

CHALKOut

A Student-led EdZine

Issue No. 1 · September 2020

ONLINE,
BUT
IS IT
IN-LINE?

FOREWORD

Dear reader,

I am delighted to write this foreword for the first issue of this e-zine. It is a wonderful effort and the themes of this issue go to the core of education and also the challenges of educating in a country like India. The e-zine is also a great example, a gratifying example, of how the University's assumptions about our teacher education programme seem to be coming true. When we started talking about the programme, we were not sure if young people, fresh out of school, would get excited about studying education and becoming educators. It seems we need not have worried!

We wanted our students to engage with and also understand the two key aspects of education in the Indian context. On the one hand good education, in its broad sense, is a great leveler. But unfortunately, and this is the second aspect, access to good education is unequal, filtered through the countless social and economic hierarchies of our society. How can our students and readers be encouraged to discover the great promise of education and at the same time be alive to the manner in which the education system is embedded in and influenced by social structures and processes?

By 'broad sense' I am talking about the fact that to be well educated is to learn things and learn to do things for sure, but it is also about having your eyes and hearts turned to the long arc of your life ahead. It is about becoming alive to the

values and strengths that will help you lead a good life and also contribute to the lives of others. It is also about realising that we live in a world of other people and other beings, always relating to them in various ways. So as educators we need to cast our eyes and energies wide to take in the world of others, the rich, the poor, the successful and the unnoticed millions.

So it is great to see that the themes you discuss in the various articles is a great introduction to the challenges of educating in a country like India. The pandemic has thrown India's diversity and inequities into relief. The poor have been hit the hardest. It has also highlighted the failure and indifference of our governance systems and a large part of our urban world. The articles bring these challenges to life. And the stories of those among you working to reach many communities affected, is uplifting.

When I became an educator more than thirty years ago, I quickly found that teaching is the most effective way to learn something well. And the most exciting thing for me about being an educator, in both school education and higher education, has been the endlessly renewed opportunity to learn. May all of you have that blessing as future educators!

Warmly,

VENU NARAYAN
Chief Academic Officer
Azim Premji University





CHALKING IT OUT

Jamlo, a 12 year old girl embarked upon a 150 km journey during the pandemic, only to breathe her last 50 kms away from home. The pages that you are reading now are the result of an urgent need to do something within our power to express solidarity with the world of children during this crisis.

The origin of this zine is a remembrance to every footprint that Jamlo walked and a plea to look at the world through a child's eyes when thinking of education. This zine calls for dialogue, conversations and engagement with a hope that our words will carry our voices and raise concerns that matter to us. It's our way of saying 'We care.'

For the first issue '**Online, but is it In-line?**', we bring to you a miscellany of what education in the pandemic looks like.

Happy Reading!

CORE TEAM (L - R FROM ABOVE)

Manasi Barmeche
Lakshmi Jagdish
Jagannath Kolkunda
Oza Vasvi
Mridula Kalluri
Ruchi Mathur
Megha Ramachandra
Sonika Parashar

GET IN TOUCH

ug.educationzine@apu.edu.in

EDITING

Manasi Barmeche

DESIGN

Megha Ramachandra

CONTENTS

TO TEACH OR NOT TO TEACH IS NOT THE QUESTION | P1

The inside story of learning in a village in North Karnataka

A HOME DELIVERED MIRACLE | P4

A reflective piece with a call to action for a place not far away.

WHERE ARE MY CRAYONS? | P7

The strangeness of a child's world during the pandemic

DEAR DIARY | P10

Snippets from the diaries of 6 year olds .



BIRDS EYE INTERVIEW | P12

A teacher's perspective on online teaching



TEACHER FEATURE | P15

In conversation with an educator

FROM THOSE ON THE FRONTLINES | P16

Watch this space to hear student and teacher voices.



RETHINKING MATH AFTER A YEAR AT UNIVERSITY | P19

An article that elicits thinking about (teaching) Math creatively

THE ROAD FORCED TO BE TAKEN | P22

An analysis of what comprises the half full glass of online learning

NEP: AN ANTISEPTIC, BUT WILL IT HEAL? | P25

A critical breakdown of the recently passed National Education Policy

HOW WELL CAN THE CAT BE BELLED? | P29

A view/review of a piece of education literature



QUESTIONS TO MARK

All the questions raised through the issue at a glance for you



TO TEACH OR NOT TO TEACH IS NOT THE QUESTION

THE LIFE AND
EDUCATION OF
RURAL KIDS
DURING THE
PANDEMIC

As someone who is teaching the children himself, Jagannath is on the front lines, the torchbearer for safeguarding education for the next generation. He tells us the story of Margutti Village in Gulbarga District of Karnataka, which is relatively untouched by Covid-19 but is facing all the impacts of it with full force.



The dark times of 2020. Everything was going smoothly until the pandemic hit the world and created chaos, leaving everyone startled. The Coronavirus put a temporary break to almost everything, from the economy, to transportation, tourism, education, and many more. Schools and colleges shut abruptly. Questions emerged about the reopening of the schools, colleges, about the exams, report cards, and other such things. The hope of getting back to normal started diminishing as the spread of Covid-19 kept on increasing. The temporary lockdown extended and kept postponing everything.

This is a story we all know quite well. But now, there's another story I want to tell you.

Let's go back in time a little bit.

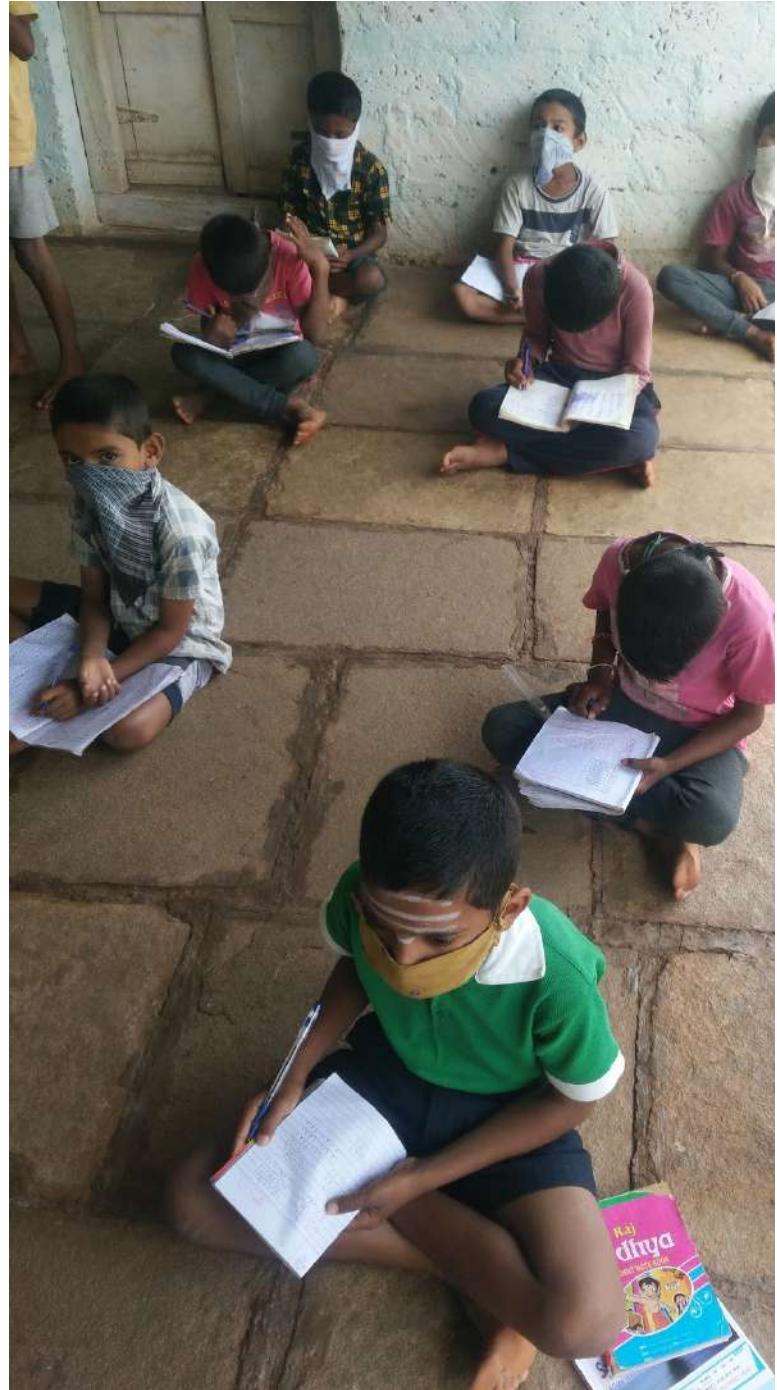
The time when we could see children in their school uniform wearing their not-so-little bags behind their little back and putting on carefree smiles on their faces as they walked to school. The morning assembly was a riot and the excitement of fresh books and new pencils still alive. It was a joy to see children jumping here and there, fighting, running in the corridors, playing on the ground. The school routine kept teachers and students engaged in the process of teaching and learning- or a semblance of it at least. Now, the course of action has significantly changed for most of these things.

The students, who once used to go to school to learn something new are now learning something of an entirely different nature. They are not allowed to go out and meet any of their friends and they stay in the closed circle of family. There is limited interaction with children of their own age and parents find it convenient to take their kids to the fields to work with them on the fields, grazing cattle, household work etc.

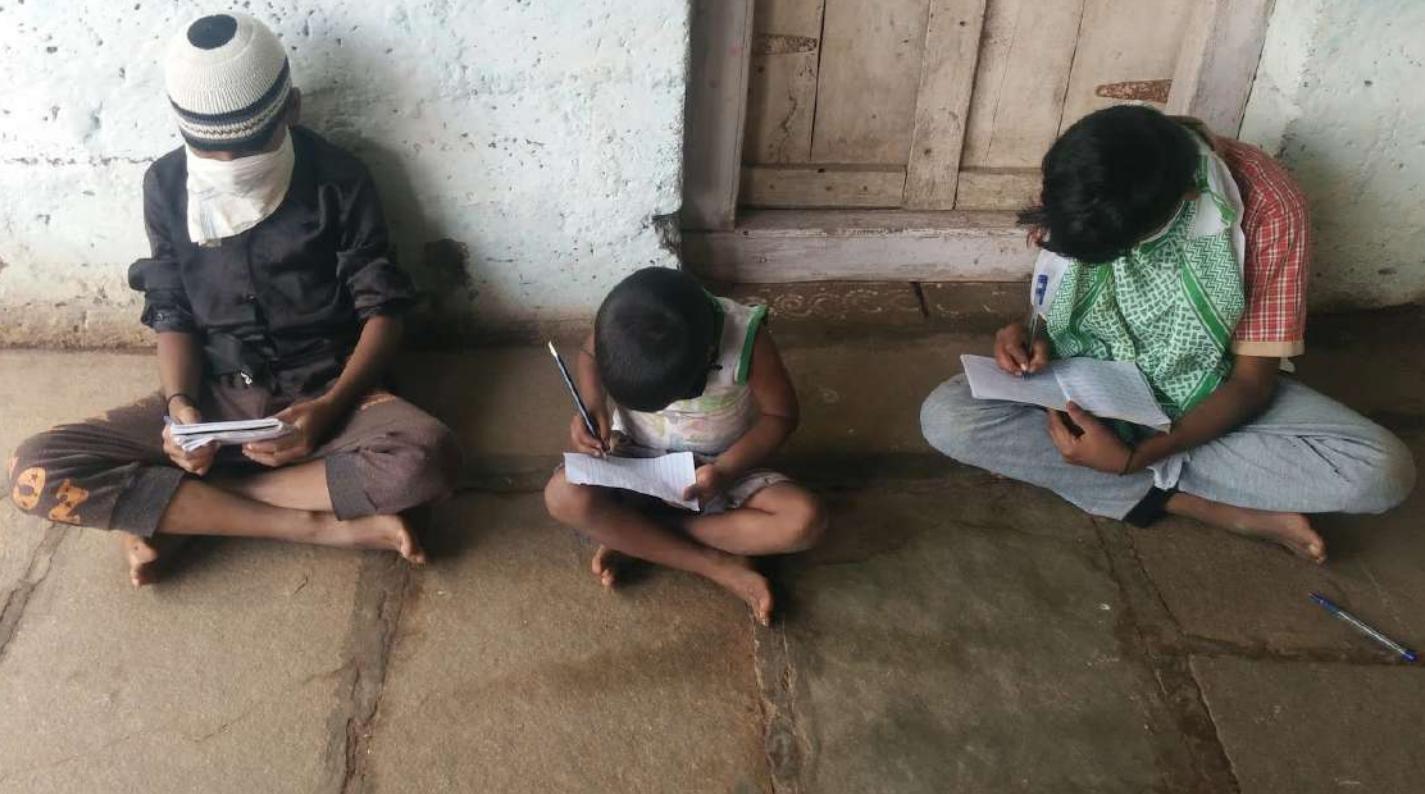
There have been initiatives from the government to start online classes through Doordarshan Chandana for high school kids, such as *Setu Bandha*, but not many students are attending those online programs. When the parents ask their kids to attend those online classes, the kids refuse. They go out to roam instead of learning.

Is it ineffective teaching or learning?

“The parents find it easier to take their kids to the fields to work with them. The children are entirely out of the context of education.”



What does education even mean for the world these young minds will grow up into?



Those kids who once used to go to school with joy now seem to have lost interest in it. When it comes to the primary sections, they do not even have classes.

They are entirely outside the context and mindset of education and thereby academic learning. However, the government school teachers have been trying to set up teaching outdoors in temples, churches and mosques for 5th- 7th grade students. Now, these places of worship have become spaces for formal education. This teaching process is being initiated by the higher authorities, as it is a safer practice at this time. They gather and teach 25 kids at a time. The teachers are well aware of the risks and are taking preventive measures against COVID 19.

They walk from door to door to inform families about the starting of school. They group the kids in a particular area of the

Looking down but seeing ahead

village and teach. When I think of all of this, it makes me wonder if learning must be so organised? Can we give credibility to learning that happens outside the four walls we like to call school and rethink what the word means at all.

I know only one thing. Teaching must not stop. In this system that hardly feels like one, much less functions in the times right now, as a future educator, all I know is that teaching must not stop and if there is one thing I want to leave you with, it is this:

Teaching must not stop, and we can only hope that learning will follow.

Jagannath K
B.Sc.B.Ed (Biology)
2018-2022



A HOME-DELIVERED MIRACLE

Stay with Pavithra as she takes us through a story close to her and asks questions posed by several thinkers in the context of children, education and human nature.

She also makes a call to action.

Back in March this year, when the government announced the first lock down due to the spread of the Covid-19 pandemic, it came as a blow to all the citizens in our country. No one expected it. It disproportionately affected daily wage laborers. They no longer had a job due to the sudden shut down of all the workplaces/industries and construction sites. When they had no work, they couldn't bring home any money. With families to take care of, the sudden helplessness they went through is something most of us can only imagine.

One such instance stayed with me long after the initial wave of awareness of my privilege and a dejection at the state of things had passed.



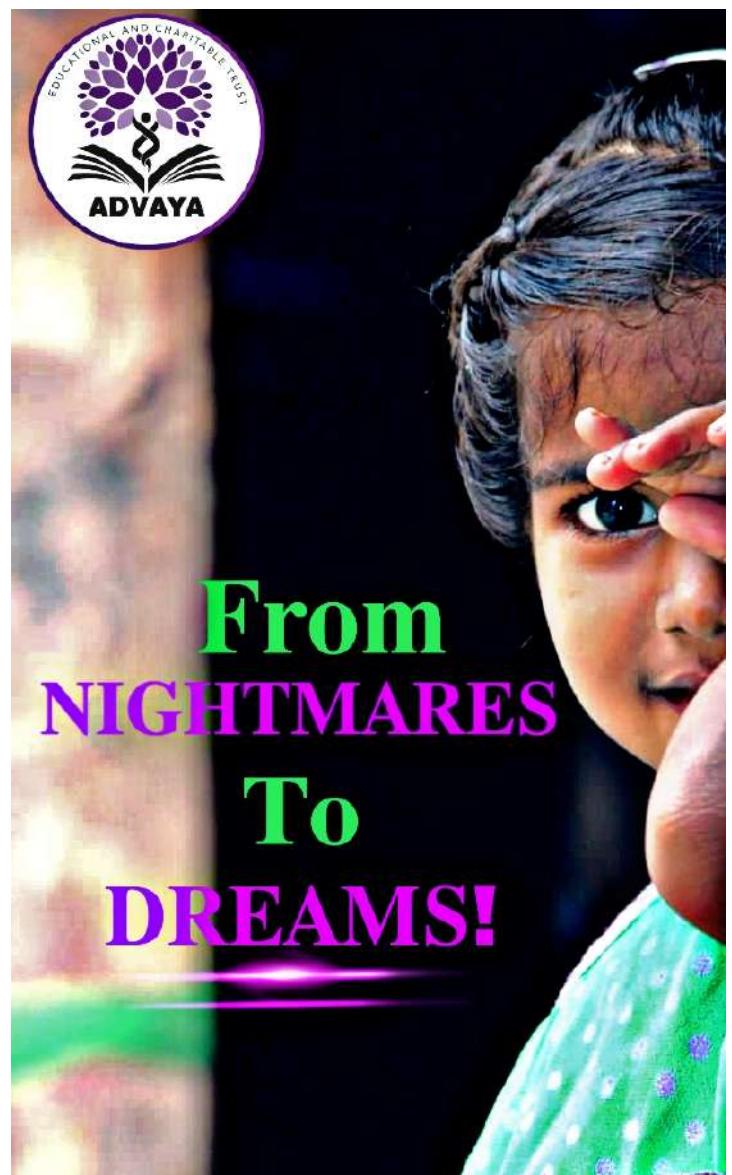
Trust in the trust: Smiles from volunteers



The home that houses 20 children (Advaya trust lease)

I am talking here about people from a particular slum in the semi-urban part of Bengaluru. They live in huts either made of hay or in tarpaulin tents. This place is called Thambuchettipalya or T.C Palya in short. Most of us know it as a passing bus stop. There are approximately 30 families living in that area. And about 15 children from the age group of 5 to 13 years. The parents usually lock their children in a small room during the day when they are away working to keep them fed and safely away from the busy road. Even during the Lockdown, they locked their kids in one room and were desperate to get themselves a paying job. There was one adult in the room to take care of the children and that person was given 1000 rupees per month by desperate but concerned parents to take care of the children. It became very difficult for the parents to pay this money now. But they had no other choice as they wanted their children to remain safe indoors and not play and run around outside.

One of my close friends from school, Nandini, who is the president of Rotaract Club of Shishu Mandir, knew this community from the time she and others from my school gave some clothes to these children to wear. She noticed the situation these people were in because of the pandemic and saw that these children were not secure and did not get three or even two meals a day. So she decided to start a trust and take in these children. She initiated this project on June 30th 2020.



As of now, it's just like a daycare centre but for free. After this lockdown, maybe with more support from donors and friends, we can extend to help these children get basic education or skills for life. And as time passes, the plan is to expand on this basic project and help many more children in need of security, love, care and above all, the respect that every child deserves.

In these times, I think equality has no or very little role to change anything for the better.

This small story here makes me reflect on some things we learnt in our education classes. I am reminded of Maslow and his hierarchy. Makes me think of what children really need the most beyond food and shelter; and how the pyramid ends short of its peak for some of them. I am reminded of Bronfenbrenner and his ecological systems. We can clearly see that the decisions made by some unit/body that the child is completely unaware of; like the government, policies, the economy or an international pandemic. Who is most affected by these large exterior influences? I am reminded of Rawl's veil of ignorance. Would it help to rethink our understanding of education in India through the veil?

I am pushed to think that in these unprecedented circumstances, equality is not what we must strive for- equity should be our goal. Equity is providing the appropriate support keeping their standard of life in mind.

Some deserve more support than some others. In the case of these children many were not even enrolled in the nearby government school. I think equality has no or very little role to change anything for the better, especially when it's all in theory, a place in the dreaded ideal. If at all we want to improve for the better we need to start looking at equity instead of equality. With equity, I believe a lot can change over time.

I want to tell you all about this project because it came as a miracle to several children there and to encourage contributions. These are tough times, and we can get through them only by being kinder, more empathetic and willing to lend a hand when we can.



If anyone wants to help the trust- monetarily or to help them furnish the shelter, do get in touch with Pavithra (6382653491)

Name: Advaya Educational and charitable trust
Account No. 39558858591
IFSC code: SBIN0041206

Pavithra

B.Sc.B.Ed (Biology)
2018-2022



WHERE ARE MY CRAYONS?

PRERANA TALKS ABOUT SCHOOLS,
TWITTER PARENTS AND THE
HOSTILITY OF A CHILD'S WORLD
NOW AND PRODS US TO REFLECT ON
THE ADAGE:
*'THE MORE THINGS CHANGE, THE
MORE THEY STAY THE SAME.'*

A pandemic is no small thing. Even if one is not ill, the long fingers of the virus manage to touch every specter of life. What was initially supposed to last a couple of months; a virus of the summer, proved to be relentless in its attack and so, long after the questions about the cure and about the economic crisis had completed its rounds, the question of schools remained. While the kids remained happy enough to be separated from their nemesis, teens drowned themselves in anxiety about their future and parents raged and worried about what to do with their offsprings. To douse the fire parents were lighting on twitter, legislators in the government decided it was an excellent idea to push everything online. This satisfied all the parents who could afford to be on twitter but worried those without the means to study in this way.



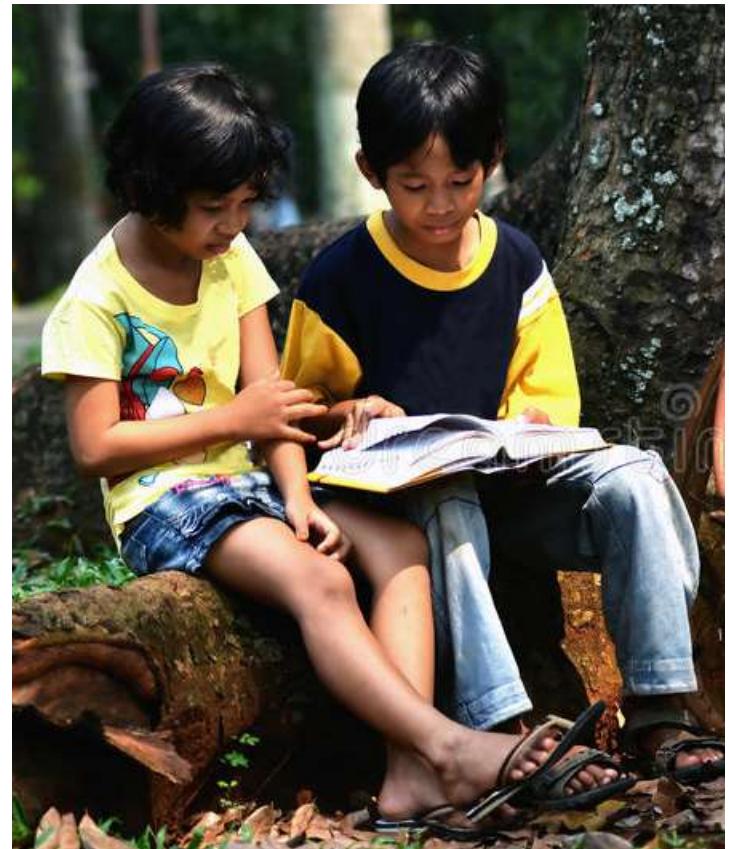
Those who did not have, those who could not afford and those that simply could not understand anything from a desperate teacher a couple of bus rides away got lost in the large gaps the education system left for those that do not mean as much.

This year will leave its marks on the academics of each one of us, but another thing most of us seem to have forgotten is that learning is more than academics.

“

After the questions about the cure and about the economic crisis had completed its rounds, the question of schools remained. Where is the press on these pressing matters?

”



School is a place that holds the answer to many people's future-it's often their only way to jump class boundaries along with being so much more. School is a place where children can play sports, dance, learn music and art- things that a lot of adults have lost touch with. Despite the fact that these 'extracurriculars' are not given much priority in conventional schools, this is the place where they can explore the world around them in ways other than what is considered 'essential'. Playing kho-kho, dancing around to random music and trying to make masterpieces out of broken crayons and lined paper; they may not lead to a career for everyone but it is what allows them to be human- to create places to practice being humane. A small bit of creative expression can do wonders for a child's effectiveness in learning otherwise as an added advantage to simply allowing them

to be children. For many it may be more; it may be the thing that allows them to escape the harrowing halls of their dark lives at home.

Even when schools refrain from offering anything that may prove a 'distraction' from their important textbooks, NGOs and teachers themselves try to pick up the slack to try and provide some kind of way to try and understand the world around them other than textbooks and lectures. Some play sports with them, while others attempt to teach them to cope with the difficulties of life through dance and music. Now, in this chaotic present when it is most needed, when everyone needs something to express the fear, the panic and the sheer anxiety that is currently inflicting itself on all of society, the people who need it the most have had their access cutoff.

When the virus first inflicted itself on India, schools and therefore education was declared non-essential but soon enough the pieces considered important to the parents were brought back. The keystone pieces to having a sane next generation were however left behind.

Those who could afford to demand for education even in a pandemic, can also afford the space, time and money to deal with the psychological fallout of a virus that has to be measured in nanometers. But the children who need it the most? The children whose parents and family structures are collapsing around them as wave after wave proceeds to destroy the lungs and airways of those closest

to them? I have a hallway full of mirrors and a phone with music to dance to, and what do they have? A textbook that they don't understand and their emotional and psychological guardians, their crayons ripped away.



Prerana Sudarshan

B.Sc.B.Ed (Biology)

2019-2023



Close circle, open minds



DEAR DIARY

WILL I BE LEFT BEHIND?

Yesterday I saw amma break her secret box of money
I'm a little scared although she said not to worry,
I'm too small, too young to think of this, they say
But for the past months, I feel like I've grown a year each day
I was very sad when our baby cow was given away.
I was very sad when papa had to come home walking all the way
He doesn't live with us, he makes big buildings in the city.
He said one day we will all go there and live where it's busy and pretty.
I won't have to get up early to walk to school
I'll have a new uniform and look big and cool.
I heard that all of my future city friends have school online
I don't have school, not even many books to call mine
Amma said to be strong and be kind
But I keep worrying, Will I be left behind?
Will I be left behind?



USE A LIFELINE: SNEAK A FRIEND

Why aren't any of my friends coming over?

I promise we'll run around the house slower

I want to go outside, I want to see faces my age

I don't like the zoo anymore, I know now

how it feels inside a cage.

I know you've told me there's bad bacteria out there

That I must be careful, it could catch me mid air

But I'm a big girl now, I can fight it- keep it at bay

I can use that cape I got last birthday.

You and papa talk to your screen at work

My toys are all quiet and the TV

doesn't compare to a park

The other day I heard you talk on the phone,

Were you talking about getting help to get housework done?

I can do the dishes and sweep the floor too

Just one thing I want in return from you

I'm tired of playing pretend

Can we sneak in a friend?

Can we please sneak in a friend?



BIRD'S EYE INTERVIEW



Read on as Lakshmi tells us how the pandemic changed Mrs Bindu Menon's, a Kendriya Vidyalaya mathematics teacher, answer to the question: 'What is effective learning or teaching?'

1. In what ways has your teaching - learning process changed ?

Since the lockdown started I first began teaching through Whatsapp. We made groups for each subject and sent video lessons and worksheets. Then I shifted to Google classroom and Google meet. I felt Google meet is successful for live interactions and Google classroom for systematic transactions of teaching materials.

2. There may be students who won't have internet access , what steps have you taken to reach them?

In my class all students have mobile with

internet access but there are few who find it difficult to join classes due to poor connectivity. For them I send the videos to my Whatsapp group and also to Google classroom and doubts are cleared through call and chat. KVS (Kendriya Vidyalaya Sangathan) has also deployed Swayamprabha portal(T.V channel) which deals with different topics which children can view on television.

3. How are students reacting to this change? How far is online teaching effective?

I have noticed that few students actively participate and could adapt to this new mode

but there are many who still find it difficult to accept the same. I have also observed that few slow bloomers have started participating enthusiastically during classes as they are getting individualised instructions and also peer pressure is less. Well I can't give a fair comment as I have just switched over and effectiveness depends on various factors of each child like motivation, interest, self learning and dedication.

4. What strategies do you use in the classroom?

I mostly use powerpoints, video lessons and discussions. I give them mini projects and encourage them to present it in the class. Teachers have to do a lot of homework in planning the lessons and to deliver it within the time limits .

5. How are you assessing the students now?

Assessments have become really challenging to make it appropriate and reliable. I give them MCQ quiz in Google form after each topic and also assess their presentations and assignments. Due to lack of immediate feedback we are unable to assess student's understanding. We find it difficult to address the issue of reliability and to ensure the Identity of exam takers and the answer they provide is the result of their own work.

“

It has now become more about motivation, interest, self learning and dedication than just being able to do what's in the textbook.

”



6. Can online teaching replace the school classroom ?

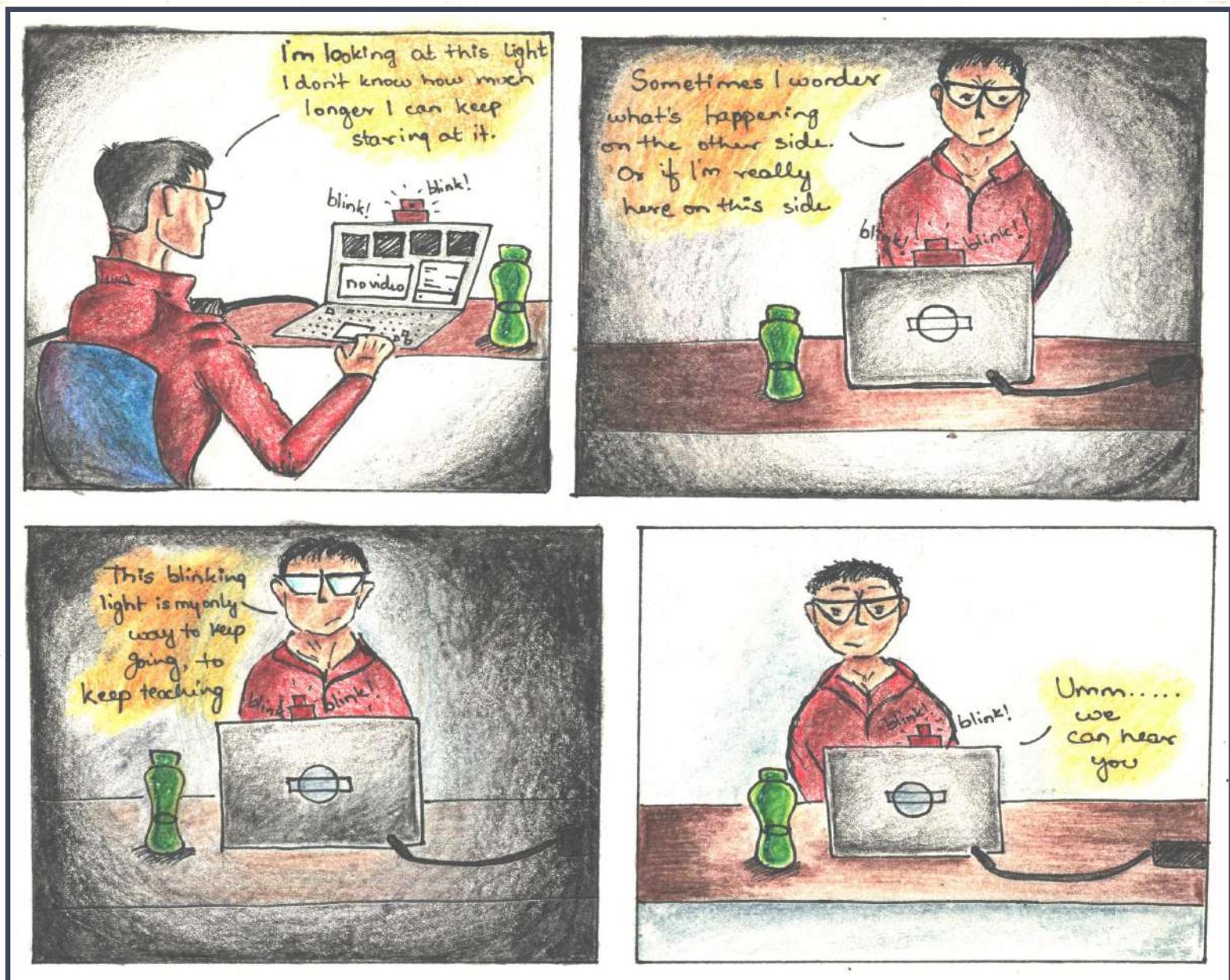
No, not completely. As online teaching and learning may be challenging to students who are used to physical classrooms. Traditional classroom has an edge in terms of the physical presence of teachers and classmates. The aim of education is not to build an "intelligent" student but to make a responsible citizen. Normal classrooms give room for proper monitoring of behaviour, improve social interaction and increase exposure. Online education may be flexible and interesting but can't meet the moral aspect of the child.



Lakshmi Jagadish

B.Sc.B.Ed (Biology)

2018-2022



**How much longer can I look at the light?
A teacher's internal monologue**

Concept by Manasi, Artwork by Megha



TEACHER FEATURE

Where there is a way, it must be shared.

Teacher Feature is a column that showcases the work of different educators in the field of social work and education. It gives us a peek into their quirks, what they're doing differently and how they think of a classroom. To kick off the series, Megha Ramachandra, is in conversation with **Sujatha Rao**, an extremely kind and beautiful educator. Here is the edited interview with the wonder woman herself.

Click here to listen to the podcast on [Spotify](#) and [YouTube](#).



Megha Ramachandra

B.Sc.B.Ed (Biology)

2018-2022



FROM THOSE ON THE FRONTLINES



Map data ©2020

Let's hear what the teachers and students of Margutti village in Gulbarga that Jagannath introduced earlier (article 1) have to say about the crisis.

Each drop counts: the alarming rise in dropout rates?

The Pandemic led to closing down the schools. We struggled and somehow completed the syllabus and other academic activities to complete the academic year. I hoped that by June it would get back to normal and schools would reopen and the students could get back to school. So that we could have a fresh start to the academic year. There is no sign of control of Corona and no hope for reopening the school. However, we have started enrolling kids into the 1st standard and are waiting for further instructions from the government. We have been distributing rations to our students as it was supposed to be their mid day meal.

Most of the students might drop out of school or discontinue. It seems they have lost interest in getting back to studies. Students who are below average might find it difficult to get back to studies due to an increased gap or vacation, and there are also high chances of them dropping out and getting into work instead. We have started teaching the kids by allowing teachers to go to a particular section of the village. Teachers gather to teach students of class 5, 6, 7, even while physical distance is being maintained and all the required preventive measures are practiced.

*Shabana Begam
Headmistress
GHPs Margutti*

NO ONE TO TEACH US

I completed the 7th standard without any exams! Now I am in 8th standard. This is the first time we have got so many days of holiday, especially in the summer. If the schools were open we would be going to school by now. Teachers gave us textbooks recently but there is no one to teach us. My parents are taking me to the field to work. I wish the schools were open. It was good to be in school in a school uniform, we used to meet friends, play kabaddi, cricket, learn and enjoy school. But now we cannot do anything. At home, when I open the books to study, I don't understand anything. So I close it and go out and do something else, like take the cattle to graze. There is teaching happening on a TV Channel. I don't understand much from it. I cannot ask doubts. I just have to sit there in front of the TV without understanding anything. So I stopped watching that program. I want to become a Police.



Rakshit

8th Std

GHSS Margutti

Alarming: The alarm clock now serves only as a reminder that there is no school, school for few or school for all. What is your stance? Are online classes organized by the schools justified for children?

I did have a good break, but it was quite boring at home. If this Corona wasn't there I would be in school teaching the kids. Now it's the month of August and we still haven't reopened the school. It's now time to get back to school! We cannot conduct online class for students as not everybody has access to phones and the internet. We have been allotted to particular sections of the village and have to gather the students in a place and teach. It is a multi-grade grouping. We teachers move to the other section of the village and try to complete certain concepts and give homework to students so that they are busy with their academics and education. However, it is quite difficult to carry out group discussions and conduct activities. Not all students attend the classes. There is a significant decrease in the number of students attending these classes. We are trying our best. I hope everything will get back to normal so that students come back to School.

Vijay Kumar

Maths Teacher

GHPS Margutti

SAALI IDRE NE JOLLY

The teachers are coming near our houses. We friends gather together. The teachers teach us and give us homework. Our parents are supporting us to attend classes outdoors. Wherever there is a wide space. We sit there and the teachers teach us. It was good to be in school. We could meet all our friends over there. Now we are only a few over here. If the teacher comes here to teach today, the next day he/she goes to teach on the other sides of the village. Whenever it rains it is difficult for us to sit there. If we were in school, we used to play. My parents are not allowing me to go out and play. *Saali idre ne jolly* (there's joy only when we have school). The schools should open soon.

Sanket

6th Std

GHPG Margutti



Credits: Khushal Bhatewara (Manasi's 8 year old cousin)



RETHINKING MATH AFTER A YEAR AT UNIVERSITY

REFLECTIONS BY SRI KEERTHAN TOKALA ON HOW MATH IS TAUGHT AT THE
SCHOOL LEVEL AND HOW IT COULD BE DONE INSTEAD

With the Covid-19 pandemic disrupting the regular academic setting, online classes have become the new order and have enabled students to sit at home and attend classes. To break the monotony of attending classes from the same room of her home, my 12 year old cousin came down to our home in a different city and attended her classes from here. On testing her performance in math through a series of oral and written assignments, I thought she could use some help. Another reason I stepped up to help was because I was keen on experimenting with math pedagogy and figuring out a way to teach maths interestingly and effectively. In essence, I wanted to be the dream math teacher I always wished I had. While teaching my cousin primes and factors, I came across

a question in her math textbook. "Find three numbers whose only prime factor is 2". At first glance, I looked at the question as just a 7th grade math problem. On solving the problem and teaching my cousin how to solve similar problems, I observed an interesting pattern in the answer to the question.

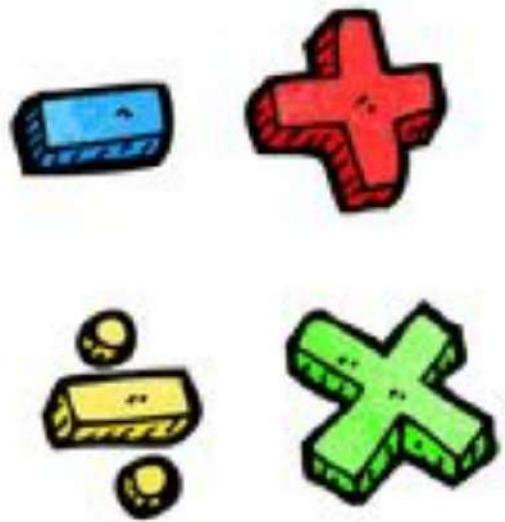
Having completed two semesters of 'Introduction to Mathematical Thinking (IMT)' at Azim Premji University, I couldn't but wonder if there's more to the question than the seemingly obvious. One of my first and foremost learning outcomes on completing IMT is learning the differences between mathematical thinking and problem solving.



I realised that while school math primarily emphasises problem solving, college math mostly emphasises mathematical thinking, with minimal problem solving. While mathematical thinking also sometimes involves problem solving, it is more of a perspective than a procedure to approach problems of mathematics. It goes beyond procedural approaches and places emphasis on understanding the underlying patterns and the context of the problems.

Using the tools I equipped myself with through the IMT courses, I tried to explore the patterns of a simple problem using mathematical thought. I extended the question to other numbers. What would the answer look like if it were asking to find three numbers whose only prime factor is 3? What would it be if one was to find numbers whose only prime factor is 5?

And unsurprisingly enough, they had the same underlying pattern. The answers were always powers of the only prime factor. The first three instances of numbers with 2 as their only prime factor are 2, 4 and 8. With 3 as the only prime factor, they're 3, 9, 27, and for 5 as the only prime factor, they're 5, 25, and 125. The obvious pattern here is that the list of numbers whose only prime factor is 'n', is the list of the powers of the number 'n'. I wondered how this could be proved, and realised that the unique-prime factorisation theorem has the proof. The unique-prime factorisation theorem or the fundamental theorem of arithmetic states that 'any integer greater than 1 is either a prime or can



be written as a unique product of primes' (where the order doesn't matter).

Using this theorem, one can easily show why the answers are always powers of the only prime factor. More than the proof alone, I became increasingly interested in looking at other problems in her textbook in a similar light. I realised a lot of the questions could be understood and learnt through a lens of mathematical thinking. Even while looking at other concepts in her textbook, I wondered why a similar perspective wasn't offered to me at the first instance when I was at school. My first introduction to mathematical thinking was in college and I couldn't but wonder why something so fundamental as this was delayed thus far; fundamental not just in terms of getting a good grasp of the subject but also to cultivate interest in the subject. Throughout my experience of learning math in school,



Never was I familiarised with looking at math through a non problem solving lens. Not providing this perspective could certainly be a major reason for the increasing number of students shunning math.

The blatantly obvious divide between school math and college math in their respective approaches to teaching math raised questions such as the following: Why should the problem solving approach exclusively be used at the school level without drawing from the approach of mathematical thinking? On what principles of learning is the math curriculum designed in India? Should mathematical thinking necessarily follow problem solving?

Can they not be adopted simultaneously?

A unique feature of math education at Azim Premji University is Inquiry Based Learning (IBL), to which the students are oriented right in the first semester. The entire first semester was approached in a manner that required the students to explore and learn ideas on their own. With minimal cues and occasional help, the courses were 'student centric'.

Not only did the students end up with a sense of satisfaction and pride on exploring fundamental ideas of mathematics but also developed interest to delve deeper into the subject. Even though the school system is student centric in the sense that one has to do a great number of problems and concepts independently, it lacks the aspects of mathematical thinking and hence rarely stimulates interest for the subject. //It is imperative that the school curriculum includes exercises that exposit math as a language to explain and understand patterns. This would not only help in clarifying to the students what college math involves but would also allow them to make an informed choice of whether or not to pursue math further. By including these two aspects at the school level, one would hope to see many more students wanting to pursue math beyond high school.



Sri Keerthan Tokala

B.Sc .B.Ed (Mathematics)

2019-2023

THE ROAD FORCED TO BE TAKEN

THE FUTURE OF EDUCATION AND SCHOOLS

Is online really in line for the future of education? There are negative sides to this being the only format for teaching, but this is not the final product. We will go back to the old normal, but not all the way. Here I present to you why this form of education is definitely in line by highlighting some of the positive aspects of online learning that might be taken into the future of education. These were noted down by **Mridula**, on attending and observing online classes of a private school in the city of Hyderabad, India.

CLASSES ARE STUDENT CENTRED

Unlike traditional classrooms, these online classes are mostly student centred where the importance is given to more active student participation.

Teacher	Student 1	Student 2
Student 3	Student 4	Student 5



**CLEAR DOUBTS
IMMEDIATELY
WITHOUT
DISTURBING
THE CLASS-FLOW**



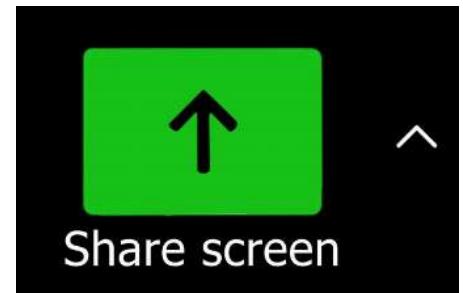
There are many times when a student does not understand a part of the lecture or a whole unit as they did not understand a word or a phrase that is important to the topic. Also, they might be shy or hesitant to ask the teacher in between the class and sometimes completely give up on asking about it as by the time they have gathered up enough courage, the class has already moved way ahead. During these times, the student can very easily clear their own doubt right then and there by searching it up in one of the search engines.

**CLASSES
CAN BE
REVISITED
AT ANY
TIME,
ANYWHERE**



Many times, students might not be able to attend classes for various reasons. It could be due to network issues, being sick, or due to any other personal reason(s). During difficult times like these, the students do not necessarily miss out on the classes as they can revisit the recordings of the classes at their own convenience!

**SHARE AND
FOCUS ON
ONE
CONTENT**



Chat

INSTANT MATERIAL SHARING

"I will share the website link with you once school is done" and "I will share with you the images once I get back home." These phrases do not come into account anymore as you can make use of the internet and the chat box for instant sharing of soft copies/online material.

To : Everyone

<https://www.google.co.in/?&bih=600&bir=1280&hl=en>

More

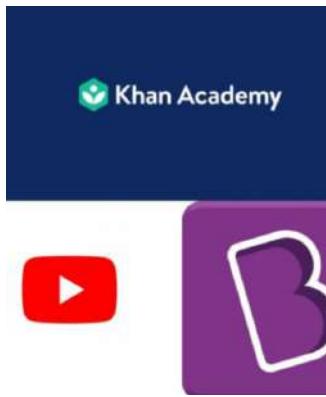
"Open to page number 55, right hand side, second paragraph, fifth line. The oesophagus is ... ". Instead of this, teachers can now waste less time on getting all the students to a common page by just sharing their screen which already has the required page of the textbook open while using the cursor to point the exact word from where they want to start. This option of "share screen" can also be used to watch videos, read text, play games, and various other activities together.



ONLINE EDUCATIONAL SITES

Due to loss of access to tuitions and external help in understanding

the concepts taught in school, students are turning more towards the educational sites that provide (mostly) pictorial explanations of almost all the topics that are being taught in school, including all the three major boards in the country (State, CBSE, ICSE).



DIGITAL TOOLS TO ENHANCE THE PROCESS OF TEACHING

Teachers now have access to a wide range of tools to make their classes a lot more interesting as well as interactive. These range from tools that allow them to make animated videos like Squigl to tools that allow the students to play educational games like on Kahoot.



Mridula Kalluri

B.Sc.B.Ed (Biology)

2018-2022



Zoom in, zoom out, zoom in, spaced out

Concept by Manasi, Artwork by Megha

10+2 system to go, flexible degree plan coming

गोदी डॉक्युमेंट ने कहा शिल्प नीति को लियाहू लारी जाएगी

अब मातृभाषा में पढ़ सकेंगे बच्चे
एमपिल पाठ्यक्रम होंगे बंद



**उच्च रिक्षा के लिए
नियानक गटित**

0+2 to 5+3+3+4: Current 10+2 structure in which policy covered schooling from Class 1 to 10 (age 6-16) and then Class 11-12 (age 16-18) gives way to 5 years of foundational education, 3 of

अब चार साल का होगा डिग्री कोर्स

CABINET CLEARS NEW EDUCATION POLICY

Doors open for foreign univs; 4-yr UG with exit option, flexible Master'

One regulator; more porous science-humanities divide

National Education Policy 2020: 5ನೇ ತರಗತಿ ವರೆಗೆ ಮಾತ್ರ ಭಾಷೆಯಲ್ಲಿ ಶಿಕ್ಷಣಕ್ಕೆ ಒಮ್ಮೆ

NEP-AN ANTISEPTIC. BUT, WILL IT HEAL?

READ ON AS VEDA BREAKS DOWN NEP 2020 AND ASKS SOME CRITICAL QUESTIONS

Education policies have had an irregular history in the Indian subcontinent. The first formal education policy was drafted in 1823 by the Committee of Public Instruction, during the British Era. Since Independence, the Indian Government has attempted to restructure the education system five times, from 1948 to 2020. Over the last month, the New National Education Policy (hereafter NEP 2020) has thrown the schools, students, and parents of our country into a frenzy.

The Ministry of Human Resource and Development (now known as the Ministry of Education) woke up from more than a two-decade-long slumber in 2014 to draw the skeletal plans of such a policy.

However, it took another seven years and shuffling of ministers before any real change manifested.

The policy was built by a nine-member committee, created by the Minister of Education, Ramesh Pokhriyal, and chaired by former ISRO Director, Dr. K. Kasturirangan. The Cabinet approved this policy on the 29th of July, 2020, amidst the pandemic.

The policy itself is a four-part document and covers school education, higher education, adult education, and implementation. By now it is common knowledge that one of the major changes suggested is in the structure of schooling where students will study five years of foundational, three years of preparatory, another three years of middle



school and then four years of secondary school. Other recommendations include the flexibility of streams, the sharing of resources amongst school ‘complexes’ (a group of institutions near one another), the need for technological knowledge, and the emphasis on actively using regional languages in the process of teaching. It does strengthen the RTE Act and the promise of complete free schooling starting from pre-school. It also assures increased funding towards educational institutions. Interestingly, it emphasizes the need for ensuring the physical as well as mental health of students and advises regular health checkups and the appointment of counselors in each school. Although the policy largely revolves around sprucing up early schooling, it does propose a few

“ Giving us an analysis of Unsurprisingly, the section on implementation was, by far, the smallest of all. It guarantees the complete execution of the policy by 2040 but doesn’t divulge the details.”

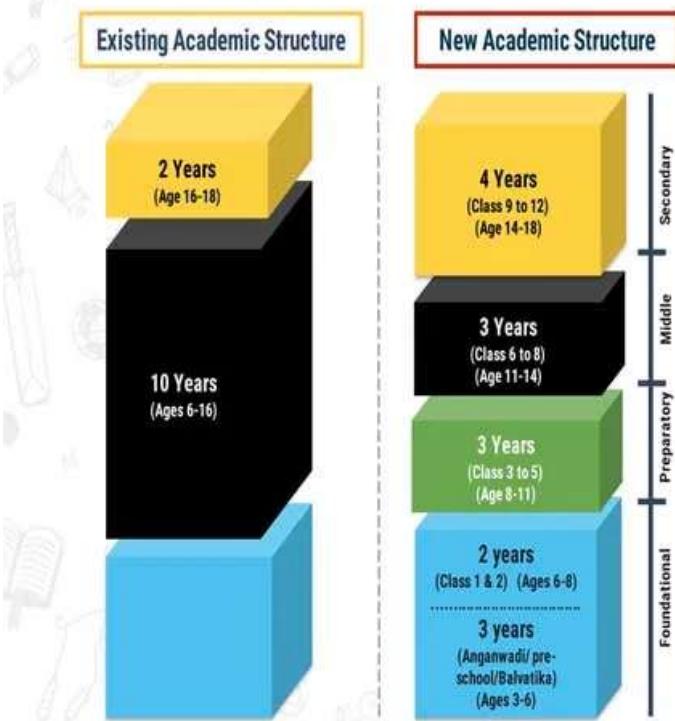
”

changes to the existing university set-up. Suggestions like the common entrance exam and the provision of certificates for each year of study were made for these long-forgotten systems. Teacher training and adult education are also stressed upon in this document. Unsurprisingly, the section on implementation was, by far, the smallest of all. It guarantees the complete execution of the policy by 2040 but doesn’t divulge the details.

While the suggestions seem positively revolutionary, this policy is ambitious in every sense of the word! In the past we have seen equally ambitious education policies. Hopefully, the terrible track record will not result in yet another set of forgotten suggestions.

This policy is perhaps the most comprehensive of proposed education policies and does make favorable recommendations. It is groundbreaking in terms of the stress it lays upon the all-round development of an individual

Transforming Curricular & Pedagogical Structure



Source: Times Now | [Click here](#) for the complete article.

(especially the mental health facet). Although risky, the central idea of using local languages as modes of instruction in schools might make schools less intimidating for lots of children across the country and may thereby increase enrollment rates. The need for well-trained and academically qualified teachers seems to be strongly voiced in this document and is met by its 'gameplan'. Increased allotment of funds towards education,i.e. from 1.6% to a whopping 6% (of the GDP) almost seems too good to be true!

The NEP 2020 has undoubtedly been sensational, given how detailed the suggested improvements are, however, it is vital to keep in mind the previous governments' negligence as a contributor to this sensationalism.

It is also important to remember the fact that it reiterates, borrows even, several points made by previous commissions and education policies (i.e. the Mudaliar Commission, the Kothari Commission, the NEP 1968) and hence isn't entirely original. Furthermore, this policy made its debut during a pandemic, where the question of how schooling would continue ran in many minds. Thereby, it already had an eager and curious audience awaiting its arrival.

The NEP 2020's applicability in different regions, especially places with a linguistically diverse student population, is concerning. With the increased movement of people across the country, there isn't a single



Source: Indian Express | [Click here](#) for the article.

language being spoken in a city. Most metropolitan cities are multilingual and non-metropolitan are also becoming more linguistically colorful. How feasible is the NEP 2020 when one child speaks Kannada and the other speaks Odia?

A more troubling sort of inflexibility does arise when we bring our current context and compare it to the feasibility of this policy. Considering the numerous lockdowns, the uncontrolled spread of a pandemic, and the shutting down of schools; the NEP 2020 fails to make a concrete plan for a future riddled with such woes



PART IV. MAKING IT HAPPEN

25	Strengthening the Central Advisory Board of Education	60
26	Financing: Affordable and Quality Education for All	60
27	Implementation	61
	List of Abbreviations used	63

Better said than done: excerpt from the official NEP 2020 document. In a document that spans more than 60 pages, only 3 pages are dedicated to implementation.

Furthermore, the policy fails to address how exactly education will be made available across all sections of society. Merely writing off an increased allotment of funds is clearly not the solution given the fact that the economy is currently in distress! Finally, the vagueness that surrounds its implementation builds castles in the air and fails to show us exactly how any of the suggestions will translate to an actual change.

I would rather not bring up the exhausting question of the pros outweighing cons or vice versa while evaluating this document, since it largely favors an unrealistic future. A majority of the changes recommended do attempt to better the current situation

The Ministry of Education is indeed undertaking a herculean task, the need for improving the current systems of education has never been greater! The real trial by fire will be in its implementation and a check on its impact. Considering the fact that the policy hints at a future not plagued by a pandemic, it may be awhile before we see any real execution.

Veda Maskey

B.Sc.B.Ed (Mathematics)

2019-2023



HOW WELL CAN THE CAT BE BELLED?

HOW CAN SCHOOLS SAFELY RE-OPEN IN INDIA? EXPERT EXPLAINS.

In this article, Suzana Brinkmann, consultant with the Government of India and UNICEF on pedagogical reforms in school education, is in conversation with Akshita Jain, editor with the Huffpost, on questions about schooling and how to continue education during the pandemic. These are questions that likely resonate with many of us.

Jain asks (among other pertinent questions): "When could schools reopen? What are some challenges that teachers and administrators might face? Can online learning be considered an effective replacement for face-to-face classes? How can the gap in access to online modes of learning be bridged in a country with unequal access like India? The longer children stay out of school, the less likely they are to ever return. Would the closure of schools mean higher rates of dropping out among students from poorer households?" Brinkmann responds (in layered details): "The urgent priority is not to reopen schools, but to ensure that children are learning whether or not they go to school."

THE COVID-19 PANDEMIC IS AN OPPORTUNITY FOR INDIA TO REIMAGINE ITS EDUCATION SYSTEM AND FOCUS ON LEARNING RATHER THAN JUST SCHOOLING.

A concern she raises is that "even children who are attending schools are often several grade levels behind in terms of their learning level." She notes a key difference between schooling and learning, and emphasizes the impacts that teacher-student relationships can have on how and what children learn.

She also shares simple and clear recommendations for how to support well-being and learning in children in these times. She offers that "the Covid-19 pandemic is an opportunity for India to reimagine its education system and focus on learning rather than just schooling."

What could re-imagining the education system entail and look like – for schools, teachers, parents, teacher trainees, and most centrally, children? [Click here](#) to read the full article.

Ruchi Mathur
 Teacher Education Faculty
 Azim Premji University



Questions to Mark

These are some questions we would want you to take away from this issue and hopefully chalk some answers of your own out!

What does education even mean for the world our young minds will grow up into?

Is it ineffective teaching or learning that's limiting the scope of online learning?

Are online classes organized by the schools justified for children?

What do the alarming rise in dropout rates mean for school and society?

News coverage for education has been abysmally staggered: Where is the press on these pressing matters?



A very grateful team would like to thank

Rajashree S for the HDTL (*Human Development Teaching Learning*) classroom that sparked the inspiration which manifested this zine

Venu Narayan, whose prompt response for the foreword and support for the initiative is very valuable to us.

To all our lovely contributors for this issue. This zine is as much yours as ours.

Photograph credits:

Cover, Article 1 'From the front lines': Jagannath K.
Advaya trust and volunteers: Pavithra

Artwork credits:

Will I be left behind? (pg 10) - Sonika Parashar
Can we sneak in a friend? (pg 11) - Manasi Barmecha
Bird's eye Inter-view background (pg 12)- Vithur
Comics on pg 14, pg 24- Concept by Manasi Barmecha,
Art by Megha Ramamchandra

All other photograph and artworks are royalty and copyright free artworks from the following platforms -

www.rawpixel.com
[www.unsplash.com\](http://www.unsplash.com)

And of course- you, dear readers for whom this is all meant. Keep reading!