feel there should be one extra period for students to think creatively and creative mind help them in stating the business.

Observations:

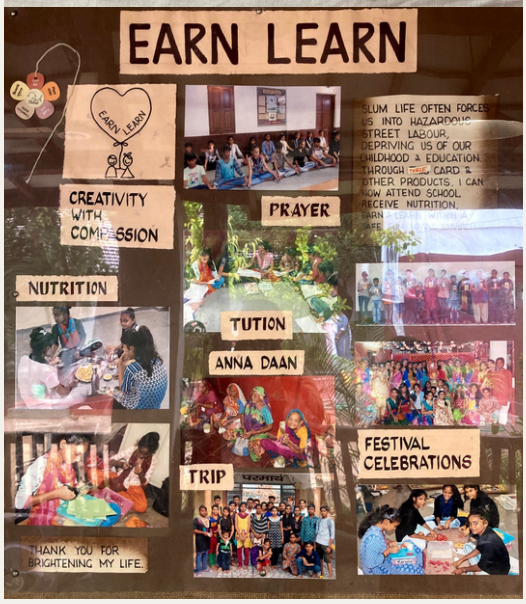
- Pandemic has affected badly on the education of the student and student's family. They don't get any chance to explore more other than studies.
- Students know the value of the education but sometime they face financial issues. Also they think that bonding between student and teacher is very important but due to distant school in rural areas villages has very high student teacher ratio.
- They all have very supportive parents but all have one mobile phone and that is the reason why they are not able to focus in online education.
- They feel the need of Practical labs and teachers for extra curricular activities. Teacher don't know if the students have understood in online mode or not.

Visit to Manav sadhna, Gujarat

As a part of a research project, we wanted to meet and know more about the issues and perspectives of students about school. Visiting Manav Sadhna, Gujarat. was part of this our primary plan.

From a peaceful corner of the Sabarmati Gandhi Ashram, Manav Sadhna (MS) has been humbly serving since 1995 to strengthen underprivileged communities in Ahmedabad through programs in Holistic Education, Nutrition, Health and Hygiene, Youth and Women's Empowerment, Senior Care, Livelihoods and more. Although there is great diversity amongst these programs, they are all based on people's participation and evolve according to the needs of the community. Over time, we have seen the holistic growth transformation of the communities with significant improvements in sanitation, education and health.

The story of Manav Sadhna begins well past its inception. Our inspiration springs from the life-message and principles of Mahatma Gandhi, Swami Vivekanand and other dedicated freedom fighters and social reformers, such as Babubhai Harilal Joshi. Shri Ishwarbhai Patel further paved the way through his mentorship and life-long dedication to service. However, the organization took shape when the founders, overwhelmed by the loving reception of the children of the Parikshitlal Ashramshala (a hostel based in the Gandhi Ashram), were moved by the extreme poverty and dire circumstances of the premises and its young residents.



Observation:

- While talking to the students I got to know that they love to come to Manav Sadhana rather than going to the school because they get better food, they get to learn stitching, making different things and earn out of them, explore more.
- Even the interaction/bond with the teacher is more stronger. Some of the students get financially adopted. They get to go out on trips also.

"We believe in the power of love and compassion to truly transform an individual and revolutionize a society. By seeing God in every individual (manav), service is transformed into worship (sadhna). Our community-based humanitarian projects cut across barriers of class and religion and directly serve and empower those in need."

Bagdola, Rajasthan

Bagdola village is located in Rajsamand Tehsil of Rajsamand district in Rajasthan, India. It is situated 8km away from Rajsamand, which is both district & sub-district headquarter of Bagdola village.

The total geographical area of the village is 417.21 hectares. Bagdola has a total population of 879 people. There are about 155 houses in Bagdola village.

This school has 155 enrollments and a well-maintained infrastructure. The school is located at the entrance of the village. School has 6 classrooms, a library, a storeroom and a teachers room.

Research Tools used:

Observations:

- The school has donation givers which have helped the school a lot to improve its infrastructure.
- The school playground is outside the village so it is only accessible during tournaments.
- ST community-specific students were less engaged with studies.
- Parents are motivated about studies but not actively engaged in children studies.
- Children are occupied with household work, fieldwork and other activities along with studies.

"जहां तक ये पढ़ेंगे हम इनको वहां तक पढ़ाएंगे, ग्रैजुएट हो जाए तो अच्छा है।"

Asotiya, Rajasthan

GOVT UPS ASOTIYA was established in 1957 and it is managed by the Department of Education. It is located in an Urban area. It is located in the RAJSAMAND block of the RAJSAMAND district of Rajasthan. The school consists of Grades from 1 to 8.

This school has 117 enrollment but only 60 students turn up school. This school has 6 classrooms and 6 teaching staff.

Research Tools used:

Observations:

- This school is located in front of the crematorium which discourages students and parents to send their kids to school.
- This school does not have boundaries of the school and the infrastructure was not in good condition.
- The principal was not actively engaged in school-related work.
- School teachers were not encouraging the students about the health and hygiene.
- Teachers were complaining about less engagement of parents in studies.
- Absenteeism were high in the school.

"बच्चों को फेल होने का डर है नहीं तो पढ़ते नहीं है।
जहां guardians active होते है वहां बच्चे भी पढ़ लेते है।"

Lavana, Rajasthan

Lawana is a small Village/hamlet in Rajsamand Tehsil in Rajsamand District of Rajasthan State, India. It comes under Lawana Panchayath. Lawana Local Language is Hindi. Lawana Village Total population is 1377 and the number of houses are 259.

Govt. Upper Primary School
GOVT UPS LAVANA was established in 1978 and it is managed by the Department of Education. The school consists of Grades from 1 to 8. Currently, GUPS has 240 enrollments and 11 teaching staff. GUPS has 8 classrooms and sports rooms, a library and an auditorium for students.

Research Tools used:

Observations:

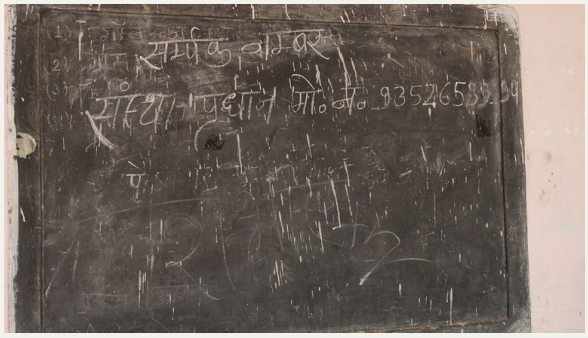
- GUPS has a very attractive main entrance.
- Teachers are motivated about teaching and give their best to the school.
- The school has solar systems and sensor-based washrooms to promote sustainability.
- Children enjoy the garden and ride on the school premises.
- Apart from studies, this school conduct various extra curriculum activities like a science fair, clay art and sports events.
- Teachers involve students in community-based activities like tree plantation, awareness drives etc.
- Though the school has many facilities still it is not inclusive for specially-abled children.

"हम extra curricular activities पर ज्यादा ध्यान देते है। स्कूल एक product है, हमारा product अच्छा होगा तो बच्चे भी आयेंगे।"

Bhagwanda, Rajasthan

Bhagwanda Khurd village is located in Rajsamand Tehsil of Rajsamand district in Rajasthan, India. It is situated 6km away from Rajsamand, which is both district & sub-district headquarter of Bhagwanda Khurd village. As per 2009 stats, Mundol is the gram panchayat of Bhagwanda Khurd village.

The total geographical area of the village is 98.96 hectares. Bhagwanda Khurd has a total population of 1,320 people. There are about 272 houses in Bhagwanda Khurd village.



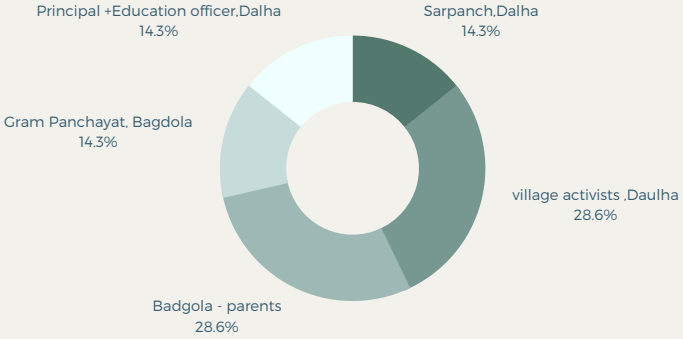
Research Tools used:

Observations:

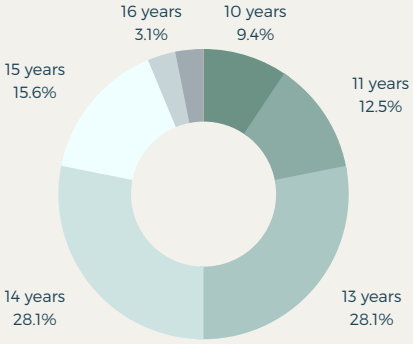
- Primary School in Bhagwanda was in a very critical situation.
- The principal has left his number on the school board and the number was not reachable. The school was running in low staff
- School ambience was very bad, School Infrastructure was in a very bad situation and it is the only school in the entire village for children till class 5.

"क्या ही करेंगे पढ़ाई करके"

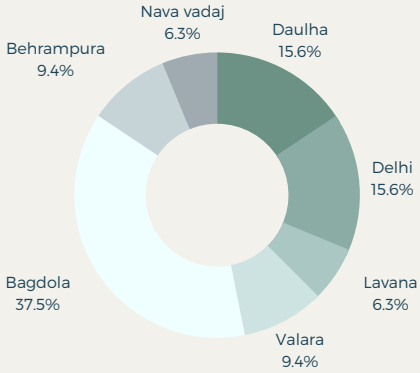
Other Stakeholder Interviewed: 7



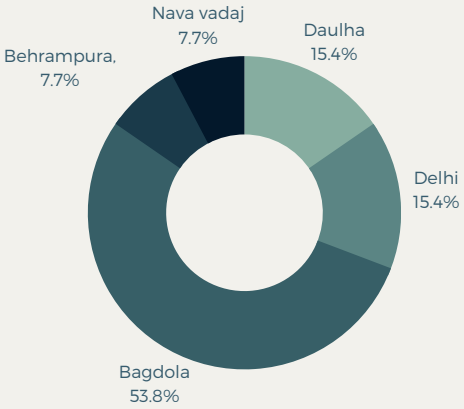
We have interviewed different students under age group of 10-15 years from Gujrat, Haryana,Rajasthan & Delhi



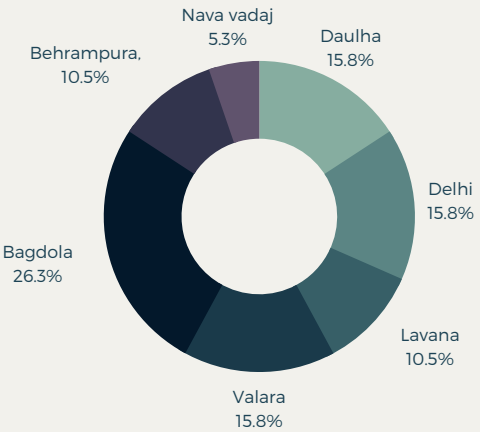
We have interviewed students of 13 schools across all places.



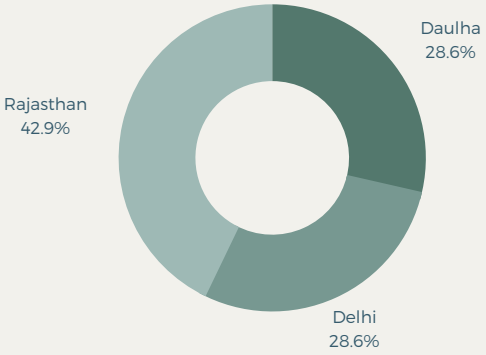
Total Children Interviewed: 32



Total Boys interviewed : 13



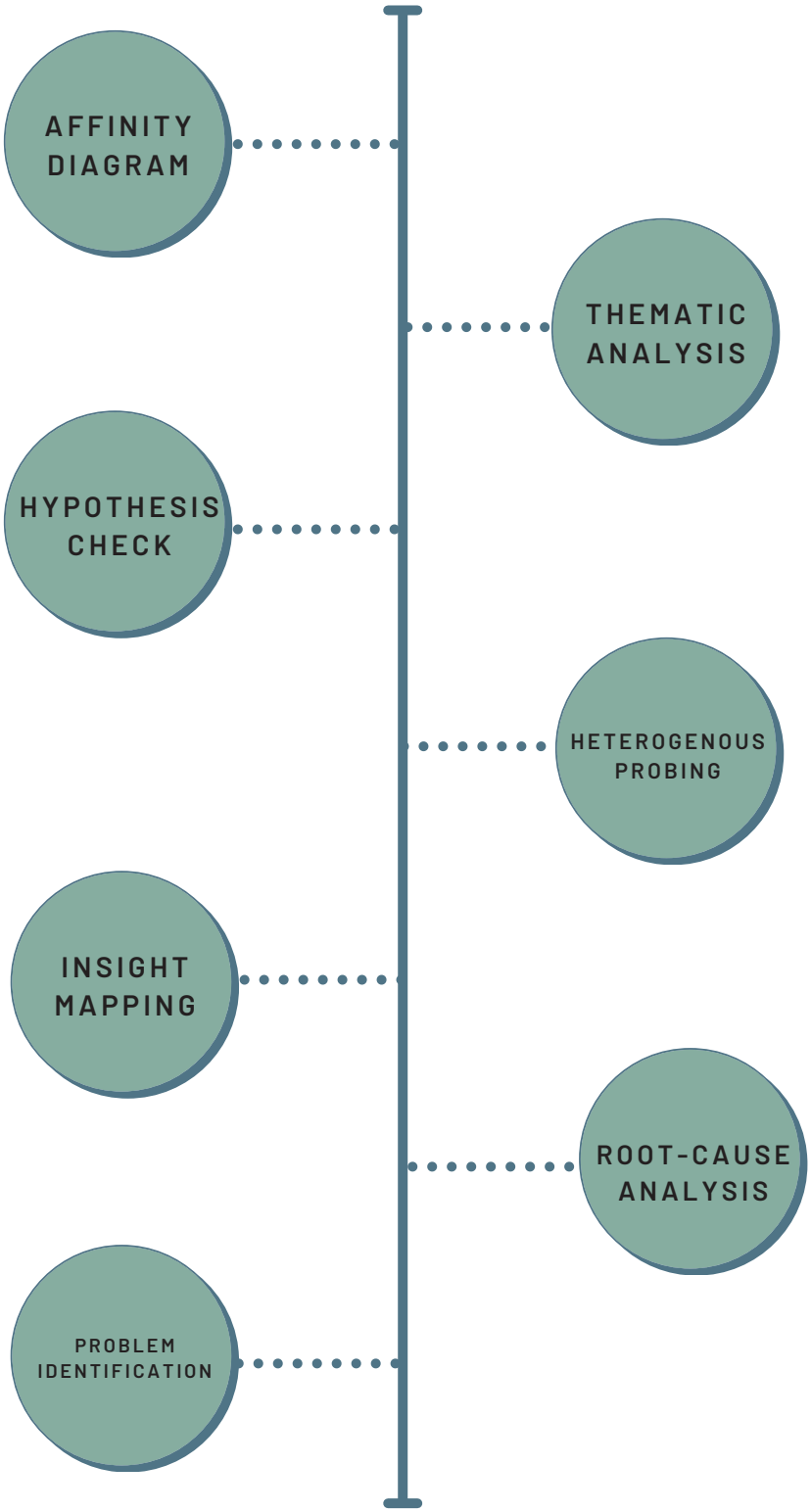
Total Girls interviewed : 19



Total Teacher Interviewed: 7

DATA ANALYSIS

OUR DATA ANALYSIS PROCESS



DATA ANALYSIS TOOLS

AFFINITY MAPPING

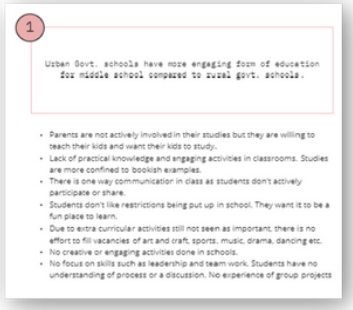
An affinity diagram, sometimes also known as a cluster map is used to organize information and is the output of affinity mapping. Affinity diagrams help organize information into groups of similar items—particularly useful when analyzing qualitative data or observations.

THEMATIC ANALYSIS

Thematic analysis is one of the most common forms of analysis within qualitative research. Thematic analysis is a qualitative data analysis method that involves reading through a data set (such as transcripts from in-depth interviews or focus groups) and identifying patterns in meaning across the data.

HYPOTHESIS CHECK

A hypothesis check is used to assess the plausibility of a hypothesis by using sample data. This step of data analysis helped us validate our secondary research insights and reach our problem areas and their symptoms.


1

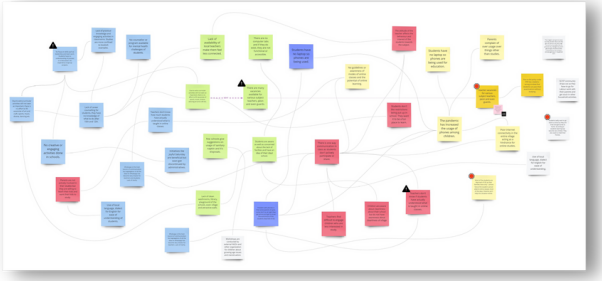
Urban Govt. schools have more engaging form of education for middle school compared to rural govt. schools.

- Parents are not actively involved in their studies but they are willing to teach their kids and want their kids to study.
- Lack of practical knowledge and engaging activities in classrooms. Studies are more confined to bookish examples.
- There is one way communication in class as students don't actively participate or share.
- Students don't like restrictions being put up in school. They want it to be a fun place to learn.
- Due to extra curricular activities still not seen as important, there is no effort to fill vacancies of art and craft, sports, music, drama, dancing etc.
- No creative or engaging activities done in schools.
- No focus on skills such as leadership and team work. Students have no understanding of process or a discussion. No experience of group projects

For eg.

HETEROGENOUS PROBING

Heterogenous probing is the stage where we segregated different layers of insights to critically examine each insight and categorize accordingly for the next stage. It is similar to step-wise filtration of layers of different oils and water.

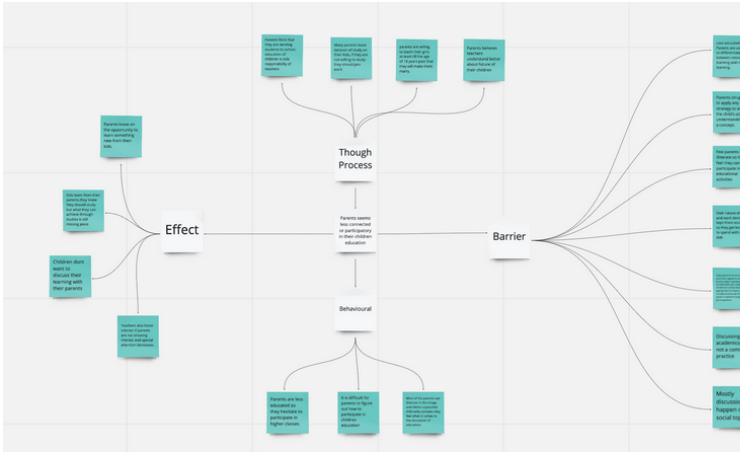


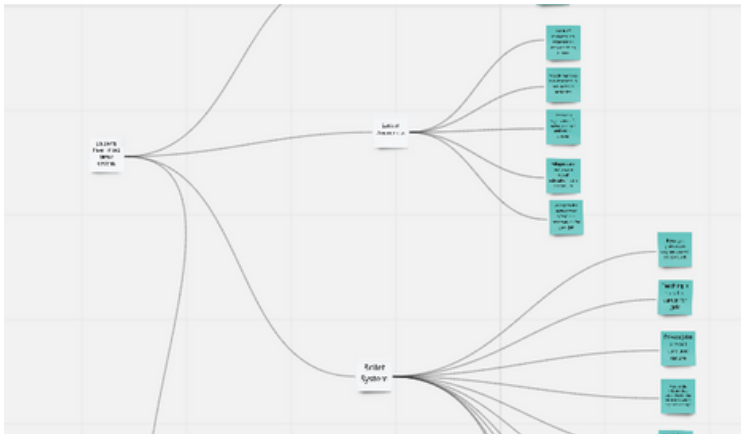
INSIGHT MAPPING

Insight maps are a result of the synthesis of information and data. We tried to understand the explanation behind why something is happening the way it is. We attempted to discover the underlying motivations that drive people's actions, a fundamental to insight definition.

Root-Cause Analysis | Why Analysis

Parents seem less connected or participatory in their children education





Insights:

Parents are missing learning opportunities as they hesitate to participate in educational activities

Discussion about academics in not common practise at home

Parents are unable to differentiate between rote learning and conceptual learning of their children.

Students have limited career options.

Lack of parents engagement in studies leads to limited career opinion for children.

Lack of exposure leads children to rely on their parents suggestion for a career without knowing their interest

No discussion related to career in school make students unaware about skilled based professions

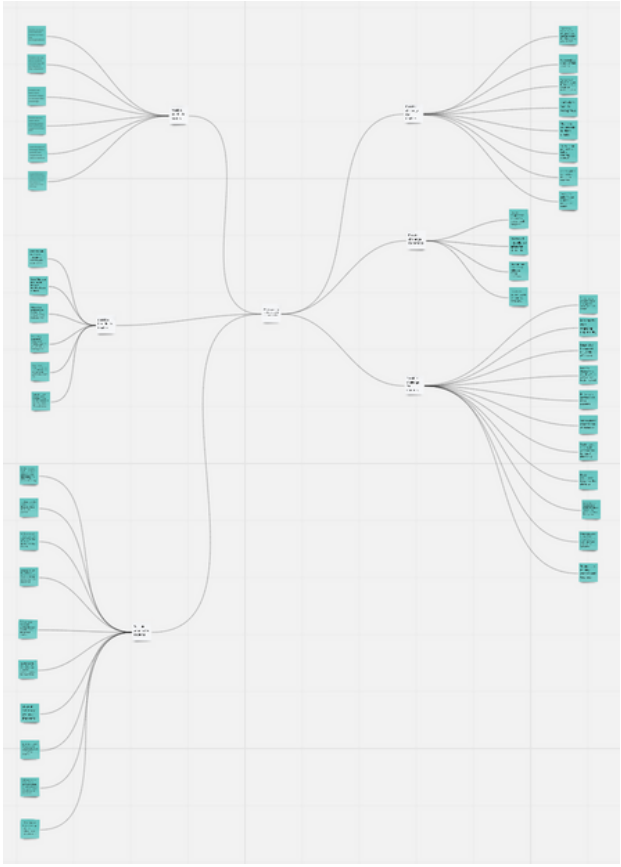
Multigrade classrooms are an opportunity to make education engaging

Insights:

Multigrade classrooms provide various spatial arrangement opportunities to make the classroom more engaging

Multigrade classrooms can be used to conduct group activities that would develop peer learning and social habits

Online mode of Communication



Insights:

Students don't miss out on any content in case of emergency and sickness

Teachers have ease of communication with parents rather than waiting for PTM

Students in remote areas are getting content to study where teacher did not show up

Some parents have objectionable content in their devices and out of shame/ fear don't want to give access to their device to their other family members.

Teachers are having problems with assessment of students learning.

KEY INSIGHTS

DELIVERY OF EDUCATION

- Lack of practical knowledge and engaging activities in classrooms. Studies are more confined to bookish examples.
- Due to extra curricular activities still not seen as important, there is no effort to fill vacancies of art and craft, sports, music, drama, dancing, etc.
- No creative or engaging activities done in schools.
- Teachers don't know how much students have actually understood what is taught in online classes.
- Whatsapp is the main sorce of communication but segregation of all the data on Whatsapp has become very chaotic for teachers and students. Lack of clarity.
- Lack of career counselling for students, they have no knowledge of what to do after 10th and 12th.
- Use of local language, dialect for English for ease of understanding of students.
- No focus on skills such as leadership and team work. Students have no understanding of process or a discussion. No experience of group projects.
- Initiatives like Joyful Saturday are beneficial but soon get discontinued by Administrative.
- No counselor or program is available for the mental health challenges of students.

SCHOOL INFRASTRUCTURE

- Lack of clean washrooms, library, playground of the schools, even village and attractive walls.
- There are no computer labs and if they do exist, they are not functional or accessible.
- There are many vacancies available for various subject teachers, peon, and even guards.
- Due to extracurricular activities still not being seen as important, there is no effort to fill vacancies of sports, music, drama, dancing, art, and craft, etc.
- Lack of availability of local teachers makes them feel less connected.
- Few schools give suggestions on the usage of sanitary napkins and it's disposals.
- Students are aware as well as concerned about the lack of facilities and have an idea of their ideal school.
- Existence of multigrade schooling where there were no classrooms available.

FINANCIAL CONSTRAINTS

- Students have no laptop so phones are being used.
- Problem with phones is that some parents do give, some don't so at night they get phone and get to know the work/most of the students deprived of OE
- Most of the students are deprived of OE as their families have only 1 phone hence the student cannot attend online classes most of the days. Parents can't help this situation either.

BEHAVIOURIAL ASPECTS

- Parents are willing to educate their kids but finding it difficult to engage with schools. There is one-way communication in class as students don't actively participate or share in online classes during pandemics.
- Teachers don't know if students have actually understood what is taught in online classes.
- Students don't like restrictions being put up in school. They want it to be a fun place to learn.
- Teachers find it difficult to engage children who are less interested in the study.
- The attitude of the teacher affects the behavior and interest of the students towards the subject.
- Children are aware of the cleanliness of their school but do not have awareness about the cleanliness of the village.

KEY INSIGHTS

TECHNOLOGICAL INFRASTRUCTURE

- Poor internet connectivity in the entire village acting as a hindrance for online studies.
- Most of the students are deprived of OE as their families have only 1 phone hence the student cannot attend online classes most of the days. Parents can't help this situation either.
- No guidelines or awareness of modes of online classes and the potential of online learning.
- parents complain of over usage over things other than studies.
- Students have no laptop so phones are being used for education.

ADMINISTRATIVE & POLICY VOIDS

- The no-fail policy under RTE has created a wrong mindset that students can pass their examinations without studying.
- Principals play a vital role in the implementation of various govt. schemes and engagement in school.
- Teacher vacancies for various subject teachers, peon, and even guards.

SOCIAL CONSTRAINTS

- The villagers want girls to study but they are less likely to as they get married at a very early age. The community states that the girls are very intelligent but don't get enough chances and face hindrances such as transport and also get busy in household work.
- SC/ST community drops out as they have to go for Labour work with their parents and get stuck in other household activities.
- Students really want to go back to school as they are tired and get bored at home. According to students learning has become very limited. They also want to meet their friends.
- Workshops are conducted by external NGOs and other organization for children about growing age issues and menstruation.
- Use of local language, dialect for English for ease of understanding.

PROBLEM IDENTIFICATION

TIER 1

- Insufficient creative and engaging activities done in rural schools.
- Need for better school infrastructure for rural schools.
- Need for well structured online education in rural schools during pandemic.

TIER 2

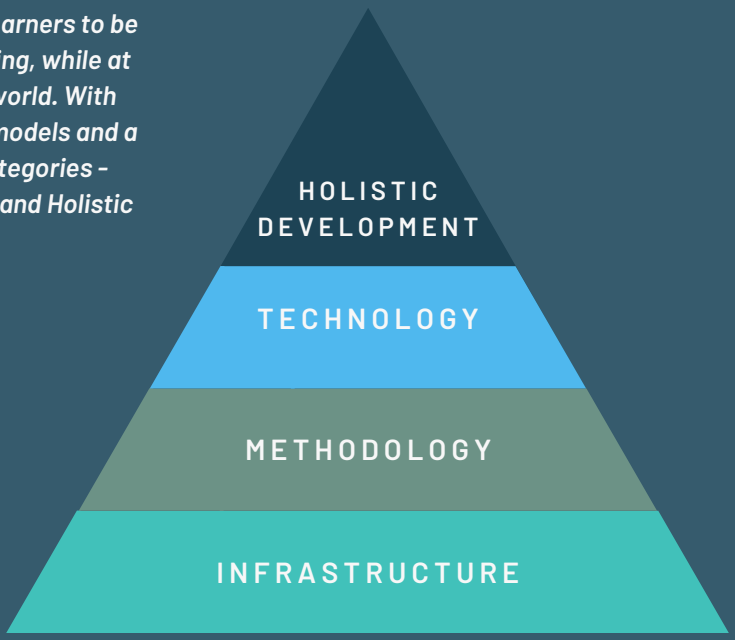
- Parents are not able to be actively involved in their child's education.
- Students unware of different career opportinities and paths in life.
- Lack of initiatives by schools on girls health and hygiene issues.

TIER 3

- Lack of availability of local teachers makes the student feel less connected to learning.
- Students belonging to the SC/ST community drop out of school as they have to go for labour work with their parents or get stuck in other household activities.

DESIGN DIRECTIONS

Education must build character, enable learners to be ethical, rational, compassionate, and caring, while at the same time prepare them for the real world. With this idea in mind, we designed long term models and a few solutions broadly divided into four categories - Infrastructure, Methodology, Technology and Holistic Development.



TO RAISE EMOTIONALLY INTELLIGENT CHILDREN & IMBIBE THE RIGHT KIND OF SOCIAL AWARENESS

TO PROMOTE COMPUTER LITERACY

TO MAKE LEARNING ENGAGING FOR STUDENTS FACILITATED BY THEIR TEACHERS

TO PROMOTE STATE, REGIONAL AND LOCAL DELIVERY SYSTEMS WHICH BRING ABOUT EFFICIENT AND EFFECTIVE EDUCATION FOR CHILDREN IN RURAL AREAS

SENSITIZING PARENTS TO MAKE THEM UNDERSTAND THE IMPORTANCE OF EDUCATION AND TO ENCOURAGE THEM TO BE ACTIVE PARTICIPANTS IN THEIR CHILD'S EDUCATION

METHODOLOGY

- Activities for students to engage with parents where students are encouraged to understand their parent's life in a deeper way.
- Visit from different occupations-Police, designers, lawyers, bankers, architects etc.
- Vision Board: The idea to bring power to thoughts.
- Sharing success stories of village.
- Experiential Learning: The process of acquiring skills, knowledge, and understanding through experience rather than through formal education or training such as Earn and Learn as stalls, Lok Sabha and Student Council, and Incorporation of plays and nukad naatak.
- Cohesive learning by adoption of buddy system.
- Educational toys for children in school for learning.

INFRASTRUCTURE

- Donation drives for educational toys
- Suggestion Box
- Sports Library
- Workshops/campaigns with parents of financial benefits of education
- Orientation for parents for online classes
- Paint school building according to rationale of colours .
- Try different seating arrangements

TECHNOLOGY

- Continuation of hybrid model/online for interaction with experts
- Arrangement of offline discussions and alternate classes
- Digital infrastructure and computer literacy

HOLISTIC DEVELOPMENT

- Environment: plantation drives, grow, your plant, class-wise one plant to take care of
- Sanitary napkin distribution and awareness about their usages.

TIME BOUND PROBLEM SOLVING

An annual group project for students wherein they pick up problems in their local areas, study and understand them, and then propose solutions. Students will learn to inculcate the importance of critical thinking, teamwork, use of the process, empathy, and decision making. This form of learning is learning by doing or Experiential Learning and practical application of knowledge and skills.

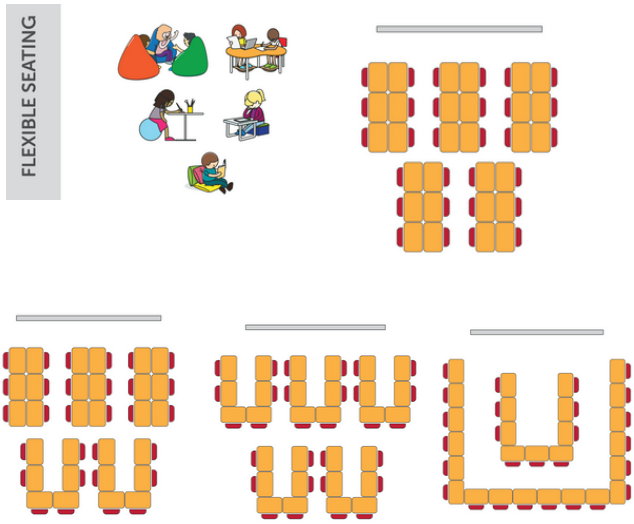
FUN SCHOOL ON WHEELS

Mobilized skill-based workshops with activity-based learning to move around in inner circles of villages and cities. The idea is to linking extra-curricular subjects and academic subjects.

PAN INDIA LEARNING

Policy-driven programs to facilitate the exchange of students and/or teachers within schools of India. Embracing the diversity of learning through interactions with teachers and students from different villages/states. Execution of such programs will help in strengthening the National Integrity of the country. During Pandemic the same can be implemented through online sessions arranged between different schools of the country to increase the horizons to explore,learn and interact.

SEATING ARRANGEMENT



CONCLUSION

- Holistic educational growth can provide the much-needed economic and social progress India requires to grow in the global arena.
- Rural communities that are supported by a comprehensive education system allow their members to build their knowledge capacity, helping them cope with changing dynamics and make more informed decisions.
- Rural communities that are supported by a comprehensive education system allow their members to build their knowledge capacity, helping them cope with changing dynamics and make more informed decisions.
- Every village has its own unique challenges. Government and corporates have to work closely with local communities to catalyse sustainable impact through the system and behavioral change.
- Providing quality education was the main driver for programmes undertaken by the trust which resulted in reduced dropouts, motivated students to learn more and promoted active participation from the community to follow a reformed and inclusive education system.
- Government, Corporates and community members have to work together to implement solutions for a sustainable education system in rural India. As stated by the latest Annual Status of Education Report (ASER), there is a steady shift of students from private schools towards government schools.

PANDEMIC RELATED OBSERVATION AND RECOMMENDATIONS

This pandemic has revealed some of the major loopholes in the Indian education system. The closure of schools has made a severe impact on marginalized students. One of the critical trends that can be followed is the need to have a combined approach to online learning with increase in investment on the upgrading of the technology infrastructure of educational institutions. Stress needs to be given to training the teachers. All higher education institutes now are aware of the importance of technology and should take serious measures to conduct technology-driven education through the learning management system. It is recommended that educational institutions should use technology in all aspects. This pandemic shows the partnership between technology and education is going to stay forever.

One more suggestion is that education Institutes can divide the courses into conventional teaching and online teaching, it will help in inculcating the technology into the classrooms. Online teaching will increase digital literacy among teachers and students which will increase their exposure and learning and making them more employable for the digital world-leading thereby contributing to social sustainability.

REFERENCES AND CITATIONS

- Banerjee, A., & Duflo, E. (2011). Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty.
- Chintakula, B. S. (2020, nov 11). Problems of Rural System in India, Need for Addressing Them in Rural Development Planning. Problems of Rural System in India, Need for Addressing Them in Rural Development Planning. https://www.ijert.org/research/problems-of-rural-system-in-india-need-for-addressing-them-in-rural-development-planning-IJERTV9IS110119.pdf
- 5 problems with teachers in rural areas which are blocking India's educational growth. (2017, jan 31). 5 problems with teachers in rural areas which are blocking India's educational growth. https://www.indiatoday.in/education-today/featurephilia/story/india-rural-education-problems-958214-2017-01-31
- greatmiddleschools.org. (2013, January 22). The Importance of Middle School. https://greatmiddleschools.org/the-importance-of-middle-school/. https://greatmiddleschools.org/the-importance-of-middle-school/
- Kapur, R. (2019, April 4). Problems and Challenges in Rural Areas. PrProblems and Challenges in Rural Areas. https://www.researchgate.net/publication/332187494_Problems_and_Challenges_in_Rural_Areas
- lummis, b. (2001). turning point guide to curriculum development. center for collaborative education. https://www.cce.org/uploads/files/Curriculm-Development.pdf
- Pandey, A. (2020, July 27). GROWTH OF EDUCATION: RURAL INDIA. SCICOMM. https://scicomm.in/education/growth-of-education-rural-india/
- Patel, R., & Joshi, A. (2015, December). Design Opportunity for Learning Aid in Multi-grade Schools in Rural India. Design Opportunity for Learning Aid in Multi-grade Schools in Rural India. 10.1145/2835966.2835975
- Paterson, J. (2019, 1 1). Middle matters. middle matters. https://www.educationworld.com/teachers/middle-matters-middle-school-years-are-important-and-theres-tools-help
- Ranjan Padhi, D., Jhunja, R., & Joshi, A. (2020, DEC). Enabling adults with less education to support their child's education through hyperlocal educational videos. Enabling adults with less education to support their child's education through hyperlocal educational videos. https://dl.acm.org/doi/10.1145/3441000.3441060
- Vengathattil, J. (2019, April 11). 10 NGOs rejuvenating education in India. Give India. https://www.giveindia.org/blog/top-10-education-ngos-rejuvenating-education-in-india/