

Azim Premji University





Every Child Can Learn Part 2

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Learning Curve is a publication on education from the Azim Premji University for teachers, teacher educators, school heads, educational functionaries, parents and NGOs on contextual and thematic issues that have enduring relevance and value for them. It provides a platform for the expression of varied opinions, perspectives and stories of innovation; and, encourages new, informed positions and thought-provoking points of view. The approach is a balance between academic- and a practitioner-oriented magazine.

All opinions expressed in this publication are those of the authors and do not necessarily reflect the official policy or position of the Azim Premji University.

FROM THE EDITOR



This issue gives us great pleasure for several reasons. First, there was such a resounding response to the statement *Every Child Can Learn* that we got many more articles than we had expected, to confirm, if confirmation were needed, that yes, indeed, children can learn and do learn, provided they get the encouragement, support, respect and dignity that is due to them during the process and after. This led to the creation of this, Part 2, devoted to the topic.

Second, one of the discoveries that teachers had made was that, as children learn, so do the adults who teach them. Over and over again, articles in both the issues testified to the fact that thinking about how to make a concept or idea easier and more inclusive made teachers look at things in a new light. So, the learning worked both ways.

Third, the varied ways in which learning is imparted cover a lot of ground, from the general to the particular. The focus articles give us the broader picture of the background required to make learning possible. These include an account of a group of tribal children reclaiming their own culture and language and realising the value of self-worth as an important component of learning; and, of the value of the right nutrition to be physically able to handle the rigours of the classroom and school. Another article refers to the learning children already come with to school and how this is used to enhance subsequent learning. The hard work that goes into creating and sustaining change and universalising it, in this case, a quartercentury of experimentation, reflection, support and constant renewal of methodologies has been described in another article.

Fourth, learning uses all the faculties of children - physical, mental and emotional, and teachers

have given accounts of how just making thoughtful changes in approach can make children participate in classroom activities.

There are articles that discuss the problem of gender inequality which is so rampant that it goes unnoticed unless it comes up for open discussion; and the efforts to make learning available to minority groups, opening up whole new worlds to these children in school. Writers have recounted their successful attempts to make learning available through total inclusion and personal involvement. Learning English, too long venerated as the language of the learned, has been demystified into being a skill, easy to learn with the right tools and approach. Language teaching via reading, being exposed to the excitement that exploring different environments bring finds expression in another article.

The one thing that comes through in this, as in Part 1, is that it is all about children learning and enjoying themselves in the process, rather than getting a formal education. Learning self-belief, being valued, getting the required support and reassurance that one does not have to change in order to acquire another's ideas are all learning-enhancing experiences. Retaining one's individuality, including, in styles of learning, is perfectly acceptable.

Another reason for our pleasure in this issue is that our new feature, *Letters to the Editor*, has seen the light of day and we present a selection of the letters we received from our readers. We hope that this will encourage more readers to write to us.

Prema Raghunath

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Rebuilding Self and Identity in Adivasi Schooling

Amman Madan

The sociological study of everyday life experiences in the classroom has enriched our understanding of how students learn and or do not learn. Children are not mechanical beings. They construct their emotions and ideas regarding teachers and school subjects through a series of social interactions. The experiences of a child within a society are what may lead her to begin to feel that geography is a boring subject, while history is exciting. A child from a home where the language of the school is spoken and where ideas of history are discussed and debated may find that it catches her interest in school as well. She will speak up in front of the teacher and the rest of the class and say things which the others might not know and gain their respect. Her self-esteem will rise. Meanwhile, a child from a family which does not speak the language of the classroom will struggle and stumble. If he has not heard about, say, Aryabhatta before, he may be silenced and may feel humiliated by the excited chatter of others.

The meanings and feelings which are created in such encounters slowly accumulate and shape a student's orientation towards school and its knowledges. The challenge for teachers and educators is how to shape the meanings and interactions of a classroom so that they encourage and enrich a child's learning. At the same time, one must beware of constructing such meanings and interactions which push the child into a shell and paralyse learning.

Several theoretical approaches have been developed in Sociology and Anthropology to understand the everyday life of students and the classroom. A theoretical approach is a way of looking at the world which has typical concepts and ways of imagining what is happening or not happening. Drawing from theoretical approaches, we too can start seeing the things which we did not notice before. In this article, one major theoretical approach is outlined and the work of the Adivasi Munnetra Sangam (AMS) with adivasi children of the Nilgiri hills is discussed to show how it helps us to understand the challenges in education.

Adivasi Munnetra Sangam

Background and history

The AMS has been working for several decades with adivasis in and around the forests of Nilgiris. There are five tribes there - the Paniyas, Bettakurumbas, Mullukurumbas, Kattunayakas and Irulas. Earlier, their livelihoods ranged from hunting-gathering to farming and working in plantations. Forests were integral to their lives; they drew sustenance, both material as well as spiritual, from the forests. The arrival of increasing numbers of outsiders from Tamil Nadu, Kerala and Sri Lanka into their region pushed them deeper into the forests. Things became bleak as the forests began to shrink and then, the government denied access into the forests altogether. Malnutrition and depression became widespread amongst the adivasis of this area. The Action for Community Organisation, Rehabilitation and Development (ACCORD) began to work there in the 1980s and the AMS began to mobilise the adivasis to demand land and the right to use forests. Over the years, these have worked on strengthening and enriching adivasi culture and helping the forest-dwellers to come to terms with the city people and the government.

The AMS believes that culture is at the heart of the adivasi struggle for dignity and livelihoods and so education is an important concern. The adivasis' older ways of learning to be adults and being full participants in their world are now confronted by a very different kind of world. In the schools set up by the Tamil Nadu government, their children felt alienated and lost. Not surprisingly, only a few would manage to stay on to graduate.

Two educationists, Rama Shastry and B Ramdas of the AMS, set up an alternative school, initially, for their own children and then, for the children of activists. This school was taken over by AMS to promote a model of schooling that would give respect and strength to the adivasis. It has become the centre for AMS's efforts in training teachers and in intervening in existing government and private schools.

Symbolic Interactionism

Symbolic interactionism says that all humans develop and grow through their interactions in the world. We slowly develop a self by interacting with our parents, friends and so on. We begin to look within and become aware of our self. This awareness of self does not exist in full, at birth, nor does it grow automatically. Instead, it changes and takes form through social interactions. We learn our place in the world, with respect to our parents, neighbours, friends, teachers and so on, through our interactions with them. This awareness develops slowly. A child growing up in a family begins to slowly start seeing itself as a 'girl'. This comes from how its parents look at the self and name it, how someone with it comes to play with dolls and not guns. Slowly a sense of the self being a girl emerges. Such an interpretation of the self further shapes other interactions and choices of how to behave or not to behave. Our identity and self are not fixed; they emerge through social interactions.

The self emerges, particularly, through the meanings we give to situations. Take for example the student's relationship with the teacher. As students, we never fully understand how a teacher looks at us, we only see him through symbols. An adivasi child may be familiar with certain symbols through which it understands that adults look at it 'warmly'. Symbols of warmth include the use of certain words, gestures, touch and so on. In a school controlled not by tribals, but by caste society, the student may see these symbols lacking. The child then begins to conclude that it is not 'warmly appreciated' in school. She may begin to dislike going to such a school and may start keeping to herself when there. C.H. Cooley called this process the looking-glass way of building the self. We imagine how others look at us and we build our own responses to that perception. Our perceptions rest upon symbols and, through our reflections upon those symbols, we develop our feelings and choose our future behaviour. Such an approach that highlights our interactions with symbols to build our identity and self is called symbolic interactionism.

According to symbolic interactionists, an important aspect of learning to be a good teacher is learning to use symbols in the way students are familiar with and are able to understand. For example, if I want to tell my students that the day's class and topic are the

key to understanding everything else, I need to find the right symbols – gestures, tone of voice, words, blackboard work, etc.—and use these so they will understand. For this, I too, as a teacher, need to know their symbols. I may say it in a way which just does not resonate with the students and then they do not pay attention to me. I may blame the students for being dull and unintelligent, but actually, the failure was in the symbols I had used.

A big part of learning to teach well is beginning to recognise which symbols the students understand and then, to choose and use the most effective ones out of those. When the students begin to respond with interest in my class (or I begin to see symbols that I think represent interest), that shapes my own self. I begin to see myself as a competent and proud teacher. We are always interacting through symbols and the study of this process throws important insights into teaching and learning.

Autonomy in symbolic interactions

The self is constructed through social interactions, but that does not take place in a mechanical fashion. We do not always accept how others look at us. When a teacher from a dominant caste looks at an adivasi child with contempt and with an expression that this person here is a useless student who should not have come to school at all, the child may pick up the meanings of that expression. The child, then, tries to work out how to feel about those meanings. The child may start thinking of itself in that same way: I am useless, I have come to the wrong place, etc. Or may build another interpretation: I need to be like the others here, I should seek the teacher's approval. Or yet another interpretation: I am being wronged here; the teacher is denying me my place in the sun.

Symbolic interactionists tell us that we have many inner conversations after seeing how others look at us. These inner conversations are where we identify and create different responses and choose between them. Symbolic interactionism directs us to pay attention to inner conversations and the way they unfold. While initially, it tended to look only at our inner life, today this perspective has been adapted to show that our inner lives are connected with larger issues and struggles of social life. Our inner conversations are what lead us to challenge the stereotypical image of being a dumb woman or an adivasi.

Building a confident self

Vidyodaya school

The experience of AMS in working on school education shows how struggles in the larger society are echoed in the classroom and in our inner conversations. The AMS argued that adivasis were decent and good people. They had been wronged by powerful groups which had exploited them and impoverished them. Adivasi groups were formed in several places to come together to talk about their problems and to strive for greater justice. They pushed to rebuild adivasi self-respect and get adivasis to become active in improving their conditions.

This was the process which had led to the establishment of the *Vidyodaya* school, as the AMS school was called, and to all their other interventions in local schools and education administration. This inserted a powerful narrative into the inner conversations of the adivasi students of the Nilgiris. It gave them a way of dealing with the way teachers from powerful communities looked at them.

Rebuilding identity

To rebuild adivasi identity, Vidyodaya school consciously built itself around adivasi teachers, though others too taught there. Initially, there were no adivasi graduates who could join the school as teachers, so the school set up its own process of training its teachers. They studied and mastered the school textbooks and learned about pedagogy. Adivasi leaders and elders talked to them about their struggle and the place of education in it. The danger that schools could lead the adivasi community to actually lose its children to another culture was highlighted - adivasi students who did well in conventional schools could begin to despise themselves and their relatives and friends. It was reiterated that this was not the kind of education which they wanted their children to get.

Vidyodaya school freely permitted the use of adivasi languages in its premises. Other private and government schools in the region would suppress the language of the adivasi children and ask them to speak in Tamil. One of the teachers of the Vidyodaya school told me that when she came there as a teacher, it was the first time that she heard her own language in a school. It was a strange, new experience for her. Her language felt

out of place within the walls of a school and yet it also seemed so right and correct. In this school, children no longer entered to get the message that the language of their home was something to be ashamed of. Tamil remained the official medium of instruction and was still taught but was introduced gradually. For instance, teachers would talk to the students about how the different adivasi languages had their own words for red and what the Tamil word for it was.

Connecting with the self

Symbolic interactionists would say that in this school, the children were building a sense of self which did not have a dark secret that had to be hidden and silenced. Instead, they were building conversations between different parts of their self. The relation of power between different languages was not ignored. Children and teachers were aware of these differences, as well as the power of Tamil. English too was taught and taught quite well - these children actually stood out in their ability to speak English. A relationship was being built between their own identity, being Tamil and being an English speaker. This was a new kind of identity, different from the older one of being an embarrassed Tamil speaker, who furtively spoke in another language with friends and family. Instead, children were heading towards creating a confident and active sense of the self.

The educational work of the AMS engages with a situation where conventional schooling led to the creation of an identity of being inferior and incompetent. Symbolic interactionism gives us a way to understand how Vidyodaya school and AMS's activities contribute to changing children's notions of self. Inner conversations of a different kind were made possible. These are slowly empowering students' actions and helping them work out a new sense of identity and a new, dignified place in the world.

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Curious young minds inhabit the classrooms, specially the early primary classes. It is up to the teacher to sustain the sparks of experimentation or further the spirit of questioning. Teachers' methods of participation and rich content presentation can have magical effects on children's comprehension. The crucial elements for learning lie in appeal and engagement with the content, free of fear.

Asha Singh, Animating Children's Energy and Engaging Minds, p 15.

Innovating Processes to Help Every Child Learn

Anil Singh

The guiding principles of the National Curriculum Framework (2005) clearly outline that knowledge should be connected to life outside school, learning should shift away from rote methods and the teaching-learning process should not be mechanical. The curriculum should be enriched in such a manner that it goes beyond the textbook into building a holistic understanding among children. Examinations should be flexible and integrated into the regular classroom proceedings. The school environment, as well as the teaching-learning process, should be democratic.

the universalization of elementary education, enrolment in schools has increased at unprecedented rates. Children with varied skills and abilities, hailing from different socioeconomic backgrounds, who had been deprived of elementary education are now coming to school. Elementary education is their fundamental right. In these changed circumstances, it is imperative that all children are given a place in schools in a dignified manner, through the means of inclusion. It is a vital need to assure children that they have the ability to learn anything and everything. This is also a requisite for us in our commitment to the values enshrined in our constitution.

Anand Niketan Democratic School works with the vision of inclusiveness and democracy. In the past eight years of its journey, the children who have been a part of the school have not only come from different socio-economic backgrounds but also with varied physical, psychological and intellectual abilities. In this democratic, child-centric, and inclusive environment, all children have reached their cognitive milestones in their own rhythm and pace.

These experiences show that each child can learn. What we need to do is to lessen our anxiety about teaching, suspend our notion of authority as teachers from time to time, gauge the inherent capabilities and inclinations of children, make learning

lively and meaningful for them, value their knowledge and understanding, and protect their individuality and dignity. Then, in no time, paths to learning open up on their own.

In this article, I have presented my arguments through the case studies of five children. There is a multitude of examples that have led us to learn as a school unit. We moulded and innovated our teaching-learning processes in line with the children's needs and they were able to accelerate their learning achievements.

The first child among them is Rohit (7 years old) who lives in a *jhuggi* near the school. His father is illiterate and works as a water supplier and plumber in the colony. His elder brother works in a hotel. His sister is younger than him, but Rohit brings her to school. The second child is Bindu (8 years old) who has come from a village and speaks Marathi. She finds it extremely difficult to understand and speak Hindi. She was nervous that learning is near impossible for her. The third child is Krishna (8 years old) who lives in a buffalo shed with his grandfather. He used to go to a nearby school, but he was expelled for being irregular and for not meeting the expected learning outcomes. He comes to our school now, but his self-confidence has been gravely wounded. The fourth child, Puja (9 years old), has a hearing impairment. Though she has received a cochlear implant, she still has a problem speaking and hearing. She used to attend a reputable private school, but the school authorities deemed that she needs to attend a special school. Her guardian was sensible and following the suggestion of a clinical psychologist, she was admitted to Anand Niketan School. The fifth child is Swati (10 years old) who had speech impediments. She used to stammer when speaking and her speech was often slurred. The feeling of inferiority had taken root in her and she would cry easily at small matters.

All five of these children stayed at Anand Niketan school for anywhere between three to eight years. Not only were they able to do well in the academic field, but they were also able to overcome their challenges. This strengthened our confidence that by bringing about desired changes in the school and its processes and by expanding our perspective, we can create an environment wherein each child can reach the expected academic achievements at their own pace, tempo, inclination, despite their constraints.

Seven-year-old Rohit was very insecure about his complexion and hair. He was reserved and quiet at school. He was irregular too. He lived in a jhuggi near the school. This also caused him to feel inferior as it was along the route to the school. His mother had left the city for her home in the village. The siblings would cook food together. The father would be away from the house most of the time due to his work. Raj, the elder brother, would also go off to work. In such a situation, it was difficult to leave the younger sister alone at home. We told Rohit that he could bring his younger sister to school. There were many other young children who would come to the school. His sister would play with them. As a result, Rohit came to the school more regularly and he felt at ease there.

Nobody could match Rohit in the playground or when it came to climbing trees. Studies, however, could not hold his interest. As teachers, we had a conversation amongst ourselves to attempt to understand the problems Rohit was facing. We decided to form a *kabaddi* team. Every day after school, we would play *kabaddi* for half an hour. An astounding flair for leadership emerged from Rohit. Not only did this lead him to build friendships with other children, but he also gained a commanding presence amongst his peers. He was now a favourite among them; all children wanted to be a part of his team.

Rohit could mimic the sounds of various birds and animals. Once, the children got together to shoot a short film in school. Rohit prepared the background music for the same. He prepared a range of sounds of the forest, of water cascading, of birds, dogs and cows, of motorcycles, trains, and utensils. Some, he mimicked, and some, he produced through various ingenious means.

Rohit was good at applied mathematics. The maths teacher prepared various problems for him related to everyday life which Rohit solved without breaking a sweat. Owing to his regularity, his friendship with other children and the growing affinity with the teachers, he began to enjoy himself in the classroom.

He began to focus on learning. Along with maths, he also learnt Hindi and English. However, the Social Science class, in which relationships among society, individuals and the government were explained using examples from his life, quickly became his favourite. He investigated the course of a canal that flowed near the school for a Social Science project. He investigated the point of origin of the canal and where it passes through and how many places it branches into. He also studied the period of its flow to figure out which months it flows and when it remains dry. He looked into the number of farmers who used the canal for irrigation and analysed the importance of the canal in his life and the lives of others around him. He put up a good display of his work for this project and presented it very well in the classroom.

Rohit stayed at the school for six years. During this time, he enthusiastically participated in all activities in equal measure. After the slum was demolished, Rohit and his family had to relocate far from the school. He took admission in a government school in class VII and once, later, even visited us at the school.

Eight-year-old Bindu had come from a village in Maharashtra. She could understand Hindi a little but speaking in Hindi was a struggle for her. Reading and writing in Hindi was negligible. She initially struggled in classes in which Hindi was the medium of instruction. For almost a month, she was detached in the classroom, neither speaking nor responding to questions put to her. Her mother informed us that she would cry at home and say that she would not be able to continue in this manner. She was disappointed at the thought that she may never be able to study and learn.

The teachers sat down for a discussion and came up with some plans for her. One of our fellow teachers knew Marathi. He was given the responsibility of slowly initiating a dialogue with Bindu. Meanwhile, we also found two Marathi songs and began singing them during the morning gathering. The morning gathering as an informal, unfettered and voluntary forum has many possibilities. It is a group exercise and there is space for everyone. As soon as it was time for the Marathi song, Bindu would participate with utmost enthusiasm. In fact, she was given the responsibility to lead the song. She also introduced new songs to children. During the podium activity, children would recount their school experiences

from the previous day. Bindu was given the chance to express herself in Marathi and it would then be translated into Hindi for the other children by our Marathi-speaking teacher.

Apart from this, we also looked for some Marathi folktales, which were narrated in the classroom. Bindu had heard some of these previously and enjoyed herself thoroughly. She used her little knowledge of Hindi and added words from Marathi to share new information about these folktales with her classmates. This was a boost to her confidence. Her feeling of inferiority for only being able to speak in Marathi lessened and she formed friendships with her peers. She, then, took on the challenge of learning Hindi, Science and Maths. Once she took the initiative to learn, the school helped her. In no time, Bindu was not only able to speak in Hindi but could also read and, eventually, write in it. The school welcomed her and she embraced the school as well. In the next few years, Bindu became the most regular child in the school and also the one learning at a very fast pace. Now, Bindu is able to converse in English. She has also written poems and stories in Hindi. Because she attended the music classes regularly and developed a passion for singing, she started formal training in music. She also took part in school plays and essayed the role of the protagonist Mati from Rinchin's book 'I Will Save My Land', performing beautifully. This year, Bindu has passed the eighth class. She is preparing to join another school to continue her studies.

Eight-year-old Krishna lives with his grandparents in a buffalo shed. He attended a nearby private school till class III. But he was expelled from the school for being irregular and for not meeting the expected learning outcomes.

Krishna's daily routine begins with getting up at 4 in the morning to bring fodder to the cattle, then clean and help his grandparents in milking the cattle as by 7 am, people start coming to collect milk. He delivers milk to several houses on his bicycle. By 8 am, he comes back and helps his grandmother in the kitchen. He eats whatever is prepared and reaches the school by 9:30.

When he first began coming to school, he couldn't understand anything. He was good at applied mathematics and would often finish his work early in the maths class. He took interest in science experiments. However, science, in general, did not seem to interest him. The teachers at the school sat down to talk about Krishna and decided to make

some different efforts for him.

For an Environmental Studies class, a group of children were asked to go to a nearby dairy and enquire about and understand the different aspects of their work. Krishna was tasked with assisting the group. He took part in this project eagerly and made the children talk to his grandparents. He provided a lot of information about the various operational aspects of a dairy - the quantity of fodder for the cattle and its cost, the quantity of milk, the income from selling milk, medicine for cattle, labour. The children were happy and so was Krishna. This raised his confidence and led to friendships with other children. Consequently, his involvement in the school's regular teaching-learning processes also grew.

Often while walking around, Krishna would pick up old motors, cells, wires, and other discarded hardware parts lying on the road. One day, he found a motherboard of a transistor and brought it to school. He figured out what it was with the help of a teacher. They borrowed new battery cells from the school, installed it, attached some wiring and connected it to an old speaker. When it caught the signal to one of Bhopal's FM radio channels, Krishna's happiness knew no bounds. All the children praised him. The transistor was placed on a table in the school courtyard. The children surrounded it and listened to the songs being played on the radio channel. That day, Krishna was a hero at the school.

The next day, the teacher demonstrated how the transistor system works in class. From that day onwards, Krishna began to come to school regularly. He was so keen on learning everything that he would stay back after school talking to teachers for hours to seek answers and build his understanding. Krishna made three models of different kinds of boats and presented them at the Umang Science Fair at school. In the first model, he used the approach of opposing force that the air leaving a balloon exerts to move the boat. In the second model, he made a paddle boat powered by a rubber band. For the third, he used an old motor to run the propellers placed on both sides of the boat. He also eloquently answered the questions put forth by the visitors at the fair.

With this, his friendship with the teachers and his belief in them also increased. He took initiative in the teaching-learning processes of the school. Krishna has been at the school for the last four years. He has shown remarkable progress in learning languages (Hindi and English) along with Maths, Social Science and Science.

Nine-year-old Puja has a hearing impairment. Although she has had a cochlear implant, she has always found it difficult to speak and hear. When she first came to school, she would stay completely silent. When other children sang songs and rhymes during the morning gathering, she would only look at them and sometimes murmur an odd word or two. She was fond of this gathering; other classes did not interest her as much. She would wait in anticipation for the art and craft class. She had previously attended a reputed private school. She seemed to be aloof and scared of the classroom processes, the behaviour of the teachers and the pressure of false discipline -- a legacy she was carrying forward from her previous school.

We did not pressurise her to go to class. She would often go to the younger children's classroom and would read aloud stories to them. After about two months, she started participating in the maths class. Fractions were being taught. The teacher knew that Puja was fond of art and craft, so the teacher gave her a cardboard piece cut out in the shape of a circle and tasked her with cutting it into ½, ½, and ¼ pieces. Puja immediately took a pencil and scale and mapped out the figures. The teacher told her to colour the shapes with different colours so that they were distinguishable. Puja finished the task in no time as it was to her liking. Doing this task helped her pay attention in class and to understand the basic concept of fractions. After this, the teacher gave Puja many such tasks, some to be completed individually by her and some in groups. This helped her in making friends. Puja also began to do tasks at home and bring them to school.

Due to her hearing impairment, she could not fully enjoy the morning gathering despite her interest in it. The teachers talked amongst themselves and compiled the songs sung during the morning gathering into an audio CD and gave it to her to listen at home. With this, not only was she able to enjoy the morning gathering, but she also began to attend other classes. She became quite talkative and her habit of writing also flourished.

She would sit in the science class for long hours to experiment and to make models. She would talk to the teacher and bring various objects like cells,

motors, wires, and magnets from home. With these objects, she would make electrical switches and do many experiments with magnets.

She began to get along well with her peers and teachers. Her hearing impairment was not a source of obstruction at all in the school. Nobody talked about her impairment nor did they consider it a hindrance. She would earnestly take part in the music class and memorise all the songs. She participated in a play performed at the school's annual function and would readily join group singing presentations in which she would sing without faltering.

Ten-year-old Swati had come to Bhopal from Noida. She had speech problems. She would stammer a lot and as a result, was reluctant to speak. The friendly and uninhibited environment of the school ensures that there is always space for everyone. Though Swati was not used to this, she found it easy to mingle with everybody. Nobody in school paid any heed to her stammer. Teachers would purposefully ask her questions so she could speak and consequently, gained confidence. Swati began to talk openly. She would recite poems and sing rhymes during the morning gathering. Her speech also improved. It seemed that Swati's problem was that she had never been allowed to talk or had been discouraged to talk.

Her mother disclosed to us that the school she went to in Noida had asked her not to come to school a fortnight before the annual function. Neither was she allowed to participate in any activity, nor was she permitted to come to any rehearsal. This wounded Swati's self-confidence. A feeling of inferiority took root in her and that exacerbated her speech problems.

In Anand Niketan school, every day, the language class ends with the enactment of the lesson for the day. Swati would take part in this activity. She would come to school regularly. At the school annual function, she sang one of Bhupen Hazarika's songs - Vistaar hai apaar...praja dono paar. The audience was astonished. She did not stammer at all!

These children are full of endless possibilities. Each child has his/her own talent and ability. They do falter in their learning, sometimes due to socioeconomic reasons and sometimes due to physical and mental restraints. It is the school's responsibility to look at the potential of these children, identify their needs and limitations, make space for them,

and provide them with opportunities to nurture their abilities; so that they can walk alongside everybody else; believe in their own abilities; and, can learn all that is expected of them and more. Kindness, flexibility, patience, egalitarianism, and a humane outlook need to be embedded in the customs and conventions of schools. Then, every child will be able to learn everything.

*Names have been changed to protect the identities of the children.



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Looking at education beyond serving the role of literacy and bookish knowledge into the role of shaping a person is imperative. This kind of understanding is built only by interaction and a cordial relationship with guardians.

Jagmohan Singh Kathait, Tied with a Single Thread: Children, Community and Teachers, p 45.

Differentiating Instruction One Size Does NOT Fit All

Ankur Madan

Brahmkamal, Gulab, Suryamukhi... are names in Hindi of flowers commonly found in Uttarakhand. No, this is not a reference to a middle school botany class. As a matter of fact, these are names given to groups of children in class IV by the primary school teacher of a government school in a remote village of Uttarakhand. As group members, the children are expected to work on tasks assigned to them by their teacher on a weekly or biweekly basis. The tasks can range from helping each other read a storybook together, work on a chart illustrating the story, enacting it in the form of a role-play, writing their own story or answering questions and finding meanings of difficult words from a textbook lesson.

Methodology

The tasks are not given randomly, nor are children assigned to groups arbitrarily. Keen observation of each child's learning level, progress over a period of time, interest levels and peer dynamics are taken into consideration by the teacher before she decides the placement of children into groups and the tasks they will perform. The children are proud of the labels assigned to them and feel a sense of belonging and responsibility towards their peers in the group.

The teacher maintains daily/weekly records of the children's progress on the assigned tasks and considers the redistribution of children into groups and tasks based on that. Peer learning is key to this form of pedagogy where children with lower learning levels are supported and scaffolded by their peers in the group with higher learning abilities. A crowded, mixed-ability, under-resourced classroom in a government school in a remote village may hardly seem like a place to look for exemplars of 'good teaching practices' that others can seek inspiration from, but this classroom is exactly that!

Responding to individual needs

The practices followed by the aforementioned teacher are actually pretty good examples of Differentiated Instruction (DI), a form of instruction which makes use of a variety of strategies to respond to the individual learning needs of children in regular classrooms.

The teacher in the Uttarakhand school did not, of course, know this at the time. When she started to search for solutions to help the children in her classroom acquire basic literacy skills, she discovered that the children, though similar in age, were all at different levels of learning. She realised that no matter how 'well' she taught them, only some children would benefit from her teaching. Hence, she understood the need to adopt teaching practices that suited the individual learning needs of all the children in her class. This also happens to be the core premise on which Differentiated Instruction is based.

This article introduces the key principles of DI and provides some examples to illustrate its relevance and feasibility for classrooms in India.

Key elements of DI

Differentiated Instruction (DI) challenges the assumption that all children of the same or similar age can learn and be taught in the same manner. Proposed initially by Carol Tomlinson, DI rubbishes the idea of homogeneity of classrooms and draws the attention of teachers and educationists towards the diversity that pervades every classroom in any school, anywhere in the world.

All teachers are acutely aware that the children in their classroom differ from one another in their learning abilities, interests, readiness to learn and behavioural and emotional needs. Children also come from varied socio-economic backgrounds, show a diversity of language preferences and follow different social and cultural practices. Each of these factors impacts children's ability to cope in the classroom not just with the taught curriculum, but also with their social and emotional wellbeing and adjustment in school. As teachers, we are aware of these differences, but we assume that there is nevertheless only one way to teach the children: our way!

Challenging these assumptions, DI encourages teachers to proactively plan and adopt varied approaches to teaching, learning and assessment that cater to the learning needs of every child in the classroom. In Tomlinson's words, 'Differentiation is classroom practice that looks eyeball to eyeball with the reality that kids differ, and the most effective teachers do whatever it takes to hook the whole range of kids on learning' (C A Tomlinson, 2001).

Emphasising that DI is not a recipe for *teaching* itself, but a philosophy or a way of *thinking about* teaching and learning, Tomlinson clarifies that there are no formulae for teaching that DI prescribes, but only a set of ideas that enable teachers to maximise the capacity of all the children in their classrooms. The essence of DI lies in creating a variety of opportunities for students to explore the curriculum and to demonstrate their learning through the different levels of task completion created by the teacher in the same unit or lesson. The teacher works towards this by assessing the individual capabilities and learning needs of all the children in her classroom and then modifying the content, process, product and the *learning environment*, where:

Content refers to what the teacher wants the students to learn and the materials and mechanisms needed to accomplish that.

Process is the set of instructional strategies that the teacher adopts to deliver the content effectively.

Product is the variety of ways in which children demonstrate their learning.

Learning Environment is a reference to the adaptations made by the teacher in her classroom to create a respectful and safe environment in which all children can engage meaningfully at their individual pace and levels of learning.

In doing all this, the teacher relies heavily on the collaborative support of all the students in her class, ensures flexibility in students' choice of materials, tasks and pace of working and, most importantly, makes certain that all the children feel equally respected and engaged in tasks considered to be of equal importance, by their peers as well as the teacher.

Practising DI in the classroom

As stated earlier, DI is not a prescription for a set of teaching strategies that can be adopted in a classroom. On the contrary, the essence of DI lies in its flexibility and the teacher's ability to recognise the specific needs of the students in her classroom and then adopting practices that subsume the key tenets of DI. In this section, some examples of DI

techniques are described. These can be applied in any classroom depending on the specific needs of the children, resources available to the teacher, size of the class, and the duration of time and amount of preparation that the teacher can put in.

One such technique is students working on different tasks at the same time. By assigning children to mixed ability groups, the teacher can create tasks that appeal to different interest levels as well as which require different skill sets to accomplish. Children can be encouraged to complete either all or some of these tasks, at their own pace, through peer support and whenever they are interested in doing them. For instance, for a class VI history lesson, the teacher can create a set of tiered tasks. One task may involve children looking up facts related to the lesson in the textbook and then, together creating a conceptual map of the chronology of events stated in the text. Another task may require them to search for additional facts outside the textbook on a particular topic and put together a presentation for the whole class. Yet another task may be related to note-making and summarising the chapter or may encourage students to present the lesson in the form of a role-play or a cartoon strip!

By creating these different set of tasks, the teacher ensures that children with varying levels of interest and capability get an opportunity not only to participate in the tasks that most interest them but also display their skills and capabilities in different ways. The assessment, closely linked to the tasks, ensures that children's learning is evaluated in different ways as well.

It is important to note here that while all this may seem daunting to a teacher to plan and accomplish, it is actually not that hard. It requires some planning and preparation initially, but after that, such classroom practices require minimum intervention on the part of the teacher, as the essence of it lies in peer learning and cooperation. At the same time, when such tasks are initially introduced, they may lead to some chaos and loss of decorum which the teacher should be prepared to handle. However, once students get used to the idea of a classroom pedagogy that is not didactic and necessarily teacher-led, they learn to take charge of their own learning and become self-disciplined. Another point to note is that such practices can be adopted even in classrooms that are not particularly rich in resources. Creating a learning environment by reimagining furniture arrangements and using spaces in and around the school optimally can go a long way in conducting such tasks successfully.

Adopting DI in the classroom

The following are some DI principles/strategies that all teachers can keep in mind while planning their lessons, in any subject, at any level:

Identify the key concepts

By identifying and highlighting the key concepts to be learned from any topic, the teacher can substantially reduce the content to be taught. This benefits those students who struggle with reading large volumes of text, such as those with learning difficulties. Highlighting, underlining, listing keywords and displaying flashcards with key ideas, are some ways this can be done easily for every lesson to be taught. Present content in different modes and encourage experiential learning

By reducing time spent on teacher-led, lecture-based pedagogy, teachers can adapt content and present it in visual, kinaesthetic and auditory modes. This could take the form of models, videos, charts and posters or audio clips. Alternating modes appeal to students with different interest levels and learning profiles. It also allows students to experience learning first-hand and making meaning of things on their own. One way this can be done is by setting up stations at different corners in the classroom. Students can be encouraged to visit the stations one after the other and actively engage with the material displayed.

Vary the pace of student learning and introduce different rubrics for assessment

By gaining an understanding of each child's strengths and weaknesses and focusing on developing that area of weakness, the teacher can create a tiered set of assessments for any topic. These can be given to students depending on their readiness levels and the pace at which they are comfortable to work. Once the child achieves a learning objective, the next level of assessment can be given. It should also not be necessary for all students to achieve all levels of assessment.

Scaffold learning to varying degrees

Children at different levels of readiness and learning require one-on-one instruction and support to varying degrees. Teachers can save time and effort by focusing their energies on providing an intensive, one-on-one mode of instruction only to those students who require it. Others, who can learn through self- and peer- support, should be encouraged thus. Such mechanisms help teachers manage their time better in the class and encourage students to become independent learners. They also help to build empathy and peer relations among children.

It is important to understand that at the heart of each such practice or recommendation lies a strong commitment to inclusion and a belief that individual differences in children's ability and interests are an inevitable reality of every classroom, in every context.

Conclusion

One may argue about the feasibility of adopting DI practices in the Indian context, given the poor conditions of a majority of schools in the country. It is, however, important to understand that DI is a multifaceted approach and a way of reimagining classroom pedagogy and not a set of watertight prescriptions. Just as one size does not fit all when it comes to children's learning, there is no reason for us not to adapt the principles of DI according to our conditions and in cognisance of the reality of our poorly resourced and overcrowded classrooms. Which is why the classroom in the Uttarakhand school where every inch of every wall and every scrap of paper and chalk available had been used optimally to set up tasks and assessments for the children to work on, is indeed the exemplar that classrooms in India need to look for inspiration and motivation to embrace the ideals and practices of differentiated instruction.

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Animating Children's Energy and Engaging Minds

Asha Singh

As a teacher educator, I begin my class with a classroom experience, though my undergraduate students, learning to be teachers, find it ridiculous at first to participate in a set of concentration exercises. This is what I tell them:

When teachers enter a classroom, they usually find the class engaged in excited chatter, scrambling to chant *good morning*. The process could be reversed with a teacher initiating playful gestures, such as the action of raising their arms and moving their fingers, chanting taare taare, tarre-tarre-tarre, followed by variations such as hanste taare, routae tare, gussewale taare, ending up with tarre-tarre-taare. And quite suddenly, to create a group with focused attention, lowering their voices to a gentle and soft pitch, say, shaant taare.

My suggestion was: begin your lesson with this charged bunch, ready for imbibing new ideas. Of course, the students engaged, though reluctantly, as it seemed to them to be quite an undignified classroom process. I followed my belief that active ways of engaging with children have to be *experienced* and not merely *imagined*.

Soon, the students went for their internship: to execute lesson plans, they had to use theoretical pedagogical practices in real classrooms. I met them after their three weeks at schools and did not hear the end of the usefulness of taare taare, tarre-tarre-tarre. The chant with varied emotional beats helped channelise children's energy and get them to value focus, thereby, endearing themselves to the groups.

The above experience of student teachers is shared to suggest alternatives to a curt instructive stance of 'can we all be quiet'- the loud teacher-controlled method for bringing the class to order by just being playful. Sylvia Ashton Werner in her seminal book, The Teacher, describes using the piano to draw the

attention of her students. Classroom devices have to be in relation to local contexts and resources. Classroom processes that permit order through chaos are close to children's tendency for play. Children feel emotionally gratified getting time for some laughter, some silliness and giggling. There seems to be an acknowledgement of their being children, not just students who have to be filled with knowledge.

The Invisible magical potion

Curious young minds inhabit the classrooms, especially the early primary classes. It is up to the teacher to sustain the sparks of experimentation or further the spirit of questioning. Teachers' methods of participation and rich content presentation can have magical effects on children's comprehension. The crucial elements for learning lie in appeal and engagement with the content, free of fear. A classroom where children are not afraid to make mistakes, or where creativity is as significant as literacy, provides elements of trust. A supportive teacher, an adult who is respectful and warm, will provide emotionally nurturing learning spaces. In the words of John Holt, 'Learning is not the product of teaching. Learning is the product of the activity of learners.' The need is to find ways to take advantage of what benefits children, which is being with other children. In fact, the mantra for the teaching community of 3-10-year-olds needs to be:

- 1. Let each child feel special
- 2. Children learn best in contexts of play
- 3. Reflect if your classroom processes engage children individually

Familiarity with child-oriented pedagogy is a must for teachers. Children's search for identity usually gets activated when they carve a space for themselves in a large group. Theatre games have the potential to stoke the individuality of each member, alternating by turns, between group-acts and individual-acts. In the following paragraphs, the attempt is to describe methods of evoking

¹Taare mean stars. I have spelt them in two ways. taare with double a refers to singing with long 'a' sound while spelt with double r as in "tarre-tarre tarre" the meter has to be fast matching the beats in 'taare taare'.

children's participation by encouraging the sharing of observations and interpretation. Creating small groups, mingling children to share, are some classroom devices for encouraging children to think. Such moments of small group sharing are rich in giving time for the shy or the quiet child to muster courage and confidence to express herself.

Collaborative learning as a pathway for critical thinking

As an illustration, five or six children can take up different portions of a chapter from a language text and each small group can discuss among themselves how they will present it. They could draw, enact or even debate. They think of ways and take suggestions from the teacher.

In such a process, they remain active, treat the content with responsibility and critique the work of fellow students. They also get familiar with each other's strong points and develop a sense of reflection and motivation to strive for more skilful discourse. Children feel special and build on-group strength in a playful, engaged manner.

Personal names as sources of linguistic awareness

I share a whole class interaction that keeps the intimacy despite perhaps many children in the class. The game is to reflect on your name, what it means, what sounds comprise the whole word and then link your name to other objects, places within a structure just as rules define any game. Before children realise, they have learnt grammatical categories.

Name game

Children are requested to call out their names with an action and an emotion. The class will repeat the action and the name twice. 'I could begin but Gajraj or Rohini, do you want to try?' The beginner could be either expressive or may even just walk forward and say *My name is* ______.

Enjoy the action and intervene if it continues in a subdued manner. Try breaking restrained actions: jump, take a *chakkar* (twirl), throw your arms up, call out your name. Children repeat, and their happiness will be increased manifold to see the teacher being playful. The action will be contagious and prompt children to be free and expressive. Different acts and mimicking surprise, bravado, anger, sadness will animate classroom energy.

Identifying sounds

Rubbing your hands, capture the energy between the palms. The first step is to lay down the rules of the game clearly. Here is an example:

- 1. First, call out names turn in turn.
- 2. Tell the children: now we will listen to the first sound of our names.
- 3. Say a word that matches with the first sound.
- 4. Allow the children to interpret what has just been said.
- 5. Intervene and give examples if instructions are not understood.
- 6. As the children participate, let them judge each other's response and the accuracy of the sounds in the matching word.

There will be a range of responses and the teacher's interjections will depend on the children's level of language learning and comprehension. For preschoolers, you could contain the game to just sounds. If Sneha, for example, says *safed*, deal with the sound difference, if necessary, as it is a subtle difference.

With older children, definitely point out the soft and prolonged sound. If Sharad is *shahad* (honey) fine, however, if the child says, *shankh* for Sharad it is the appropriate moment to talk about the difference in sound and its representation with a dot.

Using names to identify nouns

Older children can use a more complex version. Using the principle of the first sound of their name, children must name a place, person or object with a matching sound. For example, if the name of the child is Pavna, her response can be *Patna*, *palak*, and *palang*, or *pushkar*, *pankhuri* and *pitaraa*.

This is a good time to point out how sounds expand and the Hindi word for the symbol that adds sounds is *matra*. As the game proceeds, you may need to reflect and add more concepts. Let us take an example from the English language: if the child's name is Madhur, the child says *monkey*, *mother* and *Mirzapur* or *mango*. Now *monkey* and *mother* are terms and not names of persons. But they are names of *categories* for groups, like animals, fruits, and are known as *common nouns*.

Our game has been successful in enhancing linguistic awareness, keeping in mind children's desire for action and for feeling included, and the spirit, animated. If we were to put this activity to the test of *matra* mentioned earlier-making every child feel special, using play as a learning opportunity and engaging children individually - we are doing fine. Add to that, ensuring that there is energy

in the classroom and that the teacher reflects on the process. Would it count as one meaningful classroom interaction? Was the playfulness, the magic potion?

Such interactive child-initiated response turns the notion of conformity and uniformity on its head as each one feels an emotional thrill sharing in their thoughts. As children play with sounds, opportunities to express, not just play out a script, stokes their curiosity. The large classroom group becomes conducive to listening to differences in meaning-making within a safe, personal space.

Exploration as learning

Parents are relieved and rejoice when their offspring are in stress-free environments, happily exploring, and feeling free to experiment. Schools in Finland are a case in point where there is plenty to see, do and explore, with little academic pressure in the early years. Fresh air, nature and regular physical activity breaks are considered engines of learning in the same way that this article emphasises that children gain from physical activity. It often seems that classrooms only value children's heads, while other organs, like the heart and body, are there only to support mental processes! If children are not still, in class, they are often considered restless or hyperactive. Children's development receives the best returns through physical exploration, as well as dialogues and more experienced others. Heart, head and hands make a powerful team.

In education, there seems to be an assumption that classrooms of the urban poor and rural children have low access to resources with little respect for what those habitats offer. Educational content is driven by the lens of the urban middle class who regulate the testing or the curriculum design. There is never a thought to test children to name ten birds in the environment or list ten common trees or ten different market features that dominate the rural or urban low-income habitats. Our questions are on modes of transport, matching geometrical figures and other formal schooling exposure. The belief remains that high poverty groups or children raised in distant locations need benefits, and there is no focus on how they differ from their urban peers. In actuality, each group has strengths and skills to offer. For instance, in a national children's art mela, urban students realised that few had skills for group dancing, playing instruments or the ability to sing collectively or weave baskets. On the other hand, children who live as part of a community had imbibed many such artistic traditions; some hailed from families of traditional performers.

Often, children may be unlettered but be able to perform the task of storytelling as in the art of the traditional *phad katha* of Rajasthan. Urban reporters seem fascinated by the skill and pay lip service, however, they are unable to refrain from the trite question of *school mein kya seekha? Wahan achcha lagta hai?* (What did you learn in school; do you like it there?) The message for the community is: folk art and skills are fine and exotic, but how do you adapt them to modern ways of life and living? While there is no denying that literacy is indeed an important tool, it does not warrant negation of cognitive competence in skills associated with those not literate.

Nature as a resource

Children are seekers and they have to be as 'natural curiosity' is a survival skill in a world controlled by people of experience who may have only faint recollections of the fact that they too were children once. Easy access to childhood encounters is useful for educators. Nature, linking information, searching the outdoor world with friends are all-time favourites with children. As stated before, children are active meaning-makers and are impacted by their habitats. By age 15, a rural child may have seen so many calves being born that they could be well-versed in recognising women in labour.

Physical skills are shaped by our everyday resources. The absence of access to transport sharpens the skill of speed-running as that is their only way for mobility from one place to another. Children may spend time in repetitive activities like throwing pebbles in a river to observe ripples or test their strength. One rural teacher working with tribals in Telangana shared a child's quest in throwing pebbles up in the air. His curiosity was to know the kind of force needed to keep the pebble suspended in the air. This new-age Newton could be encouraged to make several such explorations by closely observing and interrogating natural phenomena. Some examples:

- Why do birds fly making a triangle as Sir ji shows in class?
- All the trees have leaves yet all the leaves are different... but mostly, they are triangular.
- A group of older boys not in school showed reluctance in using a compass to draw a circle. The city boys were aghast! However, the teacher knew better and asked them to draw the outline for digging a well. The geometry box-challenged children brought a big nail and tied a string to draw a perfect circle!

Observations by children and observations of children at play can be insightful for creating interesting classroom activities. Children in city schools will gain by running out in the open collecting fallen leaves, twigs or pebbles, making shapes or recreating local *kolam* or *rangoli* designs. The patterns, the repetitive lines are good as links for spatial mathematics, design and understanding of shapes.

Reflections by teachers

In my encounters with teachers, I have listened to their successes narrated with pride. One teacher wanted to take the children outdoors to study the trees, play games, bring different objects, learn their names in English. She was trying to promote group learning and was keen to use games in small groups, displaying spellings or collaborating to make shapes.

Knowing the children, she realised that the transition from the class to the field would be raucous. In a flash, she knew what to do. 'Children,' she said, 'if you have seen ants move, I want you all to be like ants who are going to the field.' So, in a conspiratorial manner, they agreed that ants walk in a line, whisper and move forward. In the field, after they had had their fill of touching the trees, seeing the birds and gathering leaves, they engaged in the following games described briefly:

- 1. To the count of fifteen, make a square/octagon/ triangle in groups of seven. Find some shapes in the field and get back before I finish counting 30.
- On another day, the game was to collect objects whose English names the children wanted to know. Objects ranged from stones, petals, twigs, snails, butterflies, or just the colour of the sky, the English names were shared. Some children

- knew the names, while the teacher would provide these to the others.
- 3. This could be turned into a spelling game by choosing five words, identifying the sounds and allowing the children to learn the sounds and join the alphabets as a team. Four students standing in a line could be an 'I', others curl up to make a 'C'. Children will devise with surprising innovation. The attempt is to let learning emerge from the collective spirit and interpretation of the teams.

Teachers' stories often recount their innovations in how they circumvent many challenges. The idea of workshops for teachers itself needs to be reframed, giving attention to teachers' trials and triumphs. Instances and strategies adopted by those teachers who strive to achieve are based on realistic expectations and outcomes.

Children may have emotional barriers to classroom engagement. A warm hand-holding or some art exercise may guide the restless child to focus or a child in distress needing reassurance while transitioning from the village school to the city school.

A final observation

In conclusion, as an ode to teachers, I wish to propose sharing of classroom experiences compiled as a compendium of best practices. Many educators are never complacent, they are always searching for original ways, respecting the identity of children to define, redefine and extend the boundaries of what is education and explore the gamut of ways about how children can and do learn. Salutations to those innovative champions who guide children's creativity through the spirit of childhood!

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After 34 years of association with Lady Irwin College as Associate Professor in Child Development, **Asha Singh**, moved to pursue the desires of her heart. Deeply interested in the 'early years of the human life cycle', she has been sharing the value of art-based learning with young minds at the Ambedkar University and in-service teachers in schools. She has, extensively, done storytelling with children, reflecting on animating the digital adult-child interaction. She may be contacted at asha.singh903@gmail.com

Understanding When and How Children Learn

Ritika Gupta

An infant is looking keenly at her hand, she shakes it, brings it close to her mouth and sucks her fingers. She takes her fingers out of the mouth and looks at her hand again. She lets out a small squeal. A two-year-old is repeating everything said by his older sister and giggling. A four-year-old is sitting in the sand, filling and emptying a mug with sand. A five-year-old with a toy hammer in his hand is going around the house tapping different things and looking at his mother. A six-year-old is following her mother in the house as if she is her tail. Two thirteen-year-olds are sitting next to each other, playing with blocks. A sixteen-year-old is kicking a ball against a wall repeatedly.

Often, children seem to engage in activities which seem pointless to the adult eye. Some common interpretations of these are, 'Oh he's daydreaming', 'is playing' or 'is just wasting time'. One might think, what can a child possibly be learning in the above-mentioned situations? When we talk about learning, we somehow automatically relate it with an image of a child sitting seriously with books, doing homework, listening to an adult or reciting a memorised piece. But, sometimes, it is important to remind ourselves that learning is a continuous and ongoing process, not just an outcome.

Human beings are born curious and explorative by nature. Like little scientists, children, even infants, conduct experiments in their attempt to explore and construct knowledge. For example, the one-year-old who keeps throwing everything within her reach, is learning about which objects make a sound while falling and which don't; what happens when she throws it from different heights. Children constantly act on their surroundings to learn how the world works.

How do children learn?

 Observation - The six-year-old following her mother around the house is observing intently 'how to be mother'. Perhaps she would be seen re-enacting this while playing house-house.

- Imitation The two-year-old imitating his sister is learning the rules of language and boundaries of playfulness.
- First-hand experiences; learning through own enquiry The five-year-old boy is constantly looking at his mother for feedback about what he can hit with the hammer and what is out of bounds. He is also learning about the different sounds made by different surfaces.
- Experimentation; trial and error The four-yearold child who is filling and emptying her mug with sand is learning about concepts of empty and full and learning to coordinate her movements.
- Role of environment in learning Children learn from other people in their lives; the two thirteenyear-olds may be observing and learning skills from each other.
- Reflective thought In all the examples, reflective thought is something that remains constant.
 Even though it may not look like it, children are continuously thinking about their learning, about cause and effect and about things they observe in their environment.

Learning in schools

It seems like we all are born wanting to learn. Then when and how does leaning become a task? Why do we find ourselves assuming that some children are incapable of learning?

Think about the time you learned to swim or cycle. Did someone teach you the techniques? Did you observe someone else and try to copy? Did you, over time, experiment and come up with your own tricks to stay afloat in water or balance the cycle?

All of us have the ability to learn, but we learn in different ways. We have natural preferences for certain kind of learning methods, and we each have a different pace. Sometimes we combine our way of doing something with ways that we have observed other people do it. Now let's take the example of a classroom. While teaching a chapter on fractions, some children seem to get it instantly, while others don't seem to understand. Some children benefit from having physical blocks to solve the problem

while others prefer solving by being able to read the problem itself.

Problems arise when we measure learning only based on an outcome and do not acknowledge the process. When we measure success or failure only on the basis of whether or not the child could solve a sum, we lose out on other important processes:

- We start believing that some children can learn while others cannot. Sometimes, we can assume reasons for this, such as the child is too naughty, does not have a good home environment, is not intelligent, or lacks concentration to learn.
- We might forget to measure learning over a period of time as different children learn at different paces.
- When our mind is focused on the outcome, we may miss out on observing the parts of the topic that the child does understand. For example, the child understands fractions in daily life conversations 'Give me half the chocolate, share this chocolate equally among the three of you' but is unable to understand it in numbers. This observation, in fact, might be helpful in the classroom because if we can understand what the child does understand and where he/she is stuck, it can inform our teaching style and content.

Taking learning into the classroom

There are so many children in a class, how can a teacher cater to everyone's speed of learning? Plus, the school requires teachers to do assessments where there is a need to measure outcomes. How can this information be used in the classroom? Some examples of how this learning can be taken into the classrooms:

Changing one's own beliefs

Children are very keen observers and are far more proficient in understanding non-verbal cues than adults. They can sense that the teacher thinks 'I am stupid', even if this is not spelt out in words. This can restrict the child's learning by lowering his/her self-esteem; the child starts believing that 'I can't do it; I am not smart enough'. Often, this belief can be the reason why children start acting naughty; it can stem from frustration from not being able to do well in class, or it might come from the belief that 'I can't do well and be popular, so let me disturb everyone and be popular'.

A teacher's belief in a child's capabilities has a very strong impact on the child. The child is able to pick the sense that, 'teacher thinks I can do it'. Moreover,

when the teacher believes that every child in the class can learn, there is an automatic change in his/her own behaviour. This change in itself is very comforting and encouraging for the children. Let's see an example of this below:

This is the experience of a government primary school teacher from Raipur. Ms Gayatri taught primary school children and often felt that 'these children aren't smart enough'. Even in class I and II, the reading and writing levels of students were quite low. This made her feel demotivated and sometimes also angry with the children. Below is a report of the impact of a training session she attended on how to teach young:

'One of the greatest shifts Ms Gayatri felt with regard to her teaching was her perspectives about how children learn and what they are capable of doing. After realising that children can learn on their own, the purpose of using TLMs and leaving material for exploration started making sense to her. She could also use this knowledge to tap into the natural curiosity of children; this tool turned out to be very useful to retain the attention of children. Her interactions with students shifted from using punishment and scolding to simply conversing with them. The shift was gradual and often not linear, but she is grateful for this process.

After Ms Gayatri's adapted teaching methodology, there was an almost immediate difference in the learning and participation levels of the children. Gradually, children of class I started reading, their interaction in class increased, and it seemed that they understood far more than before. She expressed that even to her, the classes were more enjoyable. Furthermore, other teachers in the school and a few from other schools have extended their desire to adopt the same practices.

When one's views on how children learn, change, there may be an automatic change in how one teaches. For example, if Radha believes that children learn only when they write everything, she will use a lot of writing tasks in class. However, if she believes that children learn best by exploring, she might use more puzzles, experiments and fun-fact corners in class.

Changing one's pedagogical style

Sometimes when a child fails to learn, it is not because he/she cannot learn, but because that method of teaching is not working for the child. Hence, by just changing one's teaching approach and meeting the child where he/she is, it is possible to help the child

overcome the 'stuck-ness'. The following example showcases this:

This is a report of a three-year-old child with autism. He did not speak, seek attention or affection from anybody. He was brought to a school for children with differential needs; this is the report of his experience of having one on one sessions with one of the teachers for three months.

Parth didn't show any motivation or curiosity to learn about anything or anyone. Even when brought to school, he would refuse to sit in front of the teacher. He would go and sit on the floor in a corner and look self-occupied. The only thing he had shown some interest in was superhero comics. Though he didn't know how to read, he was seen flipping through some comics at home.

After failing to capture Parth's attention for weeks, the teacher decided to use Parth's interest in comics in class. The teacher did not force Parth to come and sit in front; instead, the teacher also sat and drew comics. After finishing one comic strip, he left the paper near Parth and returned to his seat and continued drawing. This act was a non-threatening invitation to Parth. Slowly, after two months of being in class, Parth came and sat in front of the teacher. He would silently observe while the teacher drew; gradually, he began pointing at the drawing and making sounds. The teacher had successfully piqued Parth's interest; he felt safe and was interacting on his own initiative. This was the entry point wherein contact was successfully established; after this, gradually, the teacher was able to increase interaction and engage in different methods.

A child, who everyone thought is incapable of learning, who had absolutely zero interest, is now an average eight-year-old who likes playing with friends and is curious about his environment. Thus, it is important to remember that a child may fail to learn through a given method, but this does not imply that the child has failed at learning.

Capturing and retaining interest and curiosity

If you have ever been exhausted by a child's unending questions, you would know that children want to learn. They are curious and keen observers. Often, the classroom learning environment ends up oppressing this natural want of children to learn. John Holt in his book, 'How Children Fail' specifies that one of the reasons why children fail in the classroom is because they are bored; the repetitive tasks that children are often asked to do in schools does not utilize the wide range of capacities the child

has. Hence, the child loses interest and does not feel engaged. (Holt & Fromme,1964). This may often be interpreted as 'this child is unable to learn'.

How then can we capture the natural interest and curiosity of children?

One way is, in addition to 'teaching children', to let them explore, discover, figure out and apply concepts on their own as well. Relating concepts to a child's surroundings, giving them food for thought, and letting them ponder over things that have been taught to them feeds their natural curiosity and motivation. The following is an example of a teacher adopting these in her classroom.

This is an account of a social science teacher in a government secondary school in Raipur. Ms Joshi expressed that children need some elbow room to function at their full potential. Though she emphasised that continuous engagement with children is essential for learning, she recognises the need for freedom and explorative learning. This, she believes, can be achieved through activity-based pedagogy which gives a chance to the children to apply their classroom knowledge to their own lives.

Personalising pedagogical space

While teaching the chapter on 'छोटे और बड़े उधोग' (small and big industries) she organised a visit to the nearby Parle-G and Jindal factories. After having seen the factories the children, on their own, listed the characteristics and differences between a big and small industry. Another class was taken to the book factory while studying about the printing press/ media. While studying civics and general knowledge, she asked the students to choose a topic and carry out a survey in their village. The survey topics mostly consisted of issues present in their village and people's perspectives regarding those or on demographic structures and panchayat functioning. These surveys were put up in the class and children were seen discussing the surveys with their classmates during their free time.

Independent and explorative learning

Ms Joshi alternated between two classes in a time span of 45 minutes, the students of the other class continued to work on the task given. Ms Joshi spent about 15 minutes teaching a concept (different kind of industries) following which she divided the children into groups and gave them a task which linked this concept to their own context (brainstorm all the industries you see in your village and classify them in the categories learnt). It is possible that

the kind of tasks given to the children piqued their interest and they feel motivated to do the task even though the teacher is not in class. A lot of space for independently exploring the concept was given to the children and the children seemed to actually utilize that space happily."

Have assessments which account for difference in pace and styles of learning

The conclusion that 'this child is bad at learning or can't learn' is often based on, untimely, assessment or an assessment in a method that did not capture the learning of the child. Of course, it is not perhaps practical to have different assessments for each child; schools require some structure and standardization. But there is value in ensuring that in a given term, assessment is done by a variety of ways so that the child gets an opportunity to showcase his/her learning at least in some modality. For example, having a combination of written tests, verbal, showcasing or exhibiting and creative expressions.

Furthermore, each child learns at a different pace; as part of the Continuous and Comprehensive Evaluation, various processes can be put in place to capture children's step by step progression in learning, instead of focusing only on the outcome. Following is an example of the same.

Reproduced below is a report of a teacher from Pithoragarh, whose pedagogy was centred on a child's capability and pace. Each class had an excel sheet with the names of students and skills to learn during that semester. Since students may take differing amounts of time for different topics, the classroom allowed for them to spend time on each topic according to their need. The students progressed from one tick to two ticks and then three ticks when the skill was mastered. Hence, what the child did in class that day depended partly on his/her chart.^{III}

In summary, it is imperative to remember that there are many reasons why a child fails to learn. By reflecting on one's belief about how children learn, pedagogy used, content and assessment, more often than not, one is able to create a space wherein children flourish.

Name of student	A-Z	Flower names	Fruit names	Months	Relationships	Writing	Counting
Raghav	√	√ √	✓ ✓	√	✓ ✓	√	√
Neha	√	✓ ✓	✓	√ √	√	✓ ✓	✓ ✓

https://practiceconnect.azimpremjiuniversity.edu.in/a-teacher-transformed-through-training/

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[&]quot; https://practiceconnect.azimpremjiuniversity.edu.in/teacher-as-the-epicentre-for-change/

[#]https://practiceconnect.azimpremjiuniversity.edu.in/integrating-schools-into-social-fabric-of-community/

Addressing the Nutritional Needs of School Children

Shreelata Rao Seshadri

Importance of good nutrition for children

Imagine a young child in a typical government school in India. This little girl is six years old and getting ready for school. Her mother is getting ready too because she must be in the field by 7 am. She has no time to make breakfast for the little girl or her brother. The little girl barely has time to wash her face and get into her school uniform. There is a bit of rice leftover from the night before, which the mother hurriedly divides between her two children — barely a mouthful each. Then, they run to school, just in time for the assembly. As they file into their classrooms for their first lesson, the little girl feels a familiar rumble in her stomach — she is hungry, and lunch is several hours away. It is going to be another long morning.

This is the reality for an estimated 25 million children in India. There is substantial evidence

that the nutritional outcomes of school children are at considerable risk and need urgent attention. Nutrition during school-age is critical for several reasons: it is not only of intrinsic value in terms of the child's physical health and sense of well-being; but also, of instrumental value in terms of improving the child's learning outcomes and leading to better employment prospects in the long run. Over a lifetime, every additional year of education has been shown to increase lifelong earnings by 20%.

Yet, malnutrition continues to be a serious problem in India, particularly among school-age children (Table 1). For those belonging to poor families, who constitute the majority of children attending government schools, close to 30% are likely to suffer both low height-for-age and weight-for-age, as well as high rates of anaemia.

Table 1: Malnutrition among school-age children

	Poorest	Poor	Middle	Rich	Richest	Total
Children age 5-9 years who are stunted*	30.3	26.2	22.2	18.4	12	21.9
Children age 10-19 years with low BMI**	27.2	26.6	26	22.2	18.2	24.1
Children age 5-9 years with anemia***	30.1	29.2	22.4	18.2	18.1	23.5
Adolescents age 10-19 years with anemia	33.4	29	28.4	28.6	23.1	28.4
5-9 year-olds with Vitamin D deficiency	13.3	13.2	14.8	20.4	30.2	18.2
Adolescents with Vitamin D deficiency	18.9	18.8	19.8	28.7	32.9	23.9

Source: Comprehensive National Nutrition Survey (CNNS) 2016-18

* Stunting denotes low height-for-age

** BMI stands for Body Mass Index and is a measure of weight-for-age

*** Anaemia denotes iron deficiency

The foundations of physical and cognitive development of children are laid when the mother is pregnant and in the first 24 months of life. In this period (the first 1000-day window), under-nutrition and/or micronutrient deficiencies can impair child development irreversibly. Similarly, among school children and adolescents, normal growth and development are determined by several factors

such as adequate nutrition as indicated by normal weight or height-for-age, absence of nutritional deficiencies (especially micronutrients like iron and iodine), a robust immune system capable of protecting against repeated illness, and the ability to participate cognitively and socially in the learning process.

School-based nutrition and health interventions, such as the provision of macro- and micro-nutrients, clean drinking water and sanitation facilities and health and nutrition education, are meant to address critical contributors to better health and learning outcomes. Such interventions, if implemented comprehensively and well, will have far-reaching positive consequences.

Recognising nutritional problems in class

Classroom hunger is a well-recognised phenomenon and it hurts the child and the learning process. Watch out for some of the following signs and symptoms of a hungry child:

- Tiredness and irritability, heightened anxiety
- Lack of energy
- Inability to concentrate
- · Always feeling cold
- Depression, sadness, tears
- Disinterest in socialising, aggression, disruptive behaviour
- Falling sick often, or taking a long time to get better
- Lack of growth, low body weight, visible loss of muscle or fat
- · Learning difficulties

Various factors contribute to malnourishment in children, such as:

Extreme poverty and other socio-economic

- factors such as land ownership and mother's education which determine the adequacy and diversity of household food consumption.
- Disease prevalence due, largely, to the lack of clean water and sanitation, causing repeated episodes of ill-health and thereby, impacting nutritional outcomes.
- Lack of community knowledge and awareness about a child's nutritional requirements.
- Poor implementation of government programmes, as a result of which children lack access to a balanced diet.

Not all these issues can be addressed by the school. But in the next section, we will explore some things a school can do to promote the nutritional wellbeing of its students.

What can you do?

The 'Whole School Approach'

It is critical that the school addresses the nutritional needs of children in a systematic, equitable and sensitive manner. The World Health Organization (WHO, 2006) advocates the 'whole school approach' for this.

Briefly, it is an attempt to bring together all the stakeholders involved in the health and nutrition of the child and engage them actively. This includes not only the school teachers and others who provide the meals (cooks, helpers) but also the child's family, community, local panchayat and frontline health workers. Figure 1 illustrates the 'whole school approach'

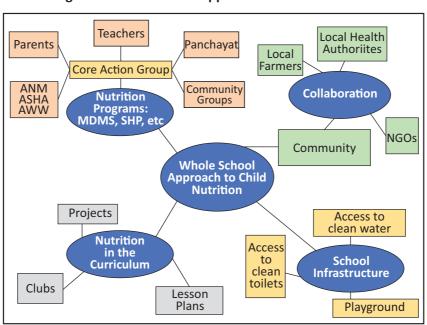


Figure 1: 'Whole school approach' to child nutrition

Adapted from Sustain 2005 (ref. Food and Nutrition Policy for Schools, WHO 2006; p.10). Following this approach, there are several steps to improving health and nutrition in your school.

1. Assemble a core action group

Many schools already have a *School Development* and *Monitoring Committee* (SDMC). This is the Core Action Group since the membership includes diverse stakeholders. However, the SDMC is often not active and meets rarely. Ensuring that the SDMC meets regularly is critical and a particular day, every month should be set aside for this. The agenda can cover infrastructure and maintenance (toilets, water supply), student welfare and implementation of government programmes.

Two programmes that require close monitoring are:

- The Mid-Day Meal Scheme (MDMS): The MDMS provides a hot, cooked meal for all primary school children from classes I-VIII. The objective is to provide children with a balanced and nutritious diet to combat classroom hunger and it includes rice or chapati, along with some type of dal and vegetables. The rice or wheat is supplied directly to the school by the government. But dal and vegetables have to be purchased by the school with the allowance per child provided by the government – usually a meagre amount. The SDMC can enrich the meal by accessing funds from the panchayat or in-kind assistance from the community. There are examples of community members or local farmers providing seasonal vegetables either free or at reduced costs, or a morning snack of peanut chikki or fruit (bananas, guava or papaya are local fruits high in nutrients). Or the SDMC could mobilise community mentors to help the students to develop a vegetable garden in the school. This would supplement the vegetable budget and can also be part of the biology and/ or environmental science curriculum.
- School Health Programme (SHP): The SHP provides basic health check-up for all children, along with vitamin A and iron supplementation and regular deworming. The SDMC can coordinate with the local Primary Health Centre/ANM to ensure that the check-up and

supplementation take place regularly according to the agreed-upon timelines and that Student Health Cards are maintained and updated. This will ensure that minor ailments are diagnosed early and treated quickly, with minimal loss of school days for the child. In addition, regular growth monitoring can be introduced to track height and weight of children and to make sure that they are not at nutritional risk.

2. Ensure a working infrastructure

Water, Sanitation and Hygiene Education (WASH) in schools is a strategy that provides for clean water and sanitation facilities for all children, as well as sensitisation on why this is necessary. Children spend a significant portion of their day in school, and WASH has been shown to impact their learning, health and dignity, especially for girls (UNICEF 2018)."

- Only about 60% of children have basic sanitation facilities (toilets) at home. The school may be the only place where they can access a clean toilet in privacy.
- While most children have access to water at home, it is of varying quality. Providing clean drinking water in school reduces their chances of illness due to water-borne diseases (typhoid, jaundice).
- Instilling the hand-washing habit, practised properly, will protect children from many infectious diseases, including COVID-19. Posters are a good way to communicate the message.

Other than WASH, playgrounds have a huge role in maintaining children's well-being. Play is a positive force for social, emotional and cognitive development; it also prevents obesity, a growing problem among school children today.

3. Introduce nutrition into the curriculum

The school curriculum already includes lessons and activities around food and nutrition, health, hygiene and sanitation-related topics. Some of the thematic areas that could be actively brought into classroom pedagogy are indicated in the table below:

Table 2: Tentative thematic areas for intervention in curriculum for classes I-V

Thematic Areas	Sub-topics Sub-topics
Food & Nutrition	 Why do children like some foods and not others? Washing vegetables, fruits before eating Making juice, sprouting grains and making salad Preparing diet charts
	Improving MDM through a school garden
Water & Sanitation	 Toilet survey at school and village: who has, who uses Purification of drinking water & its storage Conserving water – how to use water wisely
Personal Hygiene	 Hand-washing Brushing teeth, rinsing mouth after eating Cutting nails Regular physical exercise
Waste Cleaning	 Keeping surroundings clean at school and at home Using the dustbin Separating wet and dry waste
Treatment	 Making Oral Rehydration Salts (ORS) Planting medicinal plants and using traditional medicine for basic ailments Maintaining and using the first-aid box
Health Monitoring	 *Using a thermometer *Counting breathing rate, pulse rate Measuring height and weight on a quarterly basis, calculating BMI and maintaining growth chart Preparing and maintaining health cards *Conducting eye check-up using a Snellen chart

This table was developed by the Health, Development and Society team in collaboration with the Work and Education team, based on a careful review of Government of Karnataka textbooks and the literature on global evidence of successful initiatives in schools.

Note: *These sub-topics are not in the textbooks but are included because they are linked with malnutrition.

4. Build relationships with community

The community is invested in the health and well-being of their children since most families have children attending the school. Reaching out to the community for support not only widens the umbrella of resources available to the school, but also promotes ownership of the school and its success within the community. Providing additional food, either regularly or as occasional treats, volunteering their time during the lunch hour to ensure that all children eat well, taking them

outdoors for fun and exercise, teaching them how to grow or sprout or cook vegetables – these are all ways in which community members can contribute to the children's health and nutrition.

Conclusion

Ultimately, the health of the school-going child is a joint responsibility: it is the responsibility of the government to provide critical services to support his or her mental and physical wellbeing, it is the responsibility of the community to hold the government accountable for quality and transparency and it is the responsibility of the parents to ensure that their children are well-fed and cared for.

However, the school plays a central role in ensuring that the services children need, reach them. This is important for several reasons:

- It extends the benefits of early childhood health and nutrition programs, for example, the Integrated Child Development Scheme.
- Nutrition services can be delivered efficiently in schools since so many children gather in one place.
- Evidence shows that good health and nutrition promote learning – the school's central purpose.
 Most importantly, school health and nutrition programmes ensure that the student is 'present, ready, and able to learn', a foundational requirement for achieving India's goal of Education for All.
- The Health, Development and Society team at Azim Premji University has developed a set of tools for child growth assessment to use in primary schools that can be accessed here: https://sites.google.com/a/apu.edu.in/the-nutrition-project/teaching-learning-materials
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Children are Attracted to TLM as Butterflies to a Garden

Aditya Gupta

A child's mind is like that of a butterfly in the garden which gets attracted to flowers of different hues and their enchanting fragrance. Children minutely observe happenings and activities in their surroundings and react to the smallest of change. They try to understand an activity or change on the basis of their perception and prior knowledge and develop their ideas. From here, begins the role of a teacher.

So, among all the other roles and responsibilities that a teacher has, this may be another – that of a gardener who has created a very beautiful garden, bountifully decorated with colours, that attracts everyone. Here, the word 'garden' refers to teaching-learning material (TLM) which encourages students to learn new things both within and outside the classroom. When a teacher enters a classroom, all students look for the material he/she is carrying, and the sight of any new material makes them completely attentive in the class.

I would like to give an example of my classroom experiences with the students of class VI that highlights the importance of teaching aids or TLM to help children learn. Teachers often have to face the problem of lack of concentration among students in this class. Their last period, every day, is of Social Sciences. By that time, almost all the students are tired. As a result, I too would face a lot of problems. Teaching aids came to my rescue by triggering the inclination among students to learn new things and improved classroom activity immensely.

For the topic, 'Major Domains of the Earth' (Chapter 5, Geography, NCERT), I developed some teaching aids to explain to my students the four domains of the Earth. These included:

- 1. A model of the water cycle.
- 2. A puzzle on oceans and continents.
- A beaker, a test tube, coloured water and dropper to explain the global distribution of water.
- 4. A sheet related to the size of continents.
- 5. A documentary on water conservation and

measures for its preservation; and a worksheet on ways to save water.

All the students actively participated in the class due to these teaching aids, making the process of classroom learning interesting and I was able to easily achieve the learning-based outcomes.

Teaching aids used for learning the topic and the use of the TLMs in classroom activity are explained below in detail with the help of illustrations.

Hydrosphere

- a. With beaker, test tube, coloured water and dropper, I explained to the student's total water distribution on the Earth. The students, thus, learned about water distribution and its forms. I took the help of a documentary, 'When Every Drop Counts', (https://youtu.be/ WxdtmswwHAk) which depicts the shortage of water in the Barmer district of Rajasthan and various water conservation measures to drive home the importance of water and awareness and sensitivity about its use. After this, I gave students a worksheet on how to conserve water and also heard their ideas about water conservation. All students gave their reaction to figures in the worksheet and wrote about methods adopted in their villages and cities to conserve water.
- b. Water cycle: I made a water cycle model (Figure 1) to explain to students the changes in water forms and how it rains. Students showed special interest in this model and it left an indelible impression on their minds.

Lithosphere

I created a puzzle (Figure 2) on the continents, their location and a sheet related to their sizes. To begin with, I divided students into five groups. Each group was provided with a sheet related to the puzzle on a continent and its size and they were given time to join the dots of the puzzle. All students enthusiastically took part in the activity and developed their understanding of the continents, their location and size.



Figure 1: Water cycle

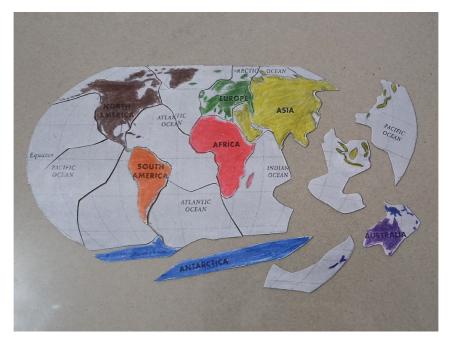


Figure 2: Mahadweep ki paheli

Students' reactions and the experience gained from it

Before sharing my experiences, I would like to make it clear that all butterflies do not get attracted to the same type of flowers and, at the same time, even a particular butterfly does not always get attracted to the same flowers. Different butterflies get attracted to flowers of different shapes, sizes and fragrance. Children's minds work in the same manner. All students have different potential to think and understand; different needs and expectations. Learning outcomes cannot be realised by adopting the same teaching aids for all. In such a situation, we should always make efforts to provide dynamic teaching in keeping with students' needs and expectations. In this direction, our actions will strengthen child-based education, a key point of the National Curriculum Framework-2005 (NCF-2005).

It took me six classes to share with the students all the activities related to the topic. But it gave them a lifelong experience about learning. Students were asked many questions during these activities. Some of the reactions of students are recounted below.

When I gave a demonstration to the children on the distribution of water on the Earth, there were different reactions from the students. For example, some students were surprised over the little quantity of water fit for use (0.0001% or 1 drop of water in 1 litre water); some other students were sad and concerned. In the end, all children promised not to waste water and stop others from wasting it.

Students showed special interest in the water cycle model and they posed interesting questions out of curiosity, some of which are given below.

Question 1: Why were some clouds on the chart seen weeping while some others laughing? Does it really rain when clouds weep?

Question 2: What is the meaning of the terms written on the water cycle model?

Question 3: The water cycle model on the green board is different. Why is it so?

Question 4: Why have you drawn it on a round board? (A student offered an explanation, 'Since rains follow a cycle, perhaps that is why it is made like that.')

This apart, some students asked me to teach them the process of making the model. This experience came as a pleasant surprise to me.

Perhaps all the above questions and curiosity arose because they were enjoying reading and learning in this manner, which is why they were more inclined to learn and could learn something new with greater concentration. The children were so engrossed in solving a puzzle given by me to make them understand 'continents and their location' that they did not even realize that the school time was over. Some students wanted to stay back to solve the puzzle even after I showed them the time. It was a unique experience for me as, usually, some students would want to go even before the last period came to an end. But that day nothing of the sort happened.

The classroom activity taught me one thing: children are like butterflies who get drawn to a captivating view of coloured flowers (teaching aids) and their fragrance wafting across the garden; they gather to suck pollen from flowers.

As a teacher, one of the most pleasant experiences for me is when children of various classes call me to their class to teach them during a free period. For me, it is difficult to describe this feeling in words. But this certainly demonstrates one thing – that they find my teaching processes more appealing. It is nothing short of a great achievement for me and teaching aids have contributed to this in a big way.



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Using Fun to Learn

Ankit Shukla

Learning in the classroom requires constant effort from both, the teacher and the students. It requires an environment which acts as stimuli, because of the nature of the given task, the expectations of the learners, the ways in which information is presented – all these impact learning. We can easily see the different dimensions of learning and the way it happens with the help of examples, learning activities and the different ways in which children process their learnings. I realised these truths after being with the Azim Premji Foundation for almost three years and having visited many schools in the district assigned to me.

In 2019, the Chhattisgarh government had asked schools to remain open through the summer holidays and conduct various fun activities as a sort of summer camp in the school itself. As a result, I could engage with the students of three schools which were in the same campus. The moment I reached the school, students rushed to me as if we were old friends. Some boys were playing football, while some were busy with cricket. The puzzling thing was – there were no girls in the playground. They were all in their respective classrooms.

We went to the head teacher's office. He welcomed me and asked some of the boys to open the hall. Students started gathering in the hall and in a few minutes, the hall was jam-packed with boys and girls. I introduced myself and my objective of coming to the school.

Change in the air

On the first day, I divided them into groups. We had ten groups with about nine students in each. I distributed storybooks to each group, which they were asked to read and discuss among themselves. The discussion could be around the characters, the storyline (plot), the dialogues, etc. Based on these discussions, they had to prepare a play. Every member of the group read the stories and then, after discussion and consensus, they reached the final draft of the play.

On the second day, we had a brief story sharing session and character identification in the larger

group. Each group came and shared their story and spoke about the different characters in their stories. All this resulted in a puppet show.

Puppet show

After this, they started preparing puppets for their stories. The idea was to first draw a sketch of the face of the character, for instance, if there was a lion in the story, then they drew a lion's face and coloured it, after which, they pasted the sketch on a piece of cardboard to give the puppet support. After pasting, they attached a stick on the puppet. With this, their puppets for the show were ready! On the third day, we presented our play.

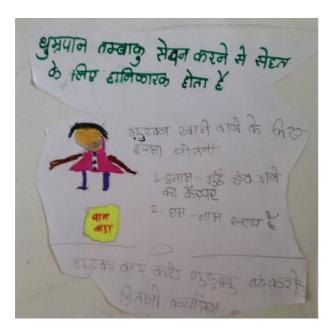
The stage was set. The students were behind a curtain, holding their stick puppets. They were placed such that only puppets could be seen in front. Each group came one by one and presented the play. The first play was ईमानदार लकड़हारा (The Honest Woodcutter). The students presented the act very beautifully with every detail in mind. After the act, each participant introduced themselves as well as the characters which they were playing. After the show, there was a question-answer round on the play. Some questions were raised - such as, what would have happened if the man had taken all the axes? Why did he choose the axe made of iron? The discussion which followed pushed these students to think about some real-life incidents.

The next play was, 'बड़ा कौन' (Who is the Greater One). The moral of the story, which came from the audience itself, was that no one can be ignored due to their size. Every organism on the earth deserves equal respect and dignity. The students were very excited and happy after the puppet show.

Baal Akhbaar

For the next activity, I asked the children to observe some new things that happen in their village. The next day, they had a lot to tell us. So, I first discussed the components of a newspaper with them - news, reports, advertisements etc. Then, again, I divided them into groups and gave them the task of writing whatever news they had.

It was amazing to see the minute details the children had observed. Many students had written about the previous day's downpour. As some of them owned vegetables and fruits shops, they had written how this rain had affected them.



Then came the advertisements. There were several advertisements -- shampoo, medicines and also, one of a school, highlighting the facilities provided in the school. The advertisement which caught my attention was the tobacco ad which pointed out the evils of smoking.

After collecting these from the students, the next step was 'publishing' the items as a paper, that is, pasting these articles on a chart paper. To do this, there was also a team called, 'Publishing Team' which had the responsibility of designing the paper. They pasted the news and advertisements

on the chart paper. Now we had the *Baal Akhbaar* newspaper made by the children! The children felt a sense of achievement when it was displayed.

Children's learnings

After these activities, what the teachers and I found was that the students expressed themselves more. The activities had involved every student and given them the confidence to put their thoughts in front of everyone. The puppet show, with its rehearsals, also made them want to do their best. They improvised the stories in their own way which became a good way of language learning. The objectives of language teaching – that students should be able to visualise and become more creative and imaginative – seemed to have been achieved because the students had used their own imaginations and their thoughts while doing the show.

The *Baal Akhbaar* activity taught the students to be more conscious and observant. They noted minute details of everything that happened around them, which usually go unnoticed. The pasting of the news on the chart paper helped them to use their spatial sense, something that can be used in the teaching of mathematics. Expressing their experiences in the form of news and advertisements gave them the chance to put forward their thoughts.

All this helped me to understand that learning could happen anywhere: it could be in the classroom or in the playground. The only thing which we have to keep in mind is that we should keep the environment learner-friendly and completely fearfree. Every child should be given proper space to express himself/herself on any platform and learning will take place.

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Learning in a Multilingual Context

Binay Pattanayak

Background

Jharkhand is a multilingual state, home to more than thirty-two indigenous communities who use around nineteen indigenous and regional languages. Some of these prominent link languages work as bridges between different indigenous languages in the state. The state has nine *Particularly Vulnerable Indigenous Groups* (PVTGs) and some of their languages are extremely endangered.

Children from all these communities encounter huge learning disadvantages in their early school years as their home languages are very different from Hindi, the school language. On an average, a third of the children entering the primary schools in the state drop out in the early grades, making this the highest dropout rate of children in the nation. Children who continue are so frustrated that by class VIII even they struggle to continue as they do not understand the content of their textbooks or their teachers who teach and test in Hindi, completely rejecting the children's learning experiences from home and community. Hence, learning outcomes of the state's students in the national learning achievement surveys of NCERT, ASER, etc. continue to appear at the bottom of the list of states. Other reasons for the low performance are political instability and non-availability of local textbooks.

Interestingly, the state has notified twelve indigenous (tribal) and regional languages as its official languages after Hindi and English. However, none of the 40,000 primary schools had any scope for the use of children's mother languages in the classroom. The administration did not seem to be bothered about the issue of highest dropout rates, lowest learning outcomes and also alarmingly low attendance of both teachers and students. There was never any discussion on these serious issues related to the majority of children in the state.

To understand the learning experience of children in the early years, and the causes of school dropouts, a team was formed and named *Mother-tongue*based Active Language Learning (M-TALL).

M-TALL and its initiatives

Based on the feedback from schools, communities and their children, colour-coded language maps of the state indicating the priority of languages were constructed. What emerged from this exercise was that regional dialects were being used in 96% by the respondents and only 4% of the people communicated in Hindi as their mother tongue. Whether it was for communicating with parents or playing or just day-to-day interactions, most of the children used their own regional dialects and languages. So, it became clear that the learning challenges the children faced, leading to boredom and dropping out were largely due to the language differences.

Development of picture dictionaries

Working on these findings, discussions were held with different language expert groups to understand what children in each community like to do in their early years.

Those child-friendly areas were compiled as broad themes for the children's mother-tongue-based school language readiness initiatives. We found that children like to play, sing, dance, discuss with various people and friends, make toys, explore, tell/listen to stories, read picture storybooks. We also compiled children's favourite stories, songs, dance, riddles, pictures, toys, games, art and craft, and other experiences.

In 2014, M-TALL developed *Meri Bhasha Mein Meri Duniya* (my world in my Language), bilingual picture dictionaries in nine indigenous and regional languages for use in *Anganwadis* as well as by teachers or parents in small groups of children (more useful if children from different language groups were there) by looking at a page together and discussing various elements of the picture in own language and sharing their experience with each object or event. This enabled every child and the concerned teacher or parent to use this as a rich local learning resource. It aided interaction with the picture, text, peers, teacher and parents. It helped to lay a strong foundation to the language

learning skills of the child (or children), along with the enrichment of her knowledge, skills, attitude and interest in the concept, first, in the mother tongue, closely followed by the same in Hindi and other languages, depending on the level of language diversity in the group and the level and direction of the interaction.

This was followed by pictures of each of the above themes to be used as children's learning primers for small group discussions among children of different language groups. *Anganwadi sevikas* and teachers encouraged children to narrate their own experiences and ideas around the pictures in their own languages.

New words used by children were noted down by the facilitators for use later. Separate language baskets (bhasha tokri, bhasha bhandar) were kept in two corners of the room to enable the facilitator to write down the new words and stories from the children for use in the classroom later. Gradual compilation of such words and stories enabled the concerned facilitators to formulate learning resources for their own institutions in the form of dictionaries, storybooks, songbooks, etc. The initial discussions in children's mother tongues enabled children to strengthen their basic language learning skills. Gradually, these discussions were encouraged in Hindi to enable children to use their initial language learning skills in picking up the basics of Hindi communication. The project became very popular with the whole community. Bilingual picture dictionaries have a big potential in facilitating discussions on various aspects of the social life of children and people in rural areas in any part of the nation.

Bhasha Puliya

Since it was generally felt that pre-school education of children must be facilitated in children's first languages, in 2015, M-TALL developed *Bhasha Puliya*, a children's language readiness package that aims to bridge home language/s of children with the language/s of *Anganwadis* and primary schools in Jharkhand. A series of child-friendly learning activities were integrated into this package in a systematic manner to enable children to actively participate in these learning activities and, through this, acquire the desired skills which form the building blocks of the pre-school education programme.

Twelve key learning milestones were covered through twelve activity guidebooks, forming

learning ladders touching upon all the activities in a sequence: learning assessment formats, activity progress chart, baseline format, a guidebook for *Bhasha Puliya*, an academic calendar for the whole year, and folders for filing away local words and stories/songs.

The programme had a significant impact on children's school readiness and language learning skills and provided clear evidence that mother-tongue based pre-school education enables each child to enjoy the learning processes, acquire language learning skills and get school-ready for introduction to the world of alphabets, numbers and then, for subject-specific learning. They also learn how to take part in learning activities in teams and learn together.

Success of the programmes

It is now an established fact that learning a language needs a multi-pronged approach. Writers sat with the community language workers to map out the major activities in their community which take place in their area where children actively take part. For example, taking part in various festivals and social activities in the summer season, enjoying visits to various markets, fields, fruit gardens and nearby areas for celebrating summer festivals are all part of their daily life, which help children learn the concepts scheduled for the initial part of the year. For example, class I children are enabled to take part in a wide range of interesting learning activities, such as singing songs, playing together, listening to stories, sharing experiences, draw and reading pictures, etc. so that they take more interest in the learning activities in the school.

Just as the language content developers identify occasions, stories, poems, riddles, etc. associated with the community festivals and occupations, the maths content designers have used rangoli, wall designs, objects associated with shapes and sizes in the community pursuits and planned for interesting learning activities which could engage children in mathematical explorations, thinking and discussions.

Activity-oriented learning paths

A variety of learning activities were designed for different quarters of the year which would enthuse and engage all children. Each chapter of the book was designed in such a manner that it carried different types of learning projects to enable children to enjoy the diversity and learn enough to reach the set learning goals. For example, the language book writers introduced language in a very rich manner by designing the content in the form of stories, songs, riddles, puzzles, skits, plays, etc. which would engage children in these joyful creative activities and thereby, help them discover the beauty and diversity of the subject. Participating in all these, children also discover how creative content is designed using local experiences and events, which they are already familiar with.

Community-supported pedagogical processes

Textbook writers aimed at associating the community resource persons in the form of storytellers, singers, dancers, musicians, poets, actors, riddle-makers, etc. to visit schools and conduct these activities in collaboration with school teachers, bringing a new dimension to the pedagogical processes. Children are amazed to see familiar persons and relatives play the role of teachers. With their rich skills, the community resource persons find a scope to demonstrate their knowledge and skills in guiding children towards the learning goals of the class. This community-based approach enriches the school's pedagogical processes significantly.

Graded reading resources

Around twenty big storybooks for class I contain child-friendly and interesting stories related to language and mathematics. They are attractively illustrated with short write-ups in a large font. The facilitators use these books to show the pictures to children and familiarise them with the related text, such as *cat*, *tree*, *mother*, etc. Using these, children gradually get familiarised with the alphabets and numbers in the first year. In the second year, another twenty smaller storybooks were designed with smaller illustrations and more texts in smaller fonts to enrich the reading practice of children.

The content designers were careful about whether the activities that touch upon the main concepts of the topic, are age-appropriate, interesting, contextual and interesting. Balance is ensured so that no chapter is long or text-heavy for the children; and, contains instructions for teachers and other details. The illustrations, depicting the life and experiences of children in their communities, are designed to stimulate the thinking and the joy of children and facilitators.

How children can learn

To make sure that every child learns, some key

features of the schools where mother-tongue based Multi-Lingual Education (MTB-MLE) programme is implemented are: a vibrant physical and academic environment, well-thought-out pedagogical plans and processes, and learning collaboration with community resource groups. Also included is, support from DIET, BRC, CRC and NGOs. The school is seen as a centre for research and innovation for the village/community. Here are some of the key features:

A prepared school and society

Along with the textbooks, we also made concept notes and training modules. Through language mapping in ten indigenous populated districts, about a thousand schools were chosen in which children spoke only in the affiliated indigenous language. Initially, environment-building activities were undertaken in these school areas for familiarising the teachers and community members with the government's plan for initiating a mother-tongue based multi-lingual education (MTB-MLE) programme using new textbooks. Teachers of these schools were trained and familiarised with the content and pedagogical processes associated with the new approach.

Involving the whole community

Community resource groups in the form of storytellers, singers, dancers, musicians, riddle-makers, toy-makers, comedians, etc were constituted in each school. Meetings between schools and the community resource groups linked textbooks with the roles of the resource persons in facilitating pedagogical processes in different subjects. Schools, then, developed an academic calendar indicating which group would visit a particular school with necessary preparations to work with children and enable them to acquire desired knowledge and skills.

Government involvement

The Government of Jharkhand now runs a Mother-Tongue based Multilingual Education (MTB-MLE) programme using these materials and training in around a thousand schools in ten districts of the state for which new textbooks for primary level were developed under the guidance of the author in seven indigenous and regional languages. Language and mathematics textbooks have generated a lot of enthusiasm and interest among the children, the teachers and the concerned community members. This community-based approach has transformed

the schools with active students, enthusiastic teachers and dynamic community supported activities.

Conclusion

The MTB-MLE programme has transformed schools and generated tremendous enthusiasm in the concerned indigenous communities. Enrolment and attendance of both, teachers and students, have improved significantly with a significant

reduction in the dropout rates in these schools. Classrooms, once silent, are now vibrating with renewed energy, enthusiasm, community support and active participation in learning activities. With the active cooperation of community members, the folklore-based content has injected a new life into classroom processes and, ultimately, made societal changes. These books can be adapted to suit any national language with contextual inputs from the relevant locality.



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We expect our teachers to teach all the children the same thing at the same time with the same method and get the same results — an idea that is 'designed to fail', because what this does is to make sure that a great proportion of children, who are otherwise bright and capable are left out of the learning process for one reason or the other.

Subir Shukla, Why We Need Responsive Schools, p 92.

Background

English skills for everyone – this was the mission of ELF Learning Solutions, the organisation we set up to focus on bridging the educational divide between rural and urban children. Most English programmes focus on the how - how to design content for English learning? However, we started with the why – why do we want children to learn Although clearing examinations and English? better employability are good reasons, the most important reason for children to learn English is building their self-confidence. Working with a large number of children from low-income families made it evident that, irrespective of their proficiency in other skills, children who cannot speak in English end up feeling inferior to those who can.

If English classes are about strict grammar and pronunciation rules, children only become more fearful of the language. This results in the majority of first-generation learners failing to achieve English skills. Even if some children finally learn the skills, they lack the confidence to have even a simple conversation in English.

English for first-generation learners

We started researching how English learning could be done in a way that children build confidence in the process of learning it. Our first endeavour was with teachers of forty-eight government schools in rural Tamil Nadu. There were two main principles that teachers followed in these classes - one, allow children to make mistakes and, two, to allow them to use vernacular words in English sentences when they attempt to speak.



We also started developing techniques that would make learning to read English simple for children, especially for those who encounter English only in school. In a language like English, where most words do not follow the phonics rules, it is very easy for children to get frustrated in their attempts to learn to read. They quickly decide that English does not follow any logic and that they cannot learn to read. Working with several school teachers, we developed a simple, graded, phonics-based structure for learning to read English.

Today, the ELF English programme is being used by 115 schools in India – these include 40 government schools in Mizoram, two in Assam and the rest (73) in Tamil Nadu. Time and again, the programme has demonstrated that when teachers set clear goals and go forward with the belief that all children can learn English, great results are achieved.

Methodology

Typically, each class begins with an audio or video



lesson followed by circle-time activities and small group activities that encourage conversation. Question and answer practice in pairs ensure that every child gets a chance to speak. Role-plays and songs help children overcome their fear of English. In a short period of four months, we found that at least 51% of the children were able to respond to common conversational questions in English.

We broke up reading skills into eight simple levels, starting with letter sounds and moving on step by step to words, sentences, paragraphs and stories. At every level, a few new sounds, blends and words were introduced. Careful grading of the content at each level was done so that a child encountered only words that he/she could decode with the sounds already learned. A few sight words introduced at each stage enabled children to quickly progress to reading sentences and paragraphs.

In this article, we share some of our learnings in this journey and how teachers can adapt these ideas to their English classroom.

Spoken English class

Listening before speaking

Before we ask children to say something, they need to see the teacher demonstrate what she expects. We do this with interactive videos in our classes, but a teacher can also use real-life examples or simple posters to help her *show and tell*. For example, if we would like the children to practise a simple conversation about objects in the class, the teacher starts with: What is this? This is a pen. What is that? That is a fan.



She points to the objects as she asks the questions. She chooses objects that children inherently know the English word for. For instance, words like *fan* and *table* are so deeply ingrained in the children's vocabulary, that in a government school in Vellore, children insisted that these were Tamil words and that they did not know the English equivalents!

During this activity, the teacher does not expect the children to respond – she asks and answers the questions herself while the children listen. We encourage the teachers not to translate each word into the mother tongue in an effort to make the children understand. Rather, teachers use animated movements, pictures and facial expression to help children understand what they are saying, without translating.

Circle time practice

Just after listening to the teacher, children get ready to practise the questions and answers in circle time. The first child asks his/her neighbour a question. After answering it, it is the second child's turn to ask the question. Questions and answers pass around in a circle to give every child a chance to speak. Mistakes are not corrected at this point. If children hesitate, the teacher role-plays with another child and demonstrates the conversation again.

Small group practice

The teacher forms groups of 4-5 children so that they practise the simple conversations they have learnt. Children in small groups do not have to worry about an overseeing adult; they can try speaking, laugh and have fun. Teachers slowly get used to the buzz of children's voices - after all a spoken English class can't be a silent one!

Describing pictures

John Holt said that when children are asked to say something, they can only respond if they have something to say. If we ask children to describe an incident or give their opinion on a topic at the very outset, they may struggle to organise their thoughts and express themselves.

Pictures are great conversation-starters. We use pictures to help children ask questions and describe what they see. If children are not ready to speak on their own, teachers can prompt them with simple questions – Who is in the picture? Where are they? What are they doing?

It is best if the pictures that we use in the class are set in the context of the child. By using objects and scenes familiar to the child's environment, we help children regard English as less alien and closer to home.

Sequencing and storytelling

Storytelling builds sequencing skills that are important for communication. Each child is given a story card, and he/she tries to say one or two sentences about the picture. As a group, they learn how to tell a story together.

Simple How-to videos are effective ways of helping children form step-by-step instructions. For example, while a video of How to make a stick puppet plays, the children are encouraged to speak along in this way:

Step 1: Take a chart paper.

Step 2: Draw the picture of a dog on it.

Step 3: Cut out the picture.

Step 4: Paste it on an ice-cream stick.

Step 5: Your stick puppet is ready!

Role-play

Nothing builds confidence better than speaking in front of an audience. Children memorise very simple dialogues for role-playing. After practising in groups, children perform the role-play in front of the class. These role-plays need to be short and have simple sentences with repetitive dialogues that are easy to memorise. The focus is not on props or costumes or expert dialogue delivery – just on performing to improve self-confidence.





Word Bingo

Teachers create word grids and ask children to cross out words corresponding to pictures shown. Points are given for every row/column completed.

Reading English fluently

While speaking builds a huge amount of confidence, children also need to learn to read English text fluently. This not only helps them in school but also allows them to independently read stories and books that they like, building comprehension and vocabulary skills along the way.

Several phonics programmes teach letter sounds and blending. However, very few of them take the child beyond the reading of three-letter words. When children need to learn to read longer words and sentences, the phonics approach is often discarded. They are then taught to read by sight and memorise spellings, resulting in many children failing to achieve reading fluency. In our program, we used the phonics approach to take children from letters to not just reading small words, but also to reading sentences, short paragraphs and stories.

Just as a lot of confidence-building is needed when children learn to speak in English, the same is true of children taking their first steps to reading English. There are many techniques that help in building this confidence. Some of these are:

Play and read

Games are a great means of helping children read words. Teachers can make simple picture and word cards to create simple *Memory Match* and *Bingo* card games that children love to play again and again.





Memory Match

Children play in small groups to find the pairs of pictures and words that match.



The ELF Sentence Builder is a flip-book that helps children move from reading words to sentences. Teachers can make their own version of this flip-book using an old calendar or spiral notepads. Children can flip the left or right half to alter the beginning or the ending of the sentence, and read the new sentence that is formed. This activity can be done in groups as well as individually.

Repeat, repeat, repeat

Repetitive texts give beginner-readers confidence to read more.

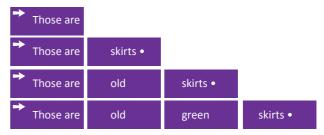
She likes to jump.

She likes to jump and skip.

She likes to jump and skip in the rain.

She likes to jump and skip in the rain all day.

Extended sentences that make reading easy



Expand the sentence

Simple cards used to help children make and read sentences

Keep it simple

Beginner-readers need simple texts with decodable words. Sentences must be short; the font must be large and there must be a lot of white space between words.

Suitable for beginning readers	Unsuitable for beginning readers
Meera gets a new pen. The pen is red. She puts it in her bag. Meera likes her new pen.	Meera buys a new pen from the departmental store. The pen is shiny and smooth and has a golden nib. Her mother asks Meera to keep it inside her pencil box and promise her that she will keep it safe.

English beyond the classroom

How do we ensure that children use English beyond the classroom? In the schools we have worked in, we launched the *Walk 'n' Talk* programme to take English out of the classroom and into the child's home. We wanted children to use English when they went back home after school. But how would this work in communities where no one knows English?

In the Walk 'n' Talk programme, when children went home from school in the evening, they walked around their neighbourhood in groups, asking questions to adults in English. Children would translate the question in Tamil and teach their parents, grandparents and other adults how to respond in English. When children 'taught' adults the little English they have learnt, the entire community felt a sense of pride in them, and this built their confidence.

Celebrating every achievement

If the goal of English learning is building confidence, then children's achievements must be celebrated at every step. Usually, only the toppers of each class are rewarded or appreciated. But if we want every child to learn English, then we need to celebrate *progress*, not *proficiency*.

At the end of each term, we conduct a *Skill Mela* for the children. The entire school takes on a festive atmosphere. There are *Letter stalls, Word stalls, Sentence stalls* and *Picture stalls* set up all over the school. Children can pick any stall at their level and try to read cards at that stall. They may pick up a picture and answer questions about it. If they answer most of the questions correctly, they get a sticker in their diary or card. In some schools, parents were invited to see the progress of their children. Every achievement, no matter how small, is celebrated.

It is not enough to believe that every child, irrespective of their social or economic background, can learn English; we need to make children believe it themselves too. When we build children's confidence along with their skills, we build a new generation of children who are confident of achieving anything they want to.





Chandra Viswanathan is the Founder Director of ELF Learning Solutions, an organization dedicated to the mission of ensuring English skills for children, youth and adults all over India, specifically catering to first-generation learners of English. Chandra and the ELF English team have developed several innovative learning materials for English learning that are being used by teachers and children in more than a hundred schools. Being part of an education non-profit AID INDIA, Chandra has over 20 years of experience in education research, curriculum, training and implementing programs in government schools. A resource person and trainer on primary education for the SSA, TN Govt., schools and NGOs, Chandra has worked with more than 10,000 teachers in Govt. schools towards improving learning outcomes in children. She can be contacted at chandra.aid@gmail.com

Why Children Fear Division

Gomathy Ramamoorthy

Five years ago, I was presenting a paper on the Mathematics Laboratory in my school. In the discussion after the presentation, I was asked: 'We start with one digit in all other arithmetic operations but in division, why do we start from the higher place value?'

My answer was, 'If your understanding of the place value is good, it is not necessary to start the operations from the ones digit It could be the other way around. Similarly, in division also, you can start dividing in either way.'

That question is still there in a corner of my mind. The rule that we follow while doing the four basic arithmetic operations is there in order to set an algorithm. But these rules are not hard and fast.

Division is one of the hardest parts of all the arithmetic operations and children fear it because it involves a lot of rules, especially long division which is the toughest for primary children. In schools, when we start division as a set of rules/algorithms to be followed, we fail to inculcate the real meaning of division. The rules of division are a process but understanding the concept needs reasoning and focused inferential work.

Understanding the concept

I cannot find a better example than the one given by Daniel Willingham, a cognitive scientist and writer, who says that almost 25% of the sixth graders in America think the symbol = means *put* the answer here (ACT, American Educator) They do not understand that the = sign means *equality* or mathematical equivalence.

What is needed in the classroom? In its position paper on mathematics, the NCF (2005) recommends a curriculum that is ambitious and coherent and says that learning mathematics is every child's right. For this, it prescribes that school mathematics should be activity-oriented.

So, to bring forth the idea of the 'mathematics' in division and to make every child of my class learn it, I have attempted an activity-oriented approach in my division classes. I ensure that all my students can learn to do division easily. These ideas are

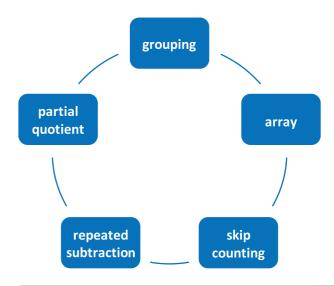
presented here in this article.

Why is division difficult for children?

The problem is not with the children, but in the way, it is taught. Here are some questions to think over and ask whether we are addressing these questions in our classroom teaching.

- 1. What is division?
- 2. Where it is used in real life?
- 3. Is there any situation in our real lives where we divide a four or five-digit number by a three-digit number? (multi-digit computation)
- 4. And if there is such a situation, how many can do it without a calculator?

I would like to refer to an important point here. Children are able to deal with basic arithmetic, including division and fractions in their everyday life before they formally learn these concepts in school. (Parmar, 2003; Mix et al., 1999). According to an NCTM (National Council of Teachers of Mathematics) publication, when students understand, they develop their own procedure to solve a problem. There are a number of ways to make the teaching-learning of division more meaningful. These have been tried in my school with the children of class IV. Our school is a girls' primary school where most of the students come from families living below the poverty line.



Some methods

Array

Since they have already learnt to divide using grouping in class III, I asked them to divide using array. It is done using counters for making arrays (rows). Children make all the possible arrays for a given number and write down the division facts for them. When children do more and more arrays, they become familiar with the concept of the factors of a number. In the traditional method, everything depends on multiplication tables, even in learning factors. With arrays, children understand the concept and know that 16 cannot be arranged as three in a row because three in a row would mean get five rows of three and a one (15 +1). All this happens in a very short period of time, proving that good understanding develops good number sense.

Ganitmala

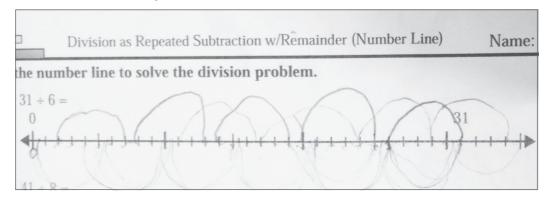
The number line division is a nightmare because

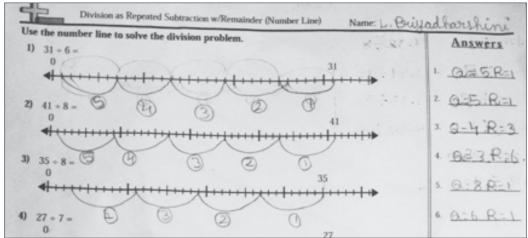
it is an abstraction which is never used in real life, except to develop number sense in maths.

This illustration shows that students cannot understand where to start from and they do not know that the continuity should not break in the middle. *Ganitmala* is a very good representation of number lines. It reduces the level of abstraction. When students use *ganitmala* they develop a good understanding of the number line and make fewer errors.

Partial quotient method

In my experience, the students will learn any concept, whether it be addition, subtraction, multiplication or division, with ease through handling money. I use pretend money for this. The class is divided into five groups and given names of shapes: Cube, Cuboid, Cylinder, Cone and Sphere.





The first sum is to share 132 between two. To do this sum, they draw two stick figures and write down the share of each against them. It has been found that children use self-invented procedures to solve problems. So, the maths problems solved in class should simulate real-life situations that the children can relate to (Verschaffel et al., 2006).

They first divided the one hundred into two fifties. Then they took thirty and divided in into two fifteens and finally the two into two ones. They counted the share each one got, the quotient, and found that there was no remainder.

An important aspect of mathematics is recording, without which the learning is incomplete. Doing

the activity teaches the concept and *recording* it is the way of learning the procedure. Concept and process should go together to connect and make understanding easier. Children bring out the answer by themselves, but teachers should watch out for disputes and ensure the equal participation of all the children in the activity.

Some common mistakes

Children can make mistakes in subtraction, which is an important part of division. For example, in subtracting 80 from 125, the remainder must be less than 100. However, children sometimes do not understand this, and the problem is with not understanding the concept of subtraction. Without addressing that, all efforts to teach her division will go in vain. The first step is teaching subtraction.

Children also make careless mistakes while doing their work, such as leaving out parts of the number to be divided. The teacher has to be alert to these mistakes and be ready to explain the basic concepts behind these.

Every child can learn division

I would like to share my best moment while teaching division. One of my students was given a division sum by her tuition master. She did it using a method taught in class, but her tuition master did not understand that and struck it out, saying that she was wrong and he did it in the long division

method. She explained it to him and pointed out, 'We both got the same answer'. He accepted it and appreciated her. Now the same student is the class topper of International Math Olympiad (IMO) exam and has been selected for the second round of the IMO exam, 2020.

Whether it is learning division in a narrow sense or learning mathematics in a broader sense, there are many factors that affect the learning of children. Teachers and their pedagogical knowledge, use of inappropriate methods and lack of understanding, classroom settings and other factors affect the learning of a child.

There is a belief that maths is generally difficult for children and in particular, for girls. This is just gender bias. Ernest's 1976 study focuses on gender differences in elementary school children and the attitudes of their teachers. This study concludes that the idea that males are superior to females in mathematics is clearly a misconception and that the lack of women as professional mathematicians is likely more due to cultural influences than a lack of ability.

So, I took this opportunity of working as a teacher in a girls' school to prove that learning mathematics is everyone's right and every child can do it. Providing opportunities for girls from deprived communities to excel in mathematics is an important social change ahead of us. I am working towards it.

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Tied with a Single Thread Children, Community and Teachers

Jagmohan Singh Kathait

We have often heard this said, 'पेट में नहीं होगा अनुन तो पढ़ने में कैसे लगेगा मन', loosely translated, it means, 'when the stomach is empty, how will the mind focus on learning?' What else do such aphorisms tell us if not that, surely, survival comes before any formal schooling? Children from the families whose primary concern is to quell the hunger in their stomachs or to look for a livelihood to silence this hunger are often called 'first generation learners' in academic circles. Who knows why they are called first-generation learners? Perhaps because schools are considered to be the sole dispensers of learning. Perhaps because their parents are not able to deduce that, if their children learn to read and write now, they will be able to reap the benefits of their learning in 15-20 years by working in better and less physically taxing conditions. Who knows if it is the lack of an ability to think or an effect of it that prevents one from considering this option? Be that as it may, the consequence remains the same: education is always a secondary priority.

Whereas homework for children usually consists of cursive writing, memorising poems and answering questions, the 'homework' of these children is of a strange kind. On returning home from school, their homework, by default, consists of - fetching firewood, cutting grass, caring for cattle, caring for their younger siblings, looking after the house in the absence of their parents, cutting, threshing and sorting grain and so on. And of course, if it is a girl, then preparing dinner is a must. They find these tasks more natural and necessary than the homework their schools assign to them. Homework assigned by the school seems too artificial and too far removed from their reality. They have to put in a great deal of deliberate effort to complete it. They have to adopt new patterns, moving away from familiar patterns of thinking and selfexpression. And this new pattern is so complex that they cannot establish a connection to it with their everyday lives. Most children hailing from these backgrounds study in government schools, at least at the primary level. That is why the government is liable to ensure that education is made available to everybody.

Popular perceptions

Oh! I got swept away by roles and liabilities. Let us come back to the topic of concern here. I was trying to tell you that it is often said about the children from the aforementioned backgrounds, that is, the children who study in government schools, that they do not meet the expected learning levels. Children in classes V-VII cannot even decode letters. Various organisations produce research that shows this. National seminars are organised to address this. The government also undertakes research in this matter. Various research articles are devoted to proving that the learning levels of the students are not at par with their grade levels.

This entire process tries to assign the blame solely on teachers. It is said that teachers do not take their work seriously; they take too much leave. Our research on teachers' absenteeism shows otherwise. It shows that though teachers are often out of schools, it is due to various administrative tasks. When teachers are asked about low learning levels, they assign the blame to the children's background, their poverty, and their irregularity. This too seems to make sense at some level. They also blame the policies and schemes of the government. But my long-term experience and observation paint another picture, which is, despite these circumstances, there are many government teachers who are working in a better and efficacious manner. This is not my belief alone, but the belief of many village people and communities. It is due to this belief that they come forward to either stop the transfers of such teachers or to bid them farewell. At this juncture, it is pertinent to note and understand that some teachers are able to work well, and some teachers are not able to do the same under similar circumstances. What exactly are the teachers who are performing better doing to deliver better? If we understand the processes of these teachers, it may provide a ray of hope that we may yet yield better results.

Whenever I conjure up a picture of these effective teachers, I can see certain similarities in their

routine practices in school. When I think about my own teaching practices now, I also recognise myself as one among the community of these teachers. I undertook many of the processes they do. Therefore, when I further try to elucidate these processes, I find it hard to completely dissociate these from personal bias and experiences. It is possible that I may not present these teachers' common or similar practices fittingly, however, the practices that I understand, I have attempted to explain here.

Taking part in others' happiness

I have noted that teachers who perform well often visit their students' homes during happy occasions, for example, when there is a birth, a marriage, a birthday or a mundan ceremony. They even visit their houses when a cow gives birth to a calf. If they cannot attend, the children's families often send some khees (first milk produced after giving birth) to the school for them. In taking part in their happiness, not only is a sense of kinship formed between teachers and children and their guardians, but teachers are also able to sense the chemistry between children and the members of their family. By chemistry, I mean the kind of relationship that exists between a child's parents, between the grandparents, between the aunts and uncles and between parents and the child, that is, all the relationships that affect a child's emotional, cognitive and motor abilities. The knowledge of this chemistry greatly impacts a teacher's work strategy. It impacts the way a teacher envisions the kind or amount of hand-holding they need to provide, how sensitive they have to be, what is the kind of motivation required. This helps them analyse the reason why a child is not able to understand something and to find solutions to these issues easily. They do not have to make deliberate efforts for the same, in fact, it is their attentiveness that naturally leads the way.

When a teacher respects the parents by taking part in their happiness, they shower the teacher with love. This love presents itself in a myriad of forms - sometimes as a bag of pulses when the harvest is done and sometimes as a vine of vegetables presented to the teacher, sometimes in the act of saving a plant's first fruit for them and sometimes in a bowl of *khees*. This relation between the love and respect shown to teachers and the teaching practices is an intricate one. It demands to be felt, not made sense of. Here, reason falls short.

Being there for them during sad times

Another quality of teachers who perform well is that they not only take part in the happy moments of the guardians but also stand with them during sad and difficult times. If someone in the family is unwell, they visit their house or talk to them over the phone. If there is a loss in the family, they listen, no matter what kind of loss – that of a family member, cattle, land or farm. They also care about family feuds and quarrels. What is it about the simple act of talking to someone or listening to someone that causes the fibres of relationships to weave in such a manner that our outlook completely changes? The funny thing is, this does not require any special effort. When a connection is felt, enquiries do not need to be made deliberately, they happen naturally. These teachers keep in touch with children even during the lockdowns, empathise with the problems in their homes and remain ever ready to help them out. Perhaps this quality does not have a linear relationship with teaching, but it certainly makes a teacher better and more effective.

Taking part in village affairs

I often find that such teachers make these connections not only with the guardians but with the village community at large. They participate in the prayer meetings and religious festivals of the village in some way or the other. The women of the village often share their marital woes and stories with these female teachers. They also share their health concerns and ailments with them. Teachers also do their part, be it by procuring medicines or offering advice. Perhaps this kind of kindred relationship does not impact a child's learning directly, but it certainly plays an important role at the level of the community's relationship with the school. People in these villages consider the school as their own and endeavour to make the school better in every possible way. They take part actively in school events and even extend their labour for the school if the need arises. In places where such kindred relationships have not been established, we often hear stories of things being stolen from the school, of damage to school property, of drunken messes being created in the school and so on. We often see that the school and the community look at each other through the lens of distrust and suspicion. Matters escalate from protests to even formal complaints.

Relation with children beyond the confines of school

I have found that such teachers are not able to confine themselves to the work-week or the working hours in building a relationship with children. They remain in contact even on the days when school is closed. They are naturally inclined towards knowing the daily routine of children. They often make charts for children after school and procure stationery items like colours, pencils, notebooks and books. They prepare materials and activities for their lessons. A teacher once told me, 'I carefully collect the pieces of chalk, pencils and notebooks tossed aside in my own children's school and use them in my school. What is thrown aside there is easily used in my school. The pencil just has to be pared down a little and it works just fine. One just has to get used to gripping a smaller pencil or piece of chalk.'

Readiness to teach and learn

I have also recognised another common strain among these teachers: all of them are, in some way or the other, constantly concerned about teaching children. If children are not able to learn something, they look for answers. This concern motivates them to learn more. This also leads them to participate actively in various forums. It seems like habits, either good or bad, are woven together like threads. One bad habit evokes another, and one good habit germinates another. Something similar happens with these teachers. Their readiness and dedication inspire them to learn.

Looking through a wider lens

I am not saying that these effective teachers adopt all these practices. However, they are often seen trying. I doubt that only progressive and innovative classroom practices can yield better results for the children from the backgrounds that we are talking about here. Or, should I say that I have not seen this happen yet. However, those who see themselves as a part of not only the teaching process but also of the above-mentioned roles and tasks, certainly yield better results. Looking at education beyond serving the role of literacy and bookish knowledge into the role of shaping a person is imperative. This kind of understanding is built only by interaction with people. Interaction with guardians and a cordial relationship with them not only leads to understanding but germinates the seeds of thought on how to work with children and what kind of work to do with them.

Secondly, it is imperative to understand that a school is a part of a society, not a separate, disparate entity with a distinct identity of its own. Better education is only possible when we stay connected and understand each other. Schools cannot be understood in isolation. Building an understanding like this seems like digging an elephant's grave with a teaspoon. A child is also part of a family and society at large. To truly understand a child, one has to look at the nexus of children, family and society. If we disregard this nexus, we will not understand things as they are. If we are unable to understand things as they are, the interaction between teachers and children will fail to lead to effective teaching. If someone just wants to do their 9 to 3 job, that is fine. However, for effective teaching, this process needs to be understood in its entirety. When we build cordial relationships, we do not need to make deliberate efforts to understand; it just comes to us. This does not only refine a teacher's sensitive and affective side but opens avenues for the furtherance of teaching skills as well.

A Teacher speaks

The day Priyanka came to seek admission, she hid behind my saree pallu. Her maternal grandmother (Nani) had come with her for admission. As we proceeded, I realised that her reading level was below the class average; if she was scolded even a little, she would go quiet; her attendance was also low. When I tried talking to her, nothing much materialised. I thought I should visit her house. Perhaps that would reveal something. When I went to her house and talked to her grandmother, I felt the ground slipping from under my feet. Her grandmother told me that Priyanka's aunt had lost her husband so her parents gave away Priyanka to her to soothe her loneliness. After a while, her aunt began working in Chandigarh so she left Priyanka with her grandmother. I cried profusely on hearing that story. The next day in school, I was about to scold her when my eyes welled up with tears. I quickly went to the office to compose myself. Then, I went back and hugged her and talked to her. I began talking to her whenever she didn't complete her homework. She began coming to school more regularly and began to improve in her studies also. Her grandmother often shares everything with me and even tells me to fetch things for them from the market. She often sends me seasonal vegetables and grains.

Another teacher recounts

Radhika would often come late to school. The issue was often addressed with her, but her tardiness continued. We even announced during the morning assembly that everybody must come to school on time. When I talked to other children, they revealed that her father often wakes up late in the morning. I thought it would be best to go to her house and talk to her family members. When I went to their house, I found out that Radhika's mother had immolated herself and died. Her father was in the habit of drinking till late and waking up late and therefore. Radhika came late to school. When I talked to her father, he sent me off to her aunt's house. When I thought of Radhika, it pained me. I became more vigilant and more kind to her. I often visited her at her house. One day, when I went to visit her, all the children scattered hurriedly. They hid whatever they were working on. Papers and little balls of dough were scattered everywhere. I believed it best to not probe too much into it and address it at another time.

Another day, all the teachers were sitting together and checking notebooks after an exam. When I went to the classroom, I saw Radhika along with her aunt's sons quietly making paper bags. As soon as they saw me, they hid them. When I enquired calmly, they told me that they make these paper bags and sell them in the market. I set up a crafts class for the children and began to teach everyone the craft of making paper bags. Radhika and her cousins were experts. They began teaching the other children. The next day, I brought old newspapers from home. The children gave all the bags they prepared to Radhika. Radhika, who was once hesitant to reveal her work to anyone, was now taking pride in teaching others. Her studies improved as well and so did her attendance. She wrote to me one day that she wishes I were her mother. She sees her mother in me.



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The Idea of Pedagogy of Connect A Strategy

Joyeeta Banerjee

Aims of 'connecting' as a strategy

At the very beginning of the article, I would like to say that this article is intended to open up a dialogue to make a connection happen and a pedagogy of connect to evolve within the arena of formal learning. It is of utmost necessity at a time when the whole world is fragmented by a pandemic, racism and the climate crisis. Our learning entirely in an enclosed educational space which not only functions like a learning machine but also as a machine for supervising, hierarchizing, rewarding. (Foucault, 1991) has failed miserably creating 'psychic anxiety and existential uncertainty' (Pathak, 2020).

Why is this? It is because our disconnected learning does not create opportunities of learning rooted in the social, economic and cultural reality of the learners, especially the disadvantaged learners. The arena of secondary education is now filled with firstgeneration learners (FGLs) because of the various educational policies and schemes. First-generation learners in the rural secondary schools 'who belong to many social categories' (Banerjee, 2017) feel a sense of otherness in formal, 'enclosed educational spaces' because the pedagogy neglects 'the manner in which these students are motivated, are self-efficacious, form language learning beliefs and acculturate' (Jamshidi, 2013). Therefore, it is the responsibility of all the stakeholders of education to create learning spaces for those disadvantaged learners which ensures 'equitable participation' of the learners irrespective of their generational status.

I have discussed elsewhere (Banerjee,2018) the challenges that FGLs face in school and how the schooling processes contribute to their alienation. The formal enclosed spaces of learning are indeed 'social spaces where cultures meet, clash, and grapple with each other, often in contexts of highly asymmetrical relations of power...' (Pratt,p. 34)

As a language facilitator and a researcher who likes critical inquiry even within the pedagogy of neglect that is delivered on the basis of a 'banking model' (Friere, 1970), the conceptual framework of this article is dependent on 'critical consciousness'. This article endeavours to develop pedagogical strategies that can be deployed to 'break the fourth wall' (Brechtian theatrical technique) and pave a way for creating 'critical consciousness' among all learners.

Identification of neglect

As a language facilitator, especially a second language, I have to keep in mind that the goals of language education as dictated by the educational policies, schemes and the demands of the privileged is to develop' grade-level competencies' and introduce the learners to new cultural norms. For FGLs whose second language acquisition is akin to learning a second culture (Brown, 1986), second language classes become an ordeal because the 'formal, elaborate, context-independent language of school is different from the restricted, esoteric code of conversation at home' (Barnstein, 1971). Moreover, the burden of learning grammar before writing ruins the prospect of engaging meaningfully with an alien language. So, I suggest that identifying areas of neglect hidden in the pedagogical approach of language learning is the first step to begin the pedagogy of connect which is the foundation stone of a strategy that can overhaul the entire language learning process and aid the formation of critical consciousness.

As an independent researcher and a language facilitator in a government-aided rural secondary school, I have found that our education system remains co-opted into an economic imperative centred on growth and inequality. The process of alienation begins here. There is a 'culture of silence' among all learners, but more so among the FGLs.

Being a second language facilitator, I need to identify how my pedagogical approaches become only a 'means used to exert linguistic power' (Phillipson,1992) and establish the dominant narrative of a monolingual world. It will help FGLs to start questioning their own language

learning beliefs. First-generation learners should be encouraged to critically look into their own language learning beliefs and how it affects their attitude towards their own mother tongue. This will help them to question the neglect latent in the language of the privileged class and how this neglect is embedded in the pedagogical strategies followed by schools. Once the neglect is identified, then, the remaining steps fall into place.

Classroom organisation

I consider classroom organisation has a major role in creating connected learning. It captures the structural aspects of how a teacher structures his or her classroom (Strange, et al). The present physical organisation of the classroom makes the learner sit in rows and the facilitator seems to be pitted against them, standing. This very organization creates 'a single great table' with many different entries, under the 'scrupulously "classificatory" eye of the master' (Foucault, 1991). First-generation learners who confront this form of arrangement for the first time feel a sense of otherness in the process which hinders the making of meaningful connections with the classroom processes. Therefore, they are left behind in attaining grade-level competencies and tend to avoid the proximity of the facilitators and others, who have a background of formal learning in the classroom (Banerjee, 2013). Therefore, it is the responsibility of the facilitator to change these arrangements by rearranging the learners in a circle or a semi-circle with the facilitator seated within the circle. It becomes challenging in a large class. In such classes, it is needed to introduce rotation of seating arrangements on a daily basis.

Engaging the learners

The enclosed educational spaces where I deliver my language classes are pedagogical machines which reaffirm the imperatives of health, qualifications, politics and morality (Foucault,1991), and neglect all real-life affirming processes. The education I deliver is deeply embedded with the 'self -perception of modernity- its notion of human supremacy over Nature, narcissistic belief in unlimited 'progress'

through the oracle of techno-science and its power to predict, control and establish order' (Pathak, 2020).

First-generation learners, who are nascent learners in secondary education, are trying to soak in the code of the so-called 'modern learning' for the formal elaboration of social hierarchy, need assertion of the fact that the learners themselves are enriched with the vast array of knowledge that they have already acquired from their experiential living. They should be encouraged to help the facilitator and the others to 'unlearn modernity' in the present world, where teachers and educators have failed to impart meaningful connectedness with the 'nuanced art of living' (Pathak'2020).

The engagement of the comparatively less conditioned minds in a language class should serve as a springboard for affirming their dignity through localised literature and songs. The learners, irrespective of their generational status also understand the consequences of the plundering of Nature and critically enquire their own roles in the anthropogenic climate crisis. Studentled seminars based on the topics of their own choices have to be conducted weekly within the classrooms to promote a dialogical relation in the classrooms and introduce the learners to a new praxis of connectedness by becoming critical co-investigators in dialogue with the teacher.

Assessment: The final cog in the wheel

The present process of assessing objectively with the help of MCQs tends to develop fundamentalism among the learners. They are indoctrinated to the concept of a single correct answer. Moreover, the young minds are already conditioned to have total faith on the degree – job nexus. The higher the degree, the better the job makes the overhauling of the assessment process a challenge. Therefore, to introduce learners, especially FGLs, to critical thinking, the projects should be based on their direct experiences of lives and languages. Though this strategy would be hard to follow in the beginning, once practised would yield the expected outcome - creating critical consciousness.

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Seeing the seed through its germination process, understanding the trees in one's vicinity...This real learning is the purpose of our schools, which also reassures the child of this purpose and determines if she finds it a space for herself or not.

Shivani Taneja, Bringing the Last Child into School, p 79.

Language and Arts Interventions The Nizamuddin Model

Jyotsna Lall and Hyder Mehdi Rizvi

Hazrat Nizamuddin Basti is the home to India's pluralistic traditions and the shrine of the revered 13th century Sufi saint, Hazrat Nizamuddin Auliya, visited by pilgrims of all faiths. This 700-year-old settlement is home to a community of over 10,000 people and over 70% work in the unorganised sector. The Nizamuddin Urban Renewal Initiative of the Aga Khan Trust for Culture and Aga Khan Foundation is a public-private partnership project that aims to use heritage conservation as a stepping-stone to improving the quality of lives of the community in Nizamuddin Basti since 2007.

The programme interventions in the area were designed based on a Quality of Life survey, where the poor quality of education of children emerged as a major issue. This was not surprising as Nizamuddin Basti is 98% Muslim and the Sachhar Committee report of November 2006 had already identified education, particularly in women and girls, as a major issue. In Nizamuddin Basti, this problem was compounded with most of the children coming to the municipal primary school being first-generation school-goers.

The Nizamuddin Urban Renewal Initiative worked on improving the municipal school through improving the physical infrastructure, school management, classroom processes and engagement with the community.

Background

The parents of children enrolled in the SDMC school may be classified as literate, but it is a wide range and their occupations and home environments were rarely conducive to learning. The limited literacy of the parents, their long working hours, absence of print material at home, the need to take care of younger siblings, early exposure to domestic violence and abusive language, characterised the lives of the children in the school.

The nature of Nizamuddin Basti is such that it attracts people from all over India, though there is a predominance of people from the Bihar, Bengal and Uttar Pradesh. This also means that a significant number of children enrolled in the school do not speak Hindi at home, which is the language of instruction in the SDMC school. Exposure to spoken English is even more limited.

So, if we try to identify the common factors that define children enrolled in the SDMC primary school in Nizamuddin, they would include - from a resource-poor family, almost definitely Muslim, little academic support available at home (some may hire another young person in the Basti as a tutor) and, quite likely, the language of instruction different from the mother tongue.

Status of school in 2007

The primary school in 2007, when the project began, was a desolate place with barely 50-60 children coming to school, even though the enrolment was over 100. The school did not run for the minimum number of hours it was supposed to and curriculum transaction was not a priority for the teachers.

The school building and its maintenance did not help towards creating a learning environment and did not even meet the SDMC's safety standards. Classrooms were poorly lit and ventilated, had uncomfortable furniture and no classroom displays. The teaching-learning process was characterised by rote learning interspersed with physical punishment. The teacher-child relationship was tense if not one of fear and classroom processes were uninspiring. The attendance of the children and teachers was irregular. The academic levels of the children were neither age- nor grade-appropriate; worse was the teachers' attitude who did not think that the children were worth teaching and the parents' attitude who felt that their children could not learn.

Process of school transformation

It is widely accepted by the community of Nizamuddin Basti and visitors that the South Delhi Municipal Corporation (SDMC) school is a transformed place. The transformation of the SDMC Pratibha Vidyalaya has taken place under a people-public-private partnership with the SDMC, Archaeological Survey of India (ASI), Central Public Works Department (CPWD) as the public partners and Aga Khan Foundation and Aga Khan Trust for Culture as the private partners (together referred to as Aga Khan Development Network (AKDN)). One of the motivations behind creating the changes was our strong belief that every child could learn if given the right opportunity and environment to do so.

The work in the school began after discussion with all the stakeholders. First, we had a discussion with the community through several cluster-level meetings to get their opinion on the projected changes. This also included a visioning exercise with the parents and children on what their idea of an ideal school would be. Parents and children shared what they would like their school to be.

Second, an internal assessment of the physical infrastructure was carried out — bearing in mind that changes in the infrastructure and processes in the school would lead to an increase in the number of students enrolled in the school. This included condition assessment and gap identification with SDMC norms. In addition, a specialist architect was identified to help design the building so that the school building itself could be used as a learning aid. This is called the *Building as a Learning Aid* (BaLA) approach.

Third, the academic levels of the children were assessed in Hindi and Maths i.e. literacy and numeracy with the help of the Department of Education, University of Delhi, to help design interventions.

Based on the baseline assessments and analysis of the situation, the following areas were identified for intervention by the Nizamuddin Urban Renewal Initiative. These were as follows:

- Physical improvement of the building and improvement in infrastructure
- School management
- Classroom processes that include curriculum enrichment and other strategies
- Engagement with the community
- After-school programme so that the children continue their education

The Nizamuddin model

The Nizamuddin model is essentially working on most of the determinants that improve the quality of education and indeed the quality of life. It is for this reason the project works in the areas of early childhood care and education, primary education, health, livelihoods, sanitation, solid waste management and culture.

This article focusses on two elements of classroom processes and curriculum enrichment i.e. language teaching and arts intervention as a change to help children learn.

Language teaching

The most common strategy used to teach Hindi at the primary level is to teach the alphabet, then memorise the *barahkhadi* — which could be translated as the vowel-consonant cross table. Children are, then, taught short, two- and three-letter words without *matras* (vowel sounds) and then, small sentences using these words. Following this, children are supposed to read chapters in their textbooks and do the written work, mainly answer questions.

The SDMC school used NCERT textbooks that had undergone a complete change in the language teaching approach following the National Curriculum Framework, 2005 and used the *whole language teaching* approach. The teachers, unfortunately, had not undergone any in-service training and therefore, were not comfortable using the new textbooks.

The Aga Khan Foundation addressed this issue in the training programmes that it organised for the SDMC teachers and appointed community teachers. Teachers learned to make lesson plans following the new approach and made story maps, character pyramids, character analysis, the 6 Ws framework - what, when, where, who, why and whom and were trained to identify the central idea and its relationship with other ideas in the story. They also learned how to 'make' these new types of exercises. Lesson plans for the entire textbook were made and this helped the teachers work with the new curriculum. Teachers were also helped to understand the philosophy behind the changed approach to language instruction.

Teachers prepared teaching-learning material during the training so that the children could learn to read in context - the major change in the new approach with lots of games. A library was created to facilitate language learning.

The training programmes also focussed on physically reorganising the class based on the activity being undertaken. The school transformation process had included changing the furniture to lightweight furniture that the children could change themselves as opposed to always sitting in rows. Children were not used to working in small groups, but they gradually





learned that each child needed to contribute when they worked this way. The teacher would call the children close to her during the story reading sessions adding to the enjoyment element in class. While the SDMC continued with its end of the year examinations, Aga Khan Foundation focussed on assessing learning in which the child was assessed for reading, writing, comprehension and speaking. The assessment also included questions that required the child to move away from the given text to use her imagination.

These multiple strategies helped the children improve their language skills and the enhancement in language capacities of children ranged from 20 percent to 80 percent.

Arts intervention

Given that this project is led by the Aga Khan Trust for Culture, arts intervention seemed like a logical way forward. The start was with a theatre and photography workshop where the children invited their parents with invitation cards that they had made. This was the first time that the community had been invited to the school to see a play. Space needed to be created for this intervention. Time had to be carved into the school timetable, resource teachers identified, and opportunities for the children needed to be created.

Two arts teachers were appointed and the timetable

was changed so that each child had access to, at least, an hour of art; theatre role-plays in language teaching; monthly *bal sabhas* and weekly special morning assemblies where special days began to be celebrated so that children could have a formal platform for expression. A magazine for children, *Rang Tarang* was also introduced for their writings and drawings. An element of cultural appreciation was also added with the heritage curriculum as well as environmental consciousness through the eco-club. A special set of activities were conducted on the designated 'bagless days.'

All these interventions have helped the children expand their world view, gain platforms for expression, gain confidence and positively impact attendance and thereby, regularity in attending school.

In Nizamuddin Basti, where the largest section of the parent community has poor levels of education but wants to educate their children, it becomes very important to engage with the community. Oftentimes, the parents fall short in confidence in engaging with members of the teacher community.

Points to ponder

The school has been transformed but the larger question of the continuity of the work without the additional resources provided/generated by the Aga Khan Development Network agencies remains a question mark. Given the government's current levels of expenditure, it seems unlikely that additional resources are on their way. The Government of NCT of Delhi has sanctioned 26% for education, arguably the largest allocation. However, primary education falls under the local government, (in this case the municipal corporation) and so that allocation does not benefit this school. Here are some issues which present themselves as we go forward:

• The factors that facilitate learning are now very well known, yet government schools continue to be understaffed, dirty, unexciting places that do not inspire children to learn. There are many research studies on optimum hours of instruction, whether mid-day meals encourage attendance, whether the presence of toilets increases the enrolment of girls and we certainly know the importance of these. However, we seem to lack the intention of creating schools that invite children to learn. It would be great if the debates were on curriculum transaction, language teaching approaches rather than what we know about the basic requirements of a school.

- What will it take for the education administration to treat teachers as autonomous individuals who know what their children need and support them?
- Children in Delhi have not been going to school regularly since November for one reason or another winter smog, severe winter, protests, riots and now COVID-19. While children from well-to-do families have access to digital classrooms, children from resource-poor areas do not. The maximum time the younger children from such families get on the phone is 25-30 minutes and they do not have computers at home. The SDMC has begun some form of digital support but the impact remains to be seen. Children who are enrolled in 'public schools' under the EWS quota will face a huge learning gap as their classmates from more affluent families would have had access to digital classes.

What the impact of all this on not just going to school, but on all aspects of their learning will be, remains to be seen.



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A Discussion on Addiction From the School to the Market

Khilendra Kumar

These were the early days of the Azim Premji School. One day, during one of my music classes, an incident took place that touched me profoundly. This was in class I. I learned much from this class - how well-acquainted children are with the incidents that take place in their environment and how they are involved with their surroundings as well. Children observe their surroundings, they see and hear what is happening around them, reason with it and build their understanding. One such anecdote, that I believe is worth sharing, I am presenting here. The discussion with the children happened in their regional language. However, for the sake of simplicity, I am writing this in Hindi. (The article has been translated into English).

In the second period, when I went to my music class, I began the class with the poem 'bade swere uth murge ne'. Children were singing the poem one at a time. The singing was proceeding nicely when a child mimicked the crow of a rooster. Everybody started laughing at the mimicry.

This is when a child exclaimed, 'Teacher, look. He has lost a tooth!'

A second child said, 'He doesn't brush his teeth.'

A third child said, 'His tooth has rotted.'

Another child claimed, 'He eats pouch.'

Upon hearing the word 'pouch', the child who was being called out got very angry, saying, 'Teacher, they are accusing me just like that. I don't eat such things!'

I asked them, 'What is this 'pouch'?'

Children responded, 'Oho! You don't even know what a pouch is?'

'No,' I said.

Children explained, 'It's something you eat.'

'So, if it's something to eat, what is the problem if he eats it?'

Children replied, 'Teacher, you don't know. He is hooked on it.'

'So what if he is hooked on it?'

To this statement, children gave several examples of things people do when they are intoxicated, such as, 'they wobble here and there', 'they bump into

light poles', 'they start fights at home', 'they fall down on roads', and 'they use bad words'.

I asked them, 'Oh! So, is that a good thing?'

Children replied in unison, 'No.'

I agreed, saying, 'Yes. Even I don't think this is a good thing. Where do you get this 'pouch'?'

They replied, 'At the shop.'

'If this is a bad thing, why do they sell it?'

The children answered, 'Teacher, to earn money, what else?'

'So, is selling this 'pouch' the only way to earn money?'

Again, they replied in unison, 'No.'

'Then?'

Children replied, 'We can earn by selling potatoes, by selling onions, by selling chocolates, by selling biscuits, by selling our crops, by selling comics, by selling chips.'

'Then, this selling of 'pouch' should be stopped.'

Children replied, 'Yes. That's true.'

I asked them, 'So, how will that happen?'

They replied, 'We will go to the shop tomorrow and tell them not to sell 'pouch'.'

The discussion was underway. But it was time for the next class, so I left.

At the beginning of the discussion, I was acting as though I was unaware of gutka. Consequently, after a while, the children came up to me to show a drawing they had made on the board, saying, 'Teacher, look. this is how they always hang up that 'pouch' in the shop.'

The next time I went to their class, they shared their experiences with me. Their experiences were varied. Children shared, 'We went to the shops in our colony/street. The shopkeeper and people sitting there chased us away. They also laughed at us.' Other children shared, 'The cart-seller told us that he won't stop selling.' A girl said, 'My papa said he will stop. But he is still selling it.'

I have worked in several organisations before. However, such an interesting experience was a first for me. The realisation that young children have such awareness was new to me. In schools, there is often a stipulated time period set for different teachers and during that period, they are expected to teach a certain subject and the class revolves around that. However, I thought that in order to understand children and the incidents that take place in their surroundings, a dialogue would be a useful way. And there is a space required for the same. For this reason, I put aside the activity I had planned for my music class in favour of taking the discussion forward with the children.

From the dialogue, I realised how in their immediate surroundings, indeed in society at large, children's expressions are either quelled or ignored by adults. Their thoughts are not given due attention or are discarded as juvenile. Although these children did not have the physical or mental ability to convince adults or to debate with them, the fact that they were able to differentiate between right and wrong, and present their opposition amongst adults is a monumental achievement. If their conviction persists, they will surely play an invaluable role in building a better society.



Children's drawing of 'pouch' sold in shops



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A Ray of Happiness in the Indian Education System?

Kriti Gupta

From the beginning of time, the meaning of education has been dynamic. It has changed from being defined as one's *dharma* in ancient times to being understood as 'scientific thinking' today. Mirrored in the Preamble to the Indian Constitution is the definition of an educated Indian: a person with scientific temperament and liberal outlook, who is capable of individual thinking. She will bring an era of new knowledge on the foundation of her observations, experimentation and reflection by being peaceful and happy (Liav Orgad, 2010, Heignotes, 2016). But is this dream, which the nation saw in 1947, being fulfilled 73 years after its independence?

Aims of education

Any investment made by a government in education is done in the light of future gains. We are able to open new doors of knowledge and innovation in the fields of science, mathematics and arts. But we cannot close our eyes to the fact that even after educating a large number of young people every year, we are not able to assure them of a life without

the evils of violence, bitterness, greed, hatred. Globally, the greatest threats facing humankind today are situations rapidly rising due to societal evils (Directorate of Education, Government of the National Capital Territory, Delhi).

Then again, India ranks 133rd in the World Happiness Report 2018, as well as accounts for the highest student suicide rates in the world (ET Contributors, 2018), statistics which question our education system on the wellbeing of students in Indian schools.

Considering this as a crisis, the Delhi government imagined a curriculum which would not only promote cognitive development language, literacy, etc but also address the wellbeing and happiness of the students (SCERT, Delhi, 2019). To make this dream a reality, in July 2018 the Delhi Government's Aam Aadmi Party launched the *Happiness Curriculum* from Nursery to class VIII in all government schools of the national NCT (National Capital Territory).



I did an independent study on the Happiness Curriculum as my winter field project and spent more than seven weeks in the field: in eight government schools of Delhi, starting from building a relationship with teachers and students to interviewing, observing classes and holding focused group discussions with teachers and other academic authorities. This helped me to understand, more comprehensively, the curriculum's pedagogy and its classroom applications.

What is the Happiness Curriculum?



The Triad of Happiness

The Happiness Curriculum (HC) is a scientifically designed course which is based on a strong humanitarian and social model designed by a philosopher named, Agrahar Nagraj (1999) called, The Triad of Happiness (SCERT, Delhi, 2019). According to this, human beings get happiness through their senses, relationships, and learning. Each of these, in turn, addresses the four dimensions of human life: the material, the behavioural, the intellectual, and the experiential. According to A. Nagraj, human beings need and seek fulfilment from all these aspects of living, resulting in peace, satisfaction and joy that together constitute human happiness.

Based on this model, the Delhi Education Department built its curriculum in such a way that all the units and modules eventually provide access to children to all three forms of happiness. The modules have been designed in a spiral format which means that every subsequent theme will link

to the previous one and knowledge will get deeper as the child progresses from one class to the next. A 'Teacher's Handbook for Happiness Class' was provided for teachers' guidance.

According to the creators of the syllabus, its contents are universal and designed age-appropriately with the guidance of teachers, philosophers, and others. The intended outcome of the course is to enhance students' awareness level, mindfulness and deepen learning so that they lead a happier and more meaningful life irrespective of what they become in their futures. The creators believe that with this course, every child, regardless of ethnicity, region, religion, and caste can learn how to be happy, because happiness is a skill that, with proper guidance, can be *practised* and *learned*.

Salient features

- Every Happiness class has three main components – mindfulness (10 minutes), an activity or story (25 minutes) followed by activity-oriented discussions. Each day has a specific focus, for instance, on Mondays, there is a special focus on mindful listening; on Saturdays, on expression and so on.
- The curriculum does not follow a rigid timeline.
 Teachers can choose to remain with one unit for an entire year if they feel the essence of the unit has not been delivered to students.
- It follows a child-centred pedagogy, where children lead the class and the teacher facilitates the discussions.
- There are no written examinations or grading systems. Evaluation is carried out to directly monitor and observe the status of happiness in each child's life.
- The objectives of this curriculum are completely synchronized with the National Curriculum Framework 2005.

Happiness Curriculum and Moral Science

After the launch of HC, the major criticism this curriculum has faced is its similarity with the Moral Science (MS) programmes which have already been a part of our education system for decades.

In my study, I found that, while the two programmes overlap, they are not the same. The core values of both are similar, but they are different in their features. The MS programme is based on the aim of giving pre-decided values to students. The stories and the pedagogical methods used are more teacher-centred, where the common question

asked during the discussion is What have you learned from this story?

My observations of happiness class revealed that questions are asked more in a child-centric manner; the question is never what have you learnt, but are why do you think a particular character does this or what might we do if we were on his/her position? The answers are left to the students to think and reflect upon.

It simply implies that whereas in an MS class, 45 students take a single moral from the story, in the Happiness class, there could be 45 different perspectives of the same story.

Perceptions about the Happiness Curriculum

I found that although the HC is currently being conducted in a very small proportion of schools in comparison to the number of schools in the country, still the idea of it is very different for all the stakeholders.

- For Principals, Happiness Coordinators and District Coordinators, it is about building selftrust, healthy relationships, a good and safe society, and promoting sensitivity for ecological sustainability in children.
- For Teacher Development Coordinators and School Mentors, it is more about increasing the power of concentration in children so that they can focus mindfully on things.
- For teachers, it is about good and bad habits and moral values which help children deal with their stress levels so that they can focus better on their studies.
- For students, it is a fun period in which they hear stories, do activities while learning achchi baatein (good things).
- For AAP officials, it enables and strengthens our education system for the all-round development of humankind by making students honest and responsible human beings. (SCERT, Delhi, 2019)

The HC is viewed from different perspectives for each stakeholder. One of the reasons for these perspective differences is the inadequate training which happiness teachers have received in these two years – just one workshop in early 2018 during the launch. This means all new teachers and the teachers who took this curriculum for this new session were not given training, although to help new teachers, the Happiness Coordinators, School Mentors, and Teacher Development Coordinators (TDCs), who get more frequent training than the

teachers themselves, are there to guide. But the data collected shows that because of academic pressure, there are very few regular meetings in the school that focus on the HC. This has resulted in creating a gap between the teachers and the government.

Another reason for the unpreparedness of young teachers is that until now, teacher training programmes do not train future teachers in this curriculum and new teachers get to know about it only they come to school. Consequently, the most reliable guide for teachers is the teachers' handbook, which has now become the only reference book for all the young and new teachers of the HC.

Impact on students

It has been found that there is a visible positive impact on the children. According to the teachers, this curriculum has helped both them and the children to bridge the teacher-student gap. Violence, especially in boys' schools, has reduced. Children have started sharing their personal stories and experiences which have led to the creation of a safer and non-judgmental space in the school.

Parents also see a visible difference in their wards, they say that their children are now learning a lot of things which will help them in life. For example, one of the parents shared the insight that earlier their son would always demand something or the other whenever they went to the market but now, he has stopped doing so. 'I don't want anything to show to my friends, I will only take things that I need,' the son tells the father.

Way forward

My findings from this study were that this curriculum has had some positive impact on students' lives but its larger impact on the education system cannot yet be established because of the limited duration of the curriculum as well as of my study. But one thing which my study can establish is that every child can learn to be happy in our education system if educators, teachers and parents work together. Right now, HC is not a part of our national curriculum, but the values it contains have their origins in the National Curriculum Framework (NEF, 2005) and Learning Without Burden (1993). This means if we can implement these national guidelines and suggestions keeping the Delhi model in mind, and any school, teacher or parent can help children and themselves, practise happiness.

The only thing we need to believe is: Happiness is much more than a feeling. It can be taught if

guided and practised well.

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Making Learning English Easier

Poulami Samanta

Nowadays there is pressure on everyone to learn spoken English. There is the feeling that if a person does not learn this language, she might not be 'successful'. As with any language, learning English needs opportunities for practice. There are many reasons why children find English difficult to learn, especially if they are more used to speaking their home languages. Here are some of the reasons:

- Diffidence
- Lack of proper learning activities
- Absence of suitable environment for conversations in English
- · Greater use of mother tongue
- · Lack of parental co-operation
- Teachers' inability to create the right learning atmosphere or a safe space for learning

Ways of enhancing the learning of English

Direct method

The teacher converses with the students only in English and leads the class in presenting new sentences. Later, in the course of the conversation, the teacher guides the students in speaking the language. The technique of presenting the sentence with the help of audio-visual aids should be used. Material aids, like pictures, models, flashcards, actual objects, worksheets, etc are very effective if they are made attractive and interesting for the learner in the initial stage. Constant use of English would help students in speaking and reading in English.

Grammar-cum-translation method

The teacher begins the lesson with vocabulary items. The meaning of the words is explained in the mother tongue/local language. Then, the teacher translates the passage and explains the grammatical items with the help of mother tongue/local language. The learners are asked to copy the grammar rules in the mother tongue/local language. Finally, unfinished exercises and learning of rules are given as assignments.

Learning variation of a word or its uses

Learning and capturing other related words in the classroom or home, for example, the words *tidy* and *untidy*, *tidying up*, etc.

What a teacher can do

In many cases, the classroom could be the only place where a child gets the opportunity to learn and practise a new language, especially English. The teacher has to be alert to the ways in which children could be helped to learn. Some of the ways in which this can happen are, making sure the class gets enough reading material and speaking opportunities. Learning new words through reading stories or speaking on a subject in the class is a very effective strategy too.

Enhancing vocabulary

A good speaker has new words her vocabulary and uses them while speaking. So as a teacher, introducing at least ten words every day and trying to find chances to use it in the class the next day would help.

Helping children overcome hesitation

Hesitation and thinking about how people 'see' you if you commit mistakes while speaking is a great fear that almost everyone, especially nonnative English speakers have. This fear will remain unless it is removed by a teacher who can create a safe space where all the children are given equal opportunity to convey their thoughts and views.

Storytelling

Help children to focus on speaking *fluently* rather than *correctly*. Encouraging then to tell stories is a good way of doing this.

Watching English movies

Encourage students to watch English television programmes or movies if possible. It is a good way of learning new words and phrases. If these can be watched together during school hours, there can be a discussion after such a session.

Keeping a notebook and using a dictionary

Encourage children to keep a notebook of new words and help them to look these up in the dictionary. This could be an interesting classroom activity.

Using local language as well as English

Learning English can become easier and more understandable if teachers use both the local language as well as English. For instance, children should be encouraged to use the local language to interpret stories.

Describing pictures in small sentences

Students can develop their ability and understanding by describing pictures. Ask them to observe a picture and describe it in simple sentences. This activity is helpful for different levels of students in the class.

Making sentences from words

Every child can learn how to frame sentences both in English as well as the local language with a little help and encouragement.

Making picture stories

Get the students to arrange pictures in a sequence to tell a story. Encourage them to tell the story as well as describe the pictures in both the local language and in English. This activity develops the thinking and imagination of pupils while improving their English.

Reading the newspaper

This is useful for older children. Teachers can use the newspaper as reading practice and encourage children to use the dictionary for difficult words. Having a discussion about a news item is good for the practice of speaking.



Extending a story

Each and every child in the classroom can take part in this activity by using their imagination to make up a new story even after the story has ended.

Using the library actively

A library, or even a class library, can be a great resource if used well. Reading always increases vocabulary and helps in writing skills.

Conclusion

There is no one method which suits all children, so it is the teacher who must select the best method of teaching English according to the needs of the class. A method of teaching that may be successful in an urban environment, where technology is available may not work in a rural area. The activities and processes that I have described can help pupils in rural areas to learn English.



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Zeroing in on the Zero Score Group

Rashmi Paliwal

Background

Eklavya is a non-government organisation based in Madhya Pradesh working since 1982 towards innovations in school education. This article draws on Eklavya's intervention between 2015-19 for primary school children in thirty-four villages of a tribal block in Madhya Pradesh. The goal was to ensure that language and maths competency scores improved over four years of work. This was achieved to some extent: however, we discovered that some children who attended school, as well as Eklavya's support centres, remained at the level of zero score over a year of attendance. We will discuss how Eklavya examined the issue and the possible steps that were envisaged to help all children learn. Many organisations, including Eklavya, work with much hope and sincerity to enable all children to learn. We focus a lot on developing innovative materials, activities and methods; on training, workshops and follow up meetings with educators and teachers; on alternative and holistic ways of assessing learning in children and so on. In addition, in the past five years, I have learnt the benefits of closely maintaining and studying data to fine-tune these efforts for greater impact.

Methodology

I participated from October 2015 to March 2019 in *Eklavya's* project for universalisation of elementary education in the Tamia block of Chhindwara district under the aegis of the Jamsetji Tata Trust. This was conducted in 34 villages, reaching about 3500 children of 37 primary schools and about 1800 children of 15 middle schools. *Eklavya's* core team of six people worked with a field team of about sixty-two people to conduct two hours of out-of-school support centres for primary level in forty-nine locations and weekly support to schools in running libraries, activity centres, use of teaching-learning material (TLM) and teacher development processes.

The impact of the work was monitored through collecting and reviewing data of attendance of each child on a monthly basis, both in the school and in *Eklavya's* out-of-school centres, called Shiksha *Protsahan Kendra* (SPKs). The impact on learning levels was studied through a sample study done in seventeen of the thirty-four villages. Children of class III and class V were assessed.

The basic, initial plan was to track if the scores achieved by these children improved in each subsequent year of the project. The assumption was that with Eklavya's continuing support of children, teachers and parents, learning levels of each subsequent batch of children should improve. So, a child in class III in February 2016 would have had the support for just a few months; a child in class III in 2017, would have had the benefit of the support for a year; a child in class III in 2018 for two years, and in 2019, for three years. The aim was to ensure that all children in class III achieved the basic competencies of class I in Hindi and maths at least by the time they finished class III and that all children in class V achieved the basic Hindi and maths competencies of at least class III. These were tested through written and oral exercises conducted in February-March each year by the Eklavya core team and some of the field team members. Each year, around 150 children of class III and 150 children of class V were tested. The test paper/tasks were the same for all these years, given to different batches of children.

Did every child learn?

Our findings

Average scores

Presented below are the comparative results from the baseline (2016), mid-line (2017), end-line-1 (2018) and end-line-2 (2019) study of four consecutive batches of classes III and V. It shows that the performance did improve over the four years as there is a rise in the average scores.

Maths class III	Average score in percent	No. of students	
End-line 2018-19	68%	158	
End-line 2017-18	53%	141	
Mid-line 2016-17	42%	161	
Baseline 2015-16	33%	161	

Maths class V	Average score in percent	No. of students	
End-line 2018-19	45%	188	
End-line 2017-18	34%	165	
Mid-line 2016-17	31%	165	
Baseline 2015-16	28%	152	

Language class III	Average score in percent	No. of students	
End-line 2018-19	38%	154	
End-line 2017-18	34%	136	
Mid-line 2016-17	30%	161	
Baseline 2015-16	18%	151	

Language class V	Average score in percent	No. of students	
End-line 2018-19	59%	191	
End-line 2017-18	49.4%	162	
Mid-line 2016-17	49.2%	164	
Baseline 2015-16	41.6%	141	

Children in zero score

We looked at the percentage of children in different scores - 0,1,2,3,4 - as the case may be in each test paper. We could see that the percentage of children scoring 0 had, by and large, come down over the four years except in the class V maths and, to a lesser extent, in the class V language sample. For example, in class III Hindi sample, there were 65% of children in zero score in 2016, 50% in 2017 and 45% in 2018 and 39% in 2019. In maths, class III batches, the percentages of children with zero score were 30, 27, 18 and 9 in the four years. Thus, on the whole, the data showed that, as the project progressed, every year a larger number of children were learning.

Learning about children who did not learn

After the results of the mid-line study were

reviewed and many children were found to have scored zero, we decided to learn more about them. We decided to repeat the test with those children who had scored zero in the baseline test in 2016. These children had reached classes V and VII. So, for example, ninety-eight children of class III were in zero score in the baseline test done in March 2016. By November 2017, eighty-eight of these children were retested on the same paper (they were by then in class V). Fifty-eight of them had improved their learning levels and scored better but thirty of them again scored zero.

Based on the above data we created a list of students who had not been able to learn any of the competencies in more than a year of attending school and SPK. We tracked their attendance status. Here are a few examples from the tracking system:

The no-movement list (0 to 0 score in 2016 and 2017)

Student in 0 score in 2016	School Att. 2015-16	SPK. Att. 2015-16	School Att. 2016-17	SPK. Att. 2016-17	Re-testing Score 0 (Oct 2017)
AMITA	80%	75%	79%	82%	गणति
SONAM	68%	61%	59%	66%	गणति
AMRITA	70%	63%	67%	64%	गणति
RANI	62%	55%	66%	74%	गणति
MANISH	73%	68%	56%	64%	गणति
JAYKISHAN	73%	67%	NA	NA	दोनों में

Case studies

We followed up on this finding by meeting with the children, their caregivers and teachers in the villages. Thirty children were thus, discussed and their participation in the overall activities of the home, school and SPKs documented. Four students of Tata Institute of Social Sciences (TISS) who joined us for their rural practicum in the last week of March 2018 also helped in creating case studies. Given below are some examples.

CASE STUDY 1

According to Laxmi's teacher, she can write some basic information about herself, such as her name, her parents' names, her village name etc. She can also identify pictures correctly but finds it difficult to write words with matras. In maths, she can count up to 100 and can do basic addition and subtraction. Her SPK teacher told us that she has been regular to class and has 82% attendance. Her mother is a single parent and is the only earning member of the family. Her father passed away when Laxmi was just nine months old. Sonam occasionally goes to nearby towns, like Pipariya, for seasonal labour work. Other than that, to add to her income, she also sells dried mahua. She makes it a point not to take her children for mahua collection in the season. During the time when her mother is out on work, Laxmi and her elder brother, who is in class IX, are left alone at home and they manage to cook for themselves. According to her mother, Laxmi gets up by around 5 am and studies for two hours before attending SPK class and school, thereafter.

Laxmi's mother informed us that her son, who is in class IX, is also quite weak in studies and cannot read or write properly. She also said that the teacher in primary school is laid back and often comes to school drunk and the little that Laxmi knows is because of the SPK class that she has been attending and that there has been an improvement

in her academic performance.

CASE STUDY 2

Sunil is irregular to school. He hardly attended any classes in class IV and even fewer in class V. Even though Sunil is now in class V, he is unable to recognise alphabets and numbers. He was unable to write his parents' names and the date correctly in his exam papers. His teacher says his learning level is equal to that of a class I student. However, he is very good and creative in drawing. Sunil's parents say they drop him to school, but he runs away midway to go and play with his friends and gets very aggressive when they force him to attend school.

Sunil's is an OBC family, the Yadavs, who are economically better off as compared to the majority of villagers who belong to the ST community. Sunil lives in a pukka house and the family owns livestock and the major source of their income is through the sale of milk. Labour is shared - Sunil's mother is in charge of milking the buffaloes, he and his brother of feeding the cattle, while his father travels daily to Piparya to sell milk and milk products. The family earns around ten thousand rupees per month, which is almost double of what the families in their neighbourhood earn practising farming. Sunil and his brother, Jairam, go to the forest to collect mahua, tendu and tamarind which they sell for 30-40 rupees a kilo in the market. The family also owns land and has a regular income.

Sunil's friends say that education is important and that the teachers teach well and do not hit them, but they do not come to school simply because they are not interested in studying. Sunil's elder brother goes to attend a middle school seven kilometres away. When he was in class V in 2016, he too had a zero score. In the retesting done in late 2017, when he was in class VII, his score was zero again.

Reflections on our findings

Tamia is a forested and hilly block, inhabited mostly by Gond and Bhariya tribal communities. A large number of families, such as Laxmi's family in the example given in the preceding section, are poor marginal farmers who rely on seasonal migration for labour jobs. We are, thus, examining the performance of children from this background and zeroing in on those among them who did not show improvement in learning, though many of their counterparts from the same socio-economic background did.

On the other hand, we also came across other children from relatively well-off families with higher social status, like Sunil, who also could not learn the competencies of much lower classes. In a few cases, their siblings also had faced challenges and while some managed to improve their performance by the time they came to class VII, others hardly improved. In many cases, parents took their children's schooling seriously but felt frustrated. However, they did not always blame the teachers; some teachers were appreciated for their efforts also. Further, we came across households where both parents had primary level schooling; were employed in business or had a government job, but their child was in zero score in our two years of monitoring.

Our learning from analysing the data and case studies was that no simple causal pattern was visible to interpret the low learning performance of a group of children. One possibility that we came to consider was the existence of specific learning disabilities in the group. Some of the literature we read on this issue corroborated our observations. For example, the socio-economic background has no role in the prevalence of specific learning difficulties (SLDs). Other findings were:

- The neural condition causing SLD may, to an extent, run in the family.
- Learning difficulties can be coupled with other special needs, such as hyperactivity and attention deficit.
- SLDs have no relation with the level of intelligence.
- SLDs may manifest in some children as challenges in reading-writing tasks, but not numerical tasks, or vice versa and in some cases, in both areas together.

We also realised that regularity of attendance in educational spaces could be both, high and low, for different children who showed little progress in learning.

What role could we play in the situation we faced and understood very little of was a challenging question before us. The efforts made by Eklavya's field-level educators were being noticed and appreciated by parents, but could these efforts be finetuned to the specific needs of the children who were challenged in a specific way? As we read about SLD, we became aware that, though confirmed diagnosis only takes place after age eight, when the maturation of the brain is accomplished, interventions are most fruitful if pedagogic intervention is available before this maturation so that suitable adaptations can be strengthened in the neural system. Once maturation is completed, progress can become slower and more difficult, if not impossible.

These reflections made us realise that we should concentrate energies and attention on the early years – classes I, II and III. We began acknowledging the importance of early intervention from our impact study data too. It pointed to the possibility that those who got the benefit of the new support from *Eklavya* in their early years, fared better than those who were over 8-years and already in classes III, IV and V. The crucial role of effective early intervention in acquiring literacy was also underlined by successful projects, such as one carried out by the *Organisation of Early Literacy Promotion* in Rajasthan.

Modifying our intervention

In order to test our learnings, we organised an experimental programme in ten primary schools of Tamia in which:

- Ten key field persons worked every day only with children of classes I and II.
- This work was enriched with poems, stories, picture books, posters, flashcards, oral discussions, drawing etc with a structured literacy approach, moving systematically from one set of words to another.
- The field persons concentrated on phonological awareness with activities to process sounds at an oral-aural level before phonetically linking sounds to written symbols. Activities such as getting the children to think of more words rhyming with a given word (aata, jaata, khaata, gaata...), clapping with the syllables of the word (aa-clap-taa-clap).
- Worksheets were designed and used in class and children were assessed through these.

After six months of this work, we started getting good results, especially where the field educator was able to grasp the strategy and work with some consistency. We felt hopeful that if this group of class I and II children were to be tested later, at the end of their class III, the resultant score would improve greatly over the 2019 end-line score of class III. However, with the project closing in March 2019, such a follow-up was not possible.

This short-lived experiment enabled us to see that it was a challenge for our team members to participate in the activities for phonological awareness. There was a lot of fumbling and hesitation. This made us realise that phonological awareness, which builds the base for learning to read for all children, and something we took for granted, had to be explicitly foregrounded. In addition, it has great importance in helping children with specific learning needs. This was an important issue to learn and share in our training programmes and materials development workshops.

Our subsequent efforts in other blocks of Madhya Pradesh to help all children learn, continue to draw on the learnings of the Tamia experiment. We have begun to orient our team members on issues of specific learning needs. They have begun discussing observations about children they see struggling and falling behind in class, by moving beyond the old framework of low attendance and family background and accounting for the difficulties of the child. They have begun to make case studies and explore ways of moving ahead with specific children. For example, one team member has reported that involving a child's friends' group in a peer-tutoring process has shown positive results. In our work with government school teachers and our field teams, sessions on phonological awareness and structured literacy have become important. We hope these efforts will bear fruit and every child can indeed learn.



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^{*}Names have been changed to protect the identities of the children.

Language Teaching in Pre-primary Classroom Reading and Writing

Roshani Dewangan

Language helps us to communicate our thoughts and feelings, establish and maintain social contacts and relationships and understand our society and culture. Initially, children are not able to use language for all these things but as they grow older, their linguistic skills improve, and they start using language for all the above-mentioned purposes.

Almost all the activities of pre-school years involve conversation. Even while playing, children keep talking and commenting on their own actions. They also describe their daily activities and talk about their family and toys. Through these talks, they come in contact with new people and their acquaintance with others increases. Children learn to use language only when they actively participate in speaking and listening. Those children, who are motivated to speak and are listened to, demonstrate better linguistic abilities. In order to encourage linguistic development of children, it is necessary that our conversations are tailored to them. If they enjoy talking to us, they will show interest in learning the language and their vocabulary will also grow.

Keeping in mind some of these principles, we worked on the development of reading and writing skills of the children at the pre-school level. Various aspects of language learning were taken into consideration in the classroom, which created interest and enthusiasm in children and their use of dictionary also developed. We could also see amazing success in reading and writing skills among children of this level. Let us try to find out how various activities were carried out in the classroom while teaching language.

Teaching language

When children enter school, they already have a rich language of their own. Children of this age group express themselves better in their own language. Children understand their mother tongue well and are able to express in it. We can say that they have a good grip over their home language. Now, it is the responsibility of the teacher to motivate the child to learn the language of the school while also giving importance to his or her home language.

In the classroom, a lot of importance is given to the fact that children express themselves in their language. Their language, their thoughts are listened to with attention, respect and patience. At the same time, we (teachers) try to gradually change their language and ideas into the formal language of the school and the children slowly start connecting with the class and school. While listening to various poems, stories and during other activities, children are given the opportunity to speak and listen.

Learning to read

In this way, plenty of practice was given on oral conversation, poetry and story for about three months at the beginning of the session. After this, the focus was shifted to the development of reading and writing skills. This process first started with a poem. Children were familiar with it.

मछली जल की रानी है. जीवन उसका पानी है। हाथ लगाओ डर जाती है. बाहर निकालो मर जाती है।

The children knew this poem fairly well before coming to school having heard it from their mother, father or friends in their community.

This poem was recited in front of children with gestures, rhythm and acting. Alongside, the children also kept repeating it enthusiastically. This helped children to remember this poem while also acting it out. Now the children were singing the poem on their own with action. After two or three days, this poem was written on a chart paper and displayed in the classroom so that children could see the poem daily. The poem was taught by the teacher by placing a finger on each word of this poem for many days. Teachers placed the finger on the words and asked children about it again and again. They were also encouraged to read the words so that they could identify those words in print. The

words that could be picturised were identified first, such as — मछली, रानी, पानी, हाथ etc. Then they began to identify even the words that could not be picturised, such as, जाती है, उसका, बाहर etc.

After this, another poem was taken. The same method was adopted for this poem also. It was also written on a chart paper displayed in the classroom so that children could read it and identify the words in print. Gradually, children were able to identify certain words. After that, some selected words from both the poems were written on a chart paper and displayed. The children kept reading them and could identify the words.

आलू कचालू बेटा कहाँ गए थे, सब्जी की टोकरी में सो रहे थे। बैंगन ने लात मारी रो रहे थे, मम्मी ने प्यार किया हँस रहे थे।

Now, of these words, we picked words whose pictures could be drawn and made flashcards. These cards were read once daily. A reading game was designed in which the teacher held all the flashcards. The teacher would place the flashcard bearing the name of the object in front of the children. Looking at it, the children were asked to tell what was written on the card. Whichever child gave the answer first, the card would be given to her/him to keep it for some time. While doing so, it was also kept in mind that for the children, who were not at the class level, easily identifiable cards would be shown. And the rest of the class was told to allow only those children to answer so that they could also get a card to keep.

The process of card reading went on continuously and the children learnt to read all the cards. After reading a card, the children wrote the words on the board and thus, also started learning to write. Furthering the same sequence, we continued the process of word identification by separating selected words from short poems and stories. Now we had many words that the children had identified.

Introducing matras

At this point, we faced a new challenge. The children were able to read only the words that they had already read and were not able to read the new, unfamiliar words. To overcome this challenge, we adopted the 'whole language teaching approach' along with working on recognition of letters. The words that the children had learnt were broken up into letters, for example, मछली was broken into म

छ ली; गमला into ग म ला; अनार into अ ना र; and ਬਰ into ਬਰ; and they started identifying the letters. Thus, the process of alphabet recognition started from words itself. Children started participating enthusiastically in the process of identifying alphabets and soon started identifying alphabets on their own. In a matter of a few days, children had started identifying about 30-35 letters and tried to read new words by breaking them and guessing. We faced another challenge as we continued with this process. Children were able to identify and read the words, but they had difficulty in reading the words which had a matra. Some were able to read the words by guessing them, but some were not able to read the words, because they were unable to identify the matra.

Various interesting and fun activities were carried out to help them identify matra. For example, facial expressions proved to be a very effective tool in identifying आ की मात्रा initially. After writing some words like मन. माना. मना on the board, we pronounced them loudly and children carefully observed the facial expressions and lip movements while pronouncing that matra. Later, they also started to practice by imitating us. They knew very well the kind of facial expressions and lip movements one makes while saying आ की मात्रा by carefully observing and listening to us. Some small words were picked up with which the children were familiar, such as – गमला and by saying गमल and गमला, they started understanding the words with or without the matra आ. In this way, the children learnt to read words having the matra आ. Apart from this, we used the names of children, their parents and teachers for the matras of इ, ई,उ,ऊ,ए and ओ; such as Khileshwari, Kavita, Paridhi, Chitranshi, Anil, Vivek, Hetal, Keman, Sohail, Roshni etc. We could get most of the letters and मात्रा in these names. By using names, children were able to relate to pronunciation very quickly and with that, they were able to think through and tell other words having similar pronunciations. While writing some words such as दादी after दादा or चाची after चाचा, children could read themselves by guessing the pronunciation of words on the basis of their structure. Some storylines were also created based on the frequency of a matra, where those matras were repeated. For example:

मोना और रोमा दो बहनें थीं। एक दिन दोनों डोड़की बाजार गई। बाजार में दोनों ने समोसे खरीदे। समोसे को झोले में रखा। Similarly, the story of *Lalu-Peelu* was narrated for the \overline{s} matra. These stories were written on charts and put up in the classroom for children to look at and read throughout the day.

This is how we tried to develop the skills of reading and writing in the Hindi language in a joyful manner for the children of pre-primary classes through the play-way method of teaching. We hope that by the end of the session, about 9 out of 10 children will learn to read and write words/sentences of the Hindi language. We faced many challenges during this process and we could overcome these by talking with other teachers and taking feedback from the children. We felt that our challenges were nothing when compared to the great enthusiasm and interest the children displayed in learning.



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Often, children seem to engage in activities which seem pointless to the adult eye. Some common interpretations of these are, 'Oh he's daydreaming', 'is playing' or 'is just wasting time'. One might think, what can a child possibly be learning in the above-mentioned situations? When we talk about learning, we somehow automatically relate it with an image of a child sitting seriously with books, doing homework, listening to an adult or reciting a memorized piece. But, sometimes, it is important to remind ourselves that learning is a continuous and ongoing process, not just an outcome.

Ritika Gupta, Understanding When and How Children Learn, p 19.

Teaching Early Language and Literacy The Question of Relevance

Shailaja Menon

There is a puzzling problem in Indian classrooms. It is this: curious, alert, socially capable children come into our classrooms year after year and somehow we manage to teach them in a way that a significant percentage of them lose their interest to learn within the first three years of school education. Is it surprising, then, that every large-scale assessment conducted in the last dozen years in our country shows that many children cannot even read or write at a basic level, even though they have progressed to higher grades? The noted psycholinguist, Jim Gee, pointed to this absurdity that also happens regularly in American classrooms: children who spend years struggling to acquire a comfortable knowledge of, say, the twenty-six letters of the English alphabet (and the rules to apply them to reading), can miraculously learn hundreds of abstract symbols and rules in a matter of weeks when you give them video games to play!

This makes me think of Geetaⁱ, a 9-year old girl we met while conducting the Literacy Research in Indian Languages (LiRIL) study". Geeta belongs to the Warli tribe and lives in a tribal belt in Maharashtra. At the time we met her, she attended fourth grade in the village school and could understand and communicate in basic Marathi, the language of her school. Bright, alert and capable, Geeta took charge of her home and the two younger siblings while her parents were away at work. She was curious and inquiring, asking many, many questions of the researcher and explaining so many things -- who lived where, which was the shortest route to get to someplace, which fruits and roots were safe to eat when food ran out, how to filter water to make it drinkable and more! She was full of questions and information, a keen observer, a hard worker, helping her mother to cook, clean, wash and so on. Not lazy. Not indifferent. Not dull. Yet, after threeand-a-half years of formal schooling, Geeta could not read or write very well.

I have met so many boys and girls like Geeta during my work in classrooms across the country – why is this happening?

What are we doing wrong?

It is clear that we are disconnecting from the natural intelligence, curiosity and engagement with which young children enter our classrooms and making learning not very relevant or accessible to them. Keeping children like Geeta at the centre of our collective attention, in this article, I propose three concrete things we could do differently in early language classrooms:

- 1. Create a multilingual environment
- 2. Encourage children's emergent attempts at language learning
- 3. Keep meaning-making at the heart of the language classroom

Create a multilingual environment

Young children come to school with an amazing resource for the language classroom - their home languages, in which they have been thinking, reasoning, exploring, arguing, describing and communicating prior to coming to school. This is the language of their relationships, the language of their emotions. They know the basic grammar of this language and have also developed a fair amount of vocabulary in it.

Yet, in many cases, when they arrive at school, we ask them to remove their home languages outside of our classrooms, along with their chappals! Ideally, the child's mother tongue should be the medium of instruction (Cummins, 2001). This will help her not only to understand what is being taught but also to communicate her thoughts and to take pride in her cultural identity and heritage. Teaching in the mother tongue does not mean that children need to be restricted to their mother tongues! Even while the child's home language is accepted, she can be introduced to other languages - the language of the school, English and other relevant languages of the environment.

But children are not taught in their mother tongues in many schools all over India due to a variety of reasons. Jhingran (2009) has estimated that one in four children in Indian schools faces a moderate to severe learning problem due to a mismatch between the home and school languages. Decisions about the medium of instruction may not be in the hands of individual teachers and there could be multiple mother tongues being used within a single classroom. Even in a school where students speak several languages, different from the official medium of instruction, there are very simple ways in which they can be made to feel more comfortable. A few are listed hereⁱⁱⁱ.

Use multilingual print in the classroom

Ensure that there is print displayed in multiple languages in the classroom. This print could include labels on different parts of the classroom, books, stories, poems, and so on. In addition to helping children understand better, it would also help them feel that their language is accepted and valued in the classroom. If the local language does not have a script, stories, songs and poems can be dictated to the teacher in the home language but written down in the script of the regional language (medium of instruction) and displayed in the classroom.

Encourage speech and expression in the home language

Young children will engage and say so much more if they are permitted to speak in their home languages. If the teacher understands the child's home language, she could respond to the child in this language; if not, a language mediator can be identified (an older student, a community member, or classmate) who can help the teacher communicate with the child.

Permit children to mix languages in speech and writing

This will help them to express their thinking fully using, largely, the grammar and vocabulary of comfort to them, even while they experiment with mixing a few words or sentence constructions of the new languages. Garcia & Wei (2014) have argued that most bilingual and multilingual speakers mix and use languages fluidly and this could be a way to support young children in learning a new language. Figure 1 shows how a fourth-grader used her knowledge of her mother tongue, Marathi, to learn the new school language, Englishiv.

Encourage children's emergent attempts at reading and writing

When young children like Geeta come to school, in addition to transitioning from their home to school languages, they are also expected to learn

to read and write. Many schools take young children through a sequence of first learning to read and write *aksharas* (alphabets), then words, then sentences and finally passage reading. Oral activities are restricted, by and large, to reciting rhymes. These methods of introducing children to language in schools are counter-productive because they do not use the strengths of speaking, listening, thinking and expressing that children bring to the classroom.

How else can we introduce young children to language learning?

Connecting with what matters

Decades of scholarship have shown us that children learn language through observation, experimentation and trial-and-error in contexts that are meaningful and interesting to them. Hence, they are able to master video games in a few weeks, but not the letters of the alphabet over years! We need to connect children with what matters to them in the language classroom. How can teachers do this?

Provide opportunities for oral expression

Children can be asked to share something of interest to them during sharing time. They can be read to or told a story, followed by a discussion. They can be taken on a field trip, that can be followed by a discussion or someone from the community can be invited to the classroom to talk to the children. The point of all these exercises should be that children are thinking, communicating, listening to each other and expressing themselves. The children should be encouraged, as described earlier, to speak in their home languages or to mix languages and speak. This will support cognition, vocabulary development, increasing knowledge of new languages as well as about the world around them. Asking children how they feel about things - a book, a story, an experience - will help the teacher to understand points of disconnect, as well as give the children, an opportunity to express both thoughts and feelings.

Provide opportunities to experiment with reading and writing

If children are permitted to browse through picturebooks every day, even if they cannot read all the aksharas or words, they will still turn the pages, look at the pictures, discuss with each other (if this activity is conducted in pairs) and try to make meaning of it. Some children may 'pretend-read' the book or may be able to recognise some words in the book. Over time, they will slowly become more and more accurate in their reading.

Similarly, if space is made in the classroom for children to write or draw in response to what is discussed as a class, they will begin to experiment with writing. They may draw a picture, or they may write some *aksharas* or words they know and, if you ask them what they have written, they may tell you something quite elaborate and beautiful! At this point, instead of correcting their spellings, what they have said could be written below their own writing and it could be read back to them. Display children's emergent writing all around the classroom and give them time to share and admire each other's work.

Create a print-rich classroom

A print-rich classroom is one that is full of meaningful print for and by the children. Children's attempts at writing or drawing can be put up and different areas of the classroom can be labelled in multiple languages. Words, poems and other information that is of interest to the children, or relevant to the teaching, can all be displayed and used during lessons and activities.

Meaning-making: The heart of language classroom

As emphasised throughout this article, children are natural meaning-makers. When we teach in a way that helps them make meaning, they learn more naturally and easily. When we teach in boring, disconnected ways, children either lose interest, or struggle to learn what could otherwise have been learnt faster.

In the previous sections, I have discussed the importance of permitting children to express themselves in their home languages, to discuss ideas and to experiment freely with emergent reading and writing. All these will help them to find language learning meaningful. In addition, here are some things we can do to keep meaning-making at the heart of our interactions with children:

Expressing thinking comfortably

While children are still developing comfort with learning language(s), our focus should be on helping them to make meaning. For this, the exact language of the textbook need not be used when they respond. For example, Geeta, the little girl introduced at the beginning of the article, was listening to the poem Paus (Rain) being read aloud from the Balbharati textbook (Maharashtra). After

reading the poem aloud, the teacher began to ask questions about it. Geeta could not read the text by herself, but she was attending carefully to what was going on and was trying to make meaning through listening. We saw many attempts where Geeta tried to participate in the conversations but was ignored by the teacher because she was not saying exactly what the text said. For example:

Teacher: What happens in the sky when it rains? Geeta: (animated quickest response): Chakan chamakta (shining streaks)

Other children: Veej (word from the poem for lightning)

Teacher: Right, veej!

Geeta was expressing herself creatively and aesthetically and showing that she understood what was being discussed but may have lacked the vocabulary that native Marathi-speaking children bring to the classroom. Repeatedly being ignored by the teacher (and her classmates) could lead children like Geeta to believe that their thinking is incorrect and not worthy, and, over time, they may feel a disconnect with school learning.

Permitting children to read and write words that are meaningful to them

We focus so much on teaching young children to read and write aksharas in a particular order, that we keep children away from the words of their spoken vocabulary because many of these words contain secondary diacritic vowel signs (matras) and conjunct consonants (samyuktaksharas). For example, a child would know the word paani, but is more likely to be taught the word *jal* in her Hindi textbook, because it has no matras. During the LiRIL study, we observed one set of lessons in Karnataka, where children learned words for: king (arasa), saw (garagasa), necklace (sara), a rumbling sound (garagara) and a festival (Dussehra) – because they shared the same set of aksharas. These words were then strung together artificially into a passage that most children were completely disinterested in because there is no organic connection between these words or between the words and the children's lives and interests.

Noted educator Sylvia Ashton-Warner (1963) who worked with Maori children in New Zealand argued that children learn to read and write more quickly if they are given words that they are interested in learning. She would write down the key vocabulary for each child, culled from her own interests, without worrying about a particular order in which

to introduce these words. Borrowing this idea from Ashton-Warner, key vocabulary could be written on word cards for individual children, or on a class chart – if some words are of common interest to the class. Children could be encouraged to use these words in their emergent reading and writing. That way, they will be reading something of interest, and also writing about things that mean something to them.

Reading aloud every day

Instead of relying only on the textbook, be sure to bring rich, interesting children's literature into the classroom, and read those aloud to the children. You can read storybooks, or poems, or even good non-fiction books on topics that children are curious about. Discuss the ideas with the children and welcome their responses. Support them in their thinking and interests. Through this process, children will slowly be introduced to the world of books and ideas, without leaving their own ideas and interests behind. They will learn new vocabulary, new ways of expressing themselves, and new thoughts and ideas beyond their own experience.

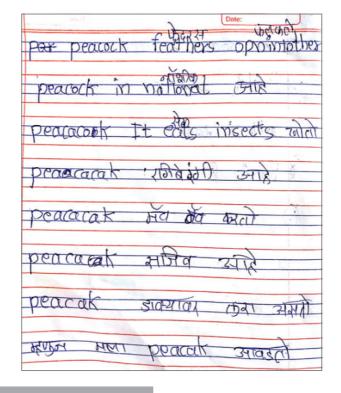
Make writing a central part of the curriculum

As discussed earlier, even if children cannot write *aksharas* or spell correctly, they can be encouraged to express themselves through emergent writing attempts. You can support their efforts in several ways. For example, after a field-visit and a rich

discussion about it, you could ask children to help you compose a few lines about the visit. You could model for them how to write down those lines and put this chart up for children to re-read later.

Or, you could ask children to draw or write about their favourite part of a story you have read aloud to them. You could help them compose letters to someone important to them—a friend or parent who has migrated, a grandparent in a different village, or someone else they are interested in staying connected with. You could also help them to write down an oral story or song from their community. Over time, you could gradually introduce them to different kinds of writing that they would enjoy (poems, stories, etc.) all very different from what they typically get to do in school!

I started this article with this puzzle: why do highly intelligent, capable children like Geeta fail to learn in early language classrooms? The answer to this question may be more complex than indicated in this piece, but I strongly suspect that making learning more relevant to young learners could go a long way towards solving this problem. Every child can - and will - learn if taught in imaginative ways! I have suggested only three key ideas for doing so — welcoming children's home languages, encouraging their emergent attempts at language learning, and keeping meaning-making at the heart of the language classroom. I am sure teachers will be able to think of other ideas as they try to solve the problem of creating relevance for learners!



- Name has been changed to protect identity.
- The Literacy Research in Indian Languages was a longitudinal research project that tracked over 700 students in Palghar district, Maharashtra, and Yadgir district, Karnataka as they moved from Grades 1-3. See Menon, S. et al. (2017). Literacy research in Indian languages (LiRIL): Report of a three year longitudinal study on early reading and writing in Marathi and Kannada. Bangalore: Azim Premji University and New Delhi: Tata Trusts.
- For more ideas, please refer to Sinha, S. (2018). Creating spaces for the child's language within classrooms. Retrieved from: http://eli.tiss.edu/wp-content/uploads/2017/08/ELI-Handout-2-Multilingualism-.pdf; and to Menon, S., Sinha, S., Das, H., & Pydah, A. (Eds.) (2019). *Multilingual education in India*. Hyderabad: Early Literacy Initiative, Tata Institute of Social Sciences.
- See, Parikh, R., & Menon, S. (2019). Using mother tongue to facilitate English language learning in low exposure setting. Retrieved from: http://eli.tiss.edu/wp-content/uploads/2017/08/ELI-Practitioner-Brief-18_Using-MT-to-Support-English-Language.pdf
- For a more complete discussion of this topic, see Sinha, S., Pydah, A., & Menon, S. (2019). Emergent liter-acy. Retrieved from: http://eli.tiss.edu/wp-content/uploads/2017/08/ELI_Practitioner-Brief-16_Emergent-Literacy.pdf
- More ideas about creating a print-rich classroom can be found at: Pydah, A. (2019). Creating a print-rich environment in the classroom. Retrieved: http://eli.tiss.edu/wp-content/uploads/2017/08/ELI_Practioner_Brief_8_Print-rich-Environment-in-Classroom-1.pdf
- vii From: Noronha, S. (2016). Failing Meena (Unpublished M.Phil dissertation). Hyderabad: Tata Institute of Social Sciences.
- For more ideas on supporting children's writing, see Sinha, S., & Menon, S. (2019). Supporting children's writing in early grades. Retrieved: http://eli. tiss.edu/wp-content/uploads/2017/08/Supporting-Childrens-Writing-in-Early-Grades_Practitioner-Brief_11.pdf; and Pydah, A. (2019). Children's writing: Creating books in the classroom. Retrieved: http://eli.tiss.edu/wp-content/uploads/2017/08/Creating_Books_in_the_Classroom_ELI_Handout_7.pdf

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Homework Vs Housework How Some Children Cope

Shantha K

The theme - Every Child Can Learn - was decided in December 2019 and participating in that discussion, the child who came into my mind was one who I watch every morning. It occurred to me that I had something to contribute to this issue.

The community I live in is an upcoming layout with a lot of houses under construction. Every morning, while working in my kitchen I observe this family, which is part of the construction workers' group, living in a small temporary shed and busy in their daily chores. Their busy life begins at six in the morning and ends by nine at night. The motto Early to bed, Early to rise is followed here. The head of the family is a lady who works as a labourer at the construction site and is paid daily wages. She has three children, two boys and a girl, named Rekha. Her brother, who is a watchman at the construction site, lives next door with his family. He too has three girls, the eldest of them, goes to school with Rekha and both of them are in class I.

I am fascinated with the routine of this youngest child of a single mother, Rekha. She wakes up around six in the morning, bathes, wears her uniform, helps her mother in washing vessels and clothes, puts them out to dry and then has her breakfast and waits for her friends to join her from other sheds from within the layout to go to school. Five children join her, and they walk to school together. Food is provided at the school (midday meal) so there is no worry for afternoon lunch, and she returns by four in the evening with the same energy. All the bathing, washing, cooking happens in an open space visible from my kitchen window.

I spoke to this girl over the weekend to understand her learning habits, how she is coping with her schoolwork, who guides her with homework and so on. Here are some points, I gathered.

Rekha is about 8-years-old and studies in class I of the Government School at Marsur, Anekal. Teaching is bilingual, both Kannada and English are used in class. Her subjects are Kannada, English, EVS and maths. Her favourite subjects are EVS and maths. When asked what lesson she is currently studying in EVS, her answer was 'What are living beings?'.

We assume that boys are good at maths and girls in social studies and languages. Rekha belies this stereotype; she finds maths very easy, as against some of the boys in her class who find it tough. She takes the help of her older brother in her homework, but since most of the time he too is overloaded with homework, she has found a viable alternative -- to rush to school in the morning and copy from her friend's notebook. Homework is given every day and she is not able to complete it because of all her home chores. So, she is compelled to copy from her friend to avoid punishment in class. How correct her friend's solutions are, the teacher only knows!

Some important questions

Children of these migrant labourers who move periodically, from place to place, busy with household work both morning and evening, attending school in between all this, makes me think: how and when do they make the time to learn to do their homework? In this era of digital India, when everything is available on the internet, children from well-to-do families hardly need any support from their parents in their studies. But where will the already deprived children go for solutions, satisfy their hunger for knowledge? All the apps available on the smartphone need internet connectivity, but who will pay for the phone and internet?

Teachers in schools where no support can be provided by the family for studies and followup work such as homework need to develop the sensitivity of providing ample support during class time, encourage more classwork and remove the concept of homework, instead of laying so much emphasis on it.

The interesting fact is, despite all these obstacles, children like Rekha go to school, learn and have ambitions of going to work like me. She said she would like to work in an office and not like her mother, carrying bricks. This is as much her mother's desire as hers, because her mother always says, 'I want all three of my children to get an education and go to work in office.'

Rekha goes to school every day with the same enthusiasm and ambition to study. What we need to make sure is that teachers and the community around create an atmosphere where children like her have the opportunity to learn and acquire knowledge and livelihood in the long run. Then, we can assert that every child *wants* to learn and, given an opportunity, every child *can* learn.



Shantha K has been working with the Azim Premji Foundation from the past eight years and is currently handling the Translations Initiative and Publications. A Human Resource Management graduate, her passion is observing life around her through the lens of social science. She can be contacted at shantha.k@azimpremjifoundation.org

A big part of learning to teach well is beginning to recognise which symbols the students understand and then, to choose and use the most effective ones out of those. When the students begin to respond with interest in my class (or I begin to see symbols that I think represent interest), that shapes my own self. I begin to see myself as a competent and proud teacher. We are always interacting through symbols and the study of this process throws important insights into teaching and learning.

Amman Madan, Rebuilding Self and Identity in Adivasi Schooling, p 3.

Bringing the Last Child into School

Shivani Taneja

When I started working in 1997, I set out with a dream that all children should be in school, with the assumption that this idea was directly linked with the vision of an equitable world. I believe many of us have worked on these lines. Whether it is the state, communities, parents, all of us adults find ourselves believing/working on the premise that schooling is necessary as well as productive. But as we grow from a naïve young person to a critically thinking adult (unlikely to have become this through our own school education!), there is a realisation that this is far from the truth. Some questions arise that may need to be examined beyond the classroom setting: Is education merely a tool for the industrialised world, for modern civilisation? Do we learn a sense of equality across gender, religion, caste, class and develop constitutional values, or is it actually the opposite that is strengthened through this system? Will this education build a sustainable world?

These questions, these doubts, persist when we look at what the *products* of this system are capable of; when we look at the way the so-called civilised world is functioning. But even, given this situation, it is in our limited role as teachers working in the classroom space that we can find the immense potential for change within the system for the children we meet every day.

Some essentials

Love and affection

Interaction between any two human beings can be a positive and enabling experience for both only if there is affection between them. Marginalised children are loved and smiled at probably only within a small circle of people in their own families and community. They are not the children who would be smiled at in the shops or on the roads. Their colour, their class, their religion or community, their appearance - can be enough for attracting discrimination. Therefore, as a teacher, when you welcome the children with a warm smile or hug, they know that you care about them, they get an acknowledgement from *outside* their social group.

This effort is not a mere strategy, but a spontaneous response when we love the children we work with. Simple gestures of affection, whether a smile or a greeting, rather than the formal *Good morning, ma'am*, work wonders. Children begin to learn that the world is more beautiful because of them. The school becomes a place where they are wanted for who they are.

Respect and dignity

In mainstream culture, the marginalised child's language and life are not given the status they merit. It could be the work the child's parents do or where she lives or the games he plays – everything is considered to be inferior to mainstream aspirations and the child bears the burden of this marginalised status and, therefore, treatment. Their language is unlikely to be the one that commands respect in the job market. On the contrary, these differences are often markers, or socially understood shorthand, for the lack of general ability considered to be the indicators of several short- and long-term material advantages. These attitudes, in turn, give rise to numerous psychological outcomes related to respect and dignity.

Respect and dignity come through in various forms, the simplest form being an acknowledgement and respect for the other's language and therefore, culture, way of life, identity and knowledge as rich and distinct. The strengths of a multilingual pedagogy are far too many to be mentioned here but beginning a conversation from the child's position is important.

As a teacher who is not fluent in the child's first language, when I speak even a sentence in the child's language, I tend to be seen differently in the child's eyes. It is as if the child feels: 'You value me, you want to speak to me, you are trying to connect with me, you are part of my life,' I do not know all of what goes through the child's mind, but she accepts me differently. In such instances, I am only trying to communicate or maybe just joke around, but the child is communicating back with me, accepting me because I have accepted her. Many times, I

get a sentence translated to the first language of the child and write it down to refer to and when I 'read', 'speak' it out from there to them, the sparkle in the child's eyes and their looking at me directly to guess what is happening, is a beautiful response. Dignity also comes through by accepting the other's life, without judging it as being inferior or superior. This means not just allowing or tolerating but encouraging children to share information about their lives. A clear message must be that their life can be and should be brought into the classrooms through conversations, writings and other forms of exchange and no one can laugh at it. Nowadays, our teachers in Muskaani have also started teaching English vocabulary to children through kitchen experiments and their traditional foods are being cooked in the class.

As we acknowledge the marginalised child, we also need to lower the stature that has been traditionally granted to the savarn, or the upper classes, to which the majority of teachers belong. Simple assumptions and attitudes need to change. For example, the feeling that I have been protected to the point of incapacity and I would feel completely lost if I did not have any money on me to reach another place even within the same town or accepting that there is as much or more violence in middle-class homes as there is in working-class families, but the walls of the big house ensure that the neighbours do not get to know are some of the attitudes society needs to change. Then, there are pre-conceived notions of appearance. If the rich did not have a continuous flow of water at home, they may not have been able to come out as cleanlooking as they do or reach school on time.

These are things that I would often share when children shared their experiences and, as a result, were self-dismissive. Popularly-held beliefs, such as the superiority of allopathic medicine to work miracles without understanding the contents of traditional medicine, but dismissing it as superstitious and backward, shows how knowledge, too, has been categorised according to the economic class and social group it emerges from. Equality of all human beings needs to come through in our interactions.

Sense of learning

Learning gives the human mind a shot of adrenalin, a kick. Any one of us who has had the opportunity to have learnt something and is conscious of that, will know what I am talking about. The school as an

institution justifies its existence for being a space for learning. Yet, what children mostly experience is a feeling of being dullened.

Children, by nature, are inherently creative, intelligent, critical and open for learning, but school often, does not offer meaningful interactions and learning. The hours of sitting in a classroom become a drudgery and the absence of a sense of learning brings a sense of being a failure for not understanding what is happening, though a perceptive child may begin to understand that there is a problem in the transactional process of learning that punctuates most school classrooms. As teachers, I hope we have realised that, while passing an exam is important and should not be compromised, marks are not what matter. *Learning* is what matters.

This sense of learning may be to do with learning a skill or a concept or getting a new thought. Thus, even the sense of being able to solve a sum with meaning, or understanding that what was simply a design or a pattern to them is a real script they can create or decode, or that they can say a complete sentence in English, are all experiences which help a child to understand that formal school could be a place for them.

Bringing in community knowledge into the formal learning space and doing things, rather than only depending on books and the blackboard, would involve the child in the learning process in a more real way. Seeing the seed through its germination process, understanding the trees in one's vicinity are some of the topics that make the real content of life and should be brought into our learning spaces, through the traditional teacher and not necessarily the teacher with a B Ed. This real learning is the purpose of our schools and it also reassures the child of this purpose and determines if she finds it a space for herself or not.

Talk and dialogue

The need to question the *status quo* and enhance independent and critical thinking is crucial and this is what is lost the most in mainstream schooling. It is, therefore, important for us to create opportunities to get children to speak up and share what they feel about different things inside them, around them, in the world. Analysing situations, the ways in which we function, gives all of us a chance to reflect. This requires the teacher to ask questions and give suggestions. While this could be incorporated within the pedagogy of transacting

any concept, it has its stand-alone value also. A weekly sharing space to discuss social norms and personal responses could lead to the habit and culture of thinking, evaluating and acting, rather than only accepting and fitting-in.

I recall a class where we were discussing why schooling is important for children of marginalised communities and why they should not give it up. The children started the conversation from the viewpoint of a desire to achieve something big and then went into the need to regain the dignity of the marginalised communities and show the savarn what a child from a specific community was capable of. This, then, veered into the idea that each one of us is unique and could try to steer our lives on different paths that work for each one of us individually and that more options would be open to us through education.

Women's work and status, caste hierarchies, emotions of anger and pain –there is nothing that children do not observe and understand. They are constantly forming opinions and unconsciously converting these opinions into behaviour. Moral Science lessons are not what we need; we just need non-judgmental and open-ended discussions.



Expression

All human beings are a bundle of experiences, memories, emotions. These are largely what make us persons. There is nothing that crosses your life and stays with you that cannot be expressed in a setting. This could be death, abuse, pain, love, anything. As adults, we hesitate in bringing in volatile topics or terminology that is abusive. But we should try to actively bring these into the classroom as these are part of the child's mind and memory. We need to discuss these with them in ways that are non-violating and non-abusive. Depending on the academic level of the child or the subject that we are teaching, we could even modify the form in which the expression is expected. Sharing through drawing, writing, speaking, acting are forms of expression which should be encouraged in all settings. This could be unstructured, or initiated through questions such as 'What did you do last night? What is it that you fear? How did you make a new friend?' Articulation and ventilation serve in varied ways for the one who feels as well as the listener(s).

Stepping outside the classroom

Exploring the familiar

It is enabling for everyone when we step out of the class and take a walk, whether in a most familiar place or a new one, as a group that has set out to observe, discuss, learn. It is a pity that most interactions are now getting defined by the computer and the phone, but still, the opportunities we build will help us to understand people and nature through our own lenses.

At times, I would take the young girls in my class to make a payment for a phone bill or to post a letter. For the children walking with their teacher in a public space and for the teacher, her/his experience of walking with the children in a public space brings new insights. Walking through children's localities and neighbourhoods and asking them to explain or introduce the places provides us new insights and perspective to a location. Community elders could also be encouraged in this endeavour.

We also learn, that whether it is the jungle or the roadside, children find it more authentic to share their knowledge and ways of understanding things in the real world than in closed rooms.

Crossing cultural boundaries through stories and storybooks

Most of our textbooks still lack interesting stories

that could help us understand and engage with the diverse cultures of the people of India and/ or the world. Since 'lessons' in textbooks are only taught for the questions that follow the chapter and are often value-laden and representative of the experiences of the privileged child and in keeping with the middle class's notions of childhood, the importance and relevance of diverse storybooks representing and honouring the lives of marginalised young people everywhere are completely lost. The educationist, Krishna Kumar's prescription was - a story a day. We can figure out what works best for our school.

Stories that reaffirm the children's realities are as important as those that help us peep into the lives of another reality. Whenever we put forth a story in which a child may have been hurt because of mob lynching or a narrative around one's violation of rights, the reader always tends to understand that person. When we hear an 8-year-old speaking against Pakistan (in interactions with children, one sees the animosity they feel for this country that they refer to as the 'enemy on the west'), one wonders if this hatred would deepen or would it dissolve if one had read stories about children on the borders, instead of receiving lessons on animosity or distorted versions of history. In Muskaan libraries, we have been consciously trying to bring in books that present varied realities as well as publish books that speak of our children's realities.

Recognising different emotional needs

One can see that it is an uphill task for children from marginalised backgrounds to attain 12 years of formal education. If one could calculate effort, then, probably the marginalised child needs to put in at least 50 times more effort than a child from a privileged background to change the flow of his/her river than the child whose direction is already set through his/her birth. We often hear that a determined child can overcome all barriers, but I prefer to believe that it is our determination and flexibility, and not the child's, that are being tested.

Teachers' role in learning

While some of the triggering circumstances could be resolved through the above efforts, the likelihood of a child not continuing because of our lack of effort and sensitivity is not lost on me. An emotional bond and trust with the teacher are important for most children, but for some, this may become the critical factor. One can recognise

such children through certain symptoms: they may not be mixing with others in the class; avoiding participating in a discussion; might be having a difficult time at home; or feeling excluded by the majoritarian group in the class.

It is a personal expectation and a lot of hard work, but I see it as part of the work that we choose as teachers and especially as teachers of children who may not have the privilege of having a counsellor or a mother who can afford to give up work or avail maternity leave and take care of them, or a family which spends quality time on holidays. I am not suggesting that children are deprived of love, but there is a tendency that the very vulnerable families are not able to provide the emotional strength that is needed when simultaneously negotiating new and difficult paths in life. Formal education is an untrodden path for these families and communities. If I chose to work with the marginalised child, I also need to recognise that s/ he needs support from me.

Real life stories

Dharmendra, an Ojha Gond child, has six siblings. Though his loving mother cares for them, she lives on the roadside and her life is as displaced from her original tribal roots as one can imagine. Dharmendra studied hard till class VIII before he fell into the routine of scrap-picking on the roads as that was his family's only source of income. I believe if I could have been more consistently an aunt to him, like a mother's sister, his life would have taken a different course. But I was, probably a sympathetic teacher, at best.

This was also the case for Anjali, a *Pardhi* girl. She was always running away from home, dreaming of another life she wanted for herself, but an illness caught up with her and she succumbed to it when she was just 8 years old. I think as an adult, I was there, but not as much as she needed. Children's needs and personalities vary, some need more attention, others less. As adults, we have to be able to stretch ourselves for the children we bring into our lives, not by birth, but our own choices.

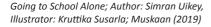
Being part of the marginalised communities, living in abject conditions and/or living a life of discrimination can be real deterrents to learning. Trudging through the path of 12 years of schooling, 3+ years of graduation before reaching the institutions of higher education is a continuous test of children's mettle and being alienated and discriminated against institutionally shows how

urgently we need to look at the way our institutions actively discriminate.

As elementary school teachers do our behaviours push out children or pull them in is something, we can be conscious of and change. Moving away from the idea that our schools and learning spaces are neutral, exist in isolation, are not conscious of caste and class, are merit oriented and recognising that

schools, more often than not, actively replicate the socio-cultural context they are situated in, means rethinking the relevance of our schooling practices and envisioning various kinds of support systems to nurture a democratic space that is inclusive of diverse realities, which truly enable learning in every child.















Munnu: A boy from Kashmir; Graphic Novel by Malik Sajad; Fourth Estate (2015)



Shivani Taneja has been working with children and marginalized communities in urban areas since 1997, through Muskaan. Muskaan believes education cannot be separated from children's lives and realities, and interactions with children have guided her work inside classrooms and the issues regarding denotified tribes. She has been volunteering with women's groups to respond to issues of sexual violence and state repression in the country. She can be contacted at muskaan.office@gmail.com

¹ Muskaan is a non-profit, non-governmental organization working with marginalized communities living in the bastis in Bhopal, Madhya Pradesh.

Bridging Social Distance Through Curricular Interventions

Shubhra Chatterji

I will start this article with an illustrative example of work done with a group of schools located in the south-western fringes of the city of Kolkata. There is a strong presence of an informal economy in the neighbourhood, by way of kite-making, *zari* work, embroidery, etc. and children are often engaged in these activities to augment their family income. Given the hardships encountered by the families on a daily basis, education is relegated to a position of low priority for the families and children are reluctant to attend schools where they are not able to fit in properly.

Creating learning environments

Teachers' approach

If we want every child to benefit from learning opportunities, a supportive and encouraging learning space is needed, especially for children who face several kinds of impediments, as do the children from the schools that I am talking about. As they are from migrant families, the main reason for their poor learning achievement is the sociolinguistic barrier, as the medium of instruction offered in the schools is Bengali. The gap between home and school language is no doubt a big impediment to learning, but it is the social distance of the teachers with the children and their inability to respond effectively to their students' distinct and differentiated learning needs, which is primarily responsible for the low levels of motivation in the children.

As the key agent in the classroom, it is the teacher who is responsible for setting the overall tone of the classroom and it is around the persona of the teacher that the children's primary socialisation and learning have to take place. This was, somehow, missing in these schools. We were familiar with the social context of these children as we have been working in this area for quite some time in an interesting project in collaboration with the city police, where education centres have been set up inside police stations. Ironically, it is these safe spaces within police stations that were able to provide children with a fear-free and secure

environment because of the emotional connect and bonding that was created between the adults and the children concerned. The teachers from our organisation who were placed in these centres also played the role of caregivers.

Safe spaces

In these centres, the teachers took special care to give children a sense of belonging and their parents to feel welcome and involved. The majority of these children face subtle to direct forms of social exclusion due to their linguistic and/or religious background and have a stigma attached to their 'potential criminality' due to their family circumstances, as this part of the city also has a high crime rate. However, the children who come are eager to learn and are seldom absent.

Through our work with children in these neighbourhoods, we came to realise that for learning to be effective, what is needed most is an anxiety-free, emotionally safe space that is inclusive in nature; a space where children are able to express themselves without fear or inhibition. Hence, when we were approached by the government to provide similar support to the primary schools in the vicinity, we were happy to help.

At our first interaction, the teachers expressed their inability to handle the layers of complexities that they knew they would have to face. They knew that teaching the textbook was not the way because of the language barrier but did not know how to come out of its trap. They said that the textbooks were pitched at a much higher level compared to where their children were, but they admitted that they were part of a system that gives precedence to completion of syllabus over children's learning. It was clear that they felt like cogs in the wheel and not in control of things. This lack of autonomy and agency on their part was projected on the children who, in turn, were made to feel inadequate and unworthy. The classrooms were bare, unattractive and poorly maintained. Absenteeism was rampant and discipline was difficult to enforce.

Ringing the changes

Classroom makeover

Since a warm and supportive environment is one of the preconditions of learning, it was decided that the creation of such a space should be the starting point for the transformational journey that the teachers would embark on. The first step was literally to clean up the classroom space jointly by the teachers and children. Then, they sat down to prepare some charts and posters to brighten up the classroom walls. Each group was assigned a task one group worked on the classroom rules, another group prepared an emotion-mapping chart, while a third worked on preparing a number graph. The children made self-portraits on paper plates and wrote little notes under their pictures, expressing their likes and dislikes. Soon their classroom started looking attractive and colourful: seeing their own handiwork up on the wall gave the children a sense of pride and belonging.

Besides, it was the first time that they had sat together and worked in groups with their teachers sitting around them. While working on their charts and posters, they interacted informally with one another and also with the teachers. This opportunity of being physically and emotionally close to their teachers helped the children relax and open up. They were active and excited, yet there was no lack of discipline as the teachers had originally feared. Although, after this experience, they went back to their usual mode of sitting in rows and reverted to the formal mode of communication, this small exercise had brought about a subtle change in the classroom climate.

Interacting through conversation

To sustain the good beginning, it was now necessary to introduce some activity that would make it possible to break down communication barriers. Since schools are conservative spaces, the activity had to be something that was part of their regular teaching. We felt that an easy entry point for this was an important area spelt out in the curriculum but rarely followed by teachers in our schools: *oral language development*.

Though it is universally acknowledged that *oracy* is the foundation for literacy, the focus in primary schools is on teaching reading and writing in an isolated manner as if these have no connection with the spoken form of language.



Conversations are central to language development - the exchange of thoughts and ideas, listening to others about how they feel, and what they experience – are also socially and emotionally enriching processes. Through conversations, both children and teachers, get to understand one another better. But it takes practice for the teacher to have the kind of authentic conversation that is needed to break down inhibitions and get children talking in the true sense of the term, rather than just answering questions. Talking is one of the principal agents of learning and yet in the traditional didactic mode of teaching, classroom talk is dominated by the teacher and the children are seldom given the chance to express their responses beyond choral or one-word answers. Through this, children become programmed to a passive learning atmosphere, which has a negative effect on their motivation and achievement.

Real-life examples

CASE STUDY 1

When Nandita, one of the teachers who we were working with, decided to have a conversation class with her class III children, initially, she found it difficult to let go of her 'teacher's' voice and talk to the children in a conversational tone. She then thought of a simple activity.

Nandita prepared some chits in which she wrote down some random conversation topics —pebbles, shop, sweets, street, etc. and asked the children to come in pairs and pick up a slip. They were told to discuss the topic with their partner and then talk about it to the class. Initially, the children too had problems in switching their mode — they felt awkward and were trying to use the same stilted language that they used in classroom interactions. But when a child broke the pattern and said that her uncle had an alu-chaat shop, the barriers suddenly broke and everyone started responding and interacting spontaneously and the teacher also seamlessly joined in the conversation.



The change in the classroom climate was palpable and the children became genuinely engrossed in the activity and did not want to stop. The flow of information did not remain one-way. It came from children as well, based on lived experiences. Later, Nandita said that through this simple activity, she had come to know much about the personal lives of children, which she had not been aware of in all the months of her association with them. Authentic talk is thus an important building block not only for language development but also for teachers to have a better understanding of children's interests and their social contexts.

CASE STUDY 2

Since the emphasis on reading and writing is unavoidable, Nandita decided to try out a different approach to writing: making children write about things as an *extension* of their drawing. They were first asked to draw whatever they wanted to and later when they finished the drawing, she asked them to talk about their drawing and why they had chosen that topic or theme. This really set them thinking and she scaffolded the process by asking questions.

After that, she asked them to write down whatever they had discussed. It was difficult to break the mould as most of the children fell back on drawing the usual stuff — a house with mountains at the back and the sun in the sky. But some showed originality. One child had drawn the picture of a waterfall and told the teacher how his father had taken him to see a waterfall. Another child drew an owl and said that she thought it was the prettiest bird, while another drew the picture of a cow being dragged by a person, a scene which he said he had seen near his house.

All the children had been struggling with the school language and Nandita was surprised at how this simple activity produced so much language and motivated all of them to overcome their fear and inhibition and start writing. They could do it because they felt connected to their writing as it had come out from their inner feelings and experiences.

Overcoming the fear of learning English

Teaching English was another area that teachers found very challenging, particularly with these children. Their own lack of confidence in using the language coupled with children's low level of exposure made it very difficult for them to negotiate the texts, which again were at a much higher level than what the children were capable of. The wide gap was slowly creating a fear of English in their minds, though they still wanted to learn it, as English is a language of aspiration for them.

To remove this fear, we felt that music and rhymes would work well as a strategy. Music is a delightful way of teaching-learning a new language since it has no language barrier. English action rhymes such as When you're happy and you know it, clap your hands or In the morning, in the morning, I brush my teeth everyday - done with actions, helped to create an atmosphere of safety, familiarity and pleasant associations. The use of the Total Physical Response (TPR) technique while singing the rhymes helped the children learn new words as well as some language structures without making a conscious effort to do so. No translation or explanation was needed as children were able to infer the meaning from the action and could easily relate with whatever was being said. The teachers were delighted to see that their students had suddenly acquired a lot of English vocabulary without being taught explicitly.

For any new learning to get internalised, reinforcement is important. So, this was followed up by some games and structured conversation sessions, where these new words and structures were used. For example, in the game Simon Says, the word chunks clap your hands, stamp your feet, shake your leg, were used. For conversation, the structure What do you do in the morning? was used — and children could easily respond, using the lines from the rhyme that they had just learnt such as I brush my teeth, I comb my hair, I take my bath etc.

The repetitive pattern of the rhymes, where some new words are introduced in each line while keeping the structure intact, made it easy for the children to use language with confidence and without feeling inhibited. The teachers saw how repeating rhymes helped children overcome their inhibition of the language. Some of the keywords were then written on the 'word wall' for developing a sight vocabulary – hands, feet, teeth, hair, and so on. The rhymes and the games had also helped the children to get familiar with the sounds of the language and

the way words are pronounced, which was a good preparation for the next step, namely, making *letter-sound connections*.

So, all the three key elements of learning a new language – learning new words, learning new structures and learning the letter-sound relationship were made possible using something that children enjoyed doing very much. Lowering the affective filter through the elimination of fear and anxiety helped in creating conducive learning alertness.

Steps to learning

This is an illustrative example from an initiative that has just been started and is designed on the premise that all children *can* and *will* learn if the learning is made relevant to their lives; if it is presented with empathy and understanding; and, has the involvement of the teacher in the entire process.

The cognitive strategies that were used to bring about a shift in the classroom interaction had been distilled out of our experience of the last thirty years of working with marginalised children across diverse geographies and social contexts, either through supplementary learning centres or through community-based learning camps or within the formal structure of classrooms in government schools. Here are the salient features:

 Promoting classroom talk as an important tool for language development and for development

- of higher-order cognitive skills, social and emotional development.
- Displaying artefacts jointly prepared by children and teachers for building ownership and creating a warm and conducive environment.
- Introducing music, games, stories and rhymes to enable multi-sensory channels of learning.
- These activities are helpful for achieving the desired learning outcomes while being thoroughly enjoyable for both children and teachers. They are also helpful in eliminating fear and anxiety and in creating learning alertness in students.

These simple and small steps in the larger scheme of things had two very important outcomes for the teachers and children. One, the teachers realised that it was possible to achieve the desired learning outcomes even without textbooks, an 'aha' moment for them when they went through some of the learning outcomes and mapped them with the pedagogical processes that they had just tried out. Second, and the more important, perhaps, was the shift that such activities had brought about in their classroom environment - a definite change in the emotional climate. Undoubtedly, this was just a small beginning and, as long as the larger reality of the system remains unchanged, teachers like Nandita have a long way to go. But then, the journey of a thousand miles begins with a single step – a step that Nandita had already taken.



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Role of Missions in the Education of Girls

Srijita Chakraborty

Despite the government's steady efforts to ensure schooling for all, 11.9 million children between the ages of six and thirteen remain out of school. Most of these children are from marginalised communities. In the Muslim community, girls have not had enough opportunities for education, for the most part, due to their restricted geographic mobility, although this pattern is changing owing to a shift in the attitude of parents. Having realised the benefits of education, such as better marriage prospects for girls and an increased likelihood that the next generation will, in turn, be educated, parents are now willing to pay a price for quality education. The poor quality of public education has given rise to a private market where residential institutes, called missions, offer a solution to the challenges associated with girls' mobility.

Khadijatul Kubra Girls' Mission (KKGM) is one such institute that caters exclusively to girls, many of who may have otherwise dropped out. What differentiates KKGM is its ability to provide everything under one roof, as the students put it. A nominal monthly fee covers tuition, food and lodging. Besides the regular curriculum, KKGM also strives to make use of digital technology to enhance students' experience. It partners with a non-profit organisation, the Ann Foundation, to facilitate virtual English classes over Skype. Volunteer tutors at the Foundation conduct classes comprising a host of reading, writing and conversational exercises to improve the girls' employability. Regular interactions with tutors offer the girls a window to the outside world, expanding their horizons.

Why are private missions so popular?

The Right to Education (RTE) Act has been instrumental in reducing the number of out of school children, particularly those up to 14 years of age. In 2014, 6.4% of primary-school-age children and 5.7% of lower secondary school-age children were out of school. Despite substantial progress in securing *schooling for all*, these figures add up to 11.9 million children who are out of school (ages 6 to 13) due to the large population size.

School exclusion is considerably more prevalent among Muslim children, with exclusion rates for both age groups, being far higher than children from other religions. The exclusion rate is 9.1% among lower secondary age children, far higher than the national average. Financial burden plays a primary role — the cost of education, coupled with the opportunity cost of not working, often forces these students out of school.

Historically, girls have tended to have higher dropout rates than boys, which increase after the primary level. In addition to the financial burden, a few other factors tend to impact girls disproportionately. Muslim neighbourhoods tend to have fewer schools than others. While boys can travel further to seek out the education they desire, girls are unable to do so. Even when schools are accessible, poor infrastructure is often a deterrent — a third of rural schools do not have girls' toilets, while over a quarter, lack usable toilets of any kind." The problem extends beyond just access to schools. To supplement their school learning, students who can afford it flock to local private tuition classes. For the same reason that Muslim-dominated neighbourhoods may lack schools, these areas also lack private tutors — a generally low level of education in the community. Again, while Muslim boys can travel far to find a tutor, girls enjoy much less geographical mobility.

But the gender gap has been decreasing, owing mainly to a changing attitude among parents. They are now eager to educate their girls as it improves their marriage prospects, increases the chances of imparting education to future generations and creates a sense of independence in case of widowhood. Parents are willing to pay a price for quality education and where public schools are lacking, a private market emerges. For example, in West Bengal, despite the government's best efforts to provide free education, private institutes or missions, providing education at a price and with teachers far less qualified than those in government schools, have sprung up. These institutes are not registered with any educational board and hence,

cannot conduct examinations. Students might be enrolled with a registered neighbouring school, but attend classes and reside at the mission, visiting the registered school only to write their board examinations.

Some of these missions, like KKGM, cater exclusively to Muslim girls, many of who may have otherwise dropped out.

Our experience

Situated in the Bainan village in the Howrah district in West Bengal, KKGM was founded in 2014 and is funded primarily by the Khadijatul Kubra Education Trust. The school has some 500-odd students in classes 6-12, most of who are from low-income families. A few are orphans. Students hail from various districts across West Bengal and are admitted through an admission test; their performance on the test along with their financial status decides the subsequent schooling fee. Students who can afford it, pay a monthly fee of INR 4000, which covers tuition, food and lodging. For needy students, and there are many, this fee is subsidised or waived. Donations from certain educationists, philanthropists and other wellwishers make this possible.

The school uses Bengali as its medium of learning and follows both *Madhyamik* and *Madrasah* curricula, including religious studies. Besides regular classes, KKGM also provides remedial classes for students struggling to cope. On completing the class X board exams, it encourages its students to continue secondary studies at the institute, effectively curbing dropout rates at the secondary level.

The school is as well-equipped as any other, boasting of classrooms, science and computer laboratories, a library, a prayer room and a small field for sports. Large, nondescript rooms form the dormitories, where the girls reside nearly thirty to a room. Food is served four times a day. *Namaz* is performed five times a day. The girls are visited by their families once a week. They are not allowed mobile phones on campus.

What makes these institutes so popular is their residential facility that helps overcome many of the challenges arising from the restricted geographical mobility of girls. These schools also tend to have a high proportion of female teachers, making them more girlfriendly. Constraints on the mobility of women across localities, and barriers to participation in occupations other than

education and health, create a locally available pool of educated women in pockets that have girls' secondary-level schools (Andrabi, Das and Khwaja, 2013). The same principle applies here. While some female teachers reside on campus, others come from the adjoining neighbourhoods. Consequently, absenteeism among teachers, a critical contributor to the poor quality of education in public schools, is virtually nil here. Most students at KKGM, in turn, aspire to become teachers, a phenomenon we hope will play no small part in establishing more private schools in Muslim communities.

Other features

Extracurricular support

To provide a holistic learning experience to its students, KKGM includes various activities alongside the curriculum. Computer classes help train the girls in basic operations like typing on Word, creating PowerPoint presentations and emailing. Regular physical training classes are conducted in which the girls either play badminton or *kabaddi* or learn yoga. The institute also has an annual sports' day where various races and sports are conducted. Arts and crafts are encouraged, with painting, sewing and crocheting classes being offered to those interested. Occasionally, the school invites local healthcare workers who train the girls in first aid and basic nursing skills.

Some of these activities also serve to keep the students engaged in the evenings once classes conclude. The library, which boasts of 1500+ books, is open at all times. The collection includes a mix of textbooks and novels or short stories, mostly in Bengali. English books account for about 200 of these. In the absence of televisions, mobiles and other engagements, students often spend their evenings, leisure reading or studying.

Digital technology is being widely explored to improve the quality of education in India; KKGM does not fall very far behind. Despite its humble infrastructure, KKGM strives to augment its regular curriculum through virtual English classes. Though the school teaches English as a second language, the students are not comfortable using it. The role of teachers and educated local women, who were themselves introduced to English through rote learning, is significant here.

The Ann Foundation

Acknowledging this shortcoming in its own system and recognising the importance of English fluency for employability, KKGM partners with the Ann Foundation, a non-profit organisation, to bridge the gap. The Foundation provides online English and computer classes to disadvantaged children and youth in schools and orphanages globally. Successful young professionals are increasingly becoming aware of the roles they can play in giving back to society, but often struggle to act on this desire owing to time or geographical constraints. The Ann Foundation effectively dismantles these roadblocks. It finds a keen volunteer anywhere in the world and connects him/her virtually to one of its partner entities.

At KKGM, the Foundation runs one-hour classes every day for different grades. The class strength of a typical grade in KKGM is about 50; each grade is split into smaller groups of 10-12 and a volunteer is assigned. The volunteers, mostly women well-versed in Bengali, are located across the world, including the US, UK, Germany, Canada and Bangladesh. Each group is taught for an hour on two consecutive days of the week, including weekends. The classes are conducted in the evenings so that they do not interfere with their regular studies. Classes are conducted over Skype, with a sole laptop facing a dozen girls at KKGM. A teacher at KKGM helps facilitate the class from their side. When a tutor is unavailable to take a class, she is required to inform the programme coordinator at the Anne Foundation so that they may arrange for a substitute tutor. The tutors also maintain a repository of documentaries or short films for times when substitutes are unavailable. In such a scenario, the facilitator at KKGM is informed and the link to the video shared so they can show it to the class.

These classes comprise a host of reading, writing and conversational exercises which the volunteer tutors prepare beforehand. Experience has shown that the girls perform fairly well in reading and writing exercises, but struggle to converse fluently. The initial barrier is their shyness, stemming from a lack of confidence in speaking in English. To overcome this, they are often paired together and asked to speak in tandem. Once the tutor has spent enough time with the class to gauge each student's abilities, she often changes the pairs to team overachievers with weaker students. Evidence has shown that the weaker student improves considerably while the stronger one continues to perform well.

To further boost their confidence, tutors try to make them comfortable with normal, everyday conversations, such as introducing oneself to a new acquaintance or discussing one's hobbies or interests. They also practice scenario-based communication, such as expressing themselves when they visit a store or reporting a crime to the police. Watching videos of people engaging in clear dialogue has also proven fruitful. Performances are better when exercises are gamified or when they are graded regularly and the star performers applauded.

Indeed, there is more to these English classes than meets the eye. For the girls who are in confined and rigid circumstances, the classes allow them to break free for a couple of hours each week. They offer a window to the outside world and a starkly different one at that. These tutors — successful young women — evoke a sense of hope among the girls, one that helps them aspire for new heights despite all adversity.

The environment may seem stifling to many, but the students at KKGM enjoy themselves. Even though they must live away from their families and do all their chores, they enjoy being with their friends — a simple pleasure which probably would have been denied to them had they stayed home.

Looking at the future

Since 2016, KKGM has been seeing an increasing proportion of its graduating students pursuing higher education. A majority enrols in the healthcare field — some study nursing in Kolkata and Bengaluru, a few pursue pharmacy and a small number pursues the MBBS degree. Other popular courses include law, engineering, management and various undergraduate courses in the sciences and the humanities. However, according to Mr Janab Ali Mollah, Director of KKGM, currently, about 35% of graduating students are unable to enrol in college as they either lack the resources or are married off. About 5% of students drop-out during higher secondary. Acknowledging these limitations, KKGM has started providing vocational classes, like computer studies and sewing, to help even those unable to continue higher studies become financially independent.

In 2020, KKGM initiated its second venture, the Khadijatul Kubra Girls' Academy, to extend its support to graduating students. The Academy aims to offer vocational courses as well as coaching classes for those wishing to appear for competitive examinations, such as the Civil Services Examination, the Staff Selection Commission

Examination, the Common Law Admission Test and the Joint Entrance Examination, among others. Now at a nascent stage, the Academy envisions a sponsorship programme to guarantee a secure future for more girls.

The holistic approach of KKGM reinforces the belief that under the right circumstances every child can learn. While the residential facilities help attract and keep girls in school, remedial classes ensure that even the weakest students do not give up. Additional coaching classes by the Academy prepare the students for the outside world, while mitigating the roadblocks they might have faced in seeking training elsewhere. Finally, its futuristic approach to improving the students' English acumen acts as an additional hook for parents.

Financial conditions often put a limit on a student's education. KKGM's financial support, not just at the school level but also in higher studies, ensures that girls who would have otherwise dropped out get a chance to pursue their education.

Finally, acknowledging that there will always be a certain section that is unable to continue further studies despite monetary help, the school provides vocational training that will help the girls be financially independent from within the confines of their homes. This stance underpins the notion that learning need not mean an advanced degree; by helping every student learn one skill or the other, KKGM prepares every one of them for a brighter future.

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Why We Need Responsive Schools

Subir Shukla

'No, sir, they will not respond, sir.'

It was in the 1990s and I was at a non-formal education centre (we still had them in those days) for working children in Kerala. The children ranged from 8-12 years, had worked the whole day and were in this centre at night. Their instructors were trying to teach them basic literacy skills and finding it difficult as the children were tired and uninterested. I looked at the primer being used – it seemed to have nothing to do with children's lives at all! That was when I asked if we could converse with the children through an interpreter and was told they would not respond.

However, we went ahead. I asked them if they could name all the tools they used during the day. There was a little hesitation in the beginning, but they began and were soon pouring out a long list and so fast that the instructor was finding it difficult to write them on the blackboard. We then discussed what each tool was used for, what its alternative was and so on. As the board began to get filled with the words used by the children, it became a 'learner-generated text' with sufficient repetitions and patterns to enable us to use as material to introduce reading.

Years later, conversing in a remote village in Jharkhand with a boy who had joined school late (he had been herding goats), I asked him how he managed to recognise each of his goats when they looked alike. He glared at me in surprise, 'Why? Can't you recognise children when you see them?' And we went on to discuss the intricacies of herding goats - from keeping the flock together to knowing when to turn the herd back in different seasons, to using herbs if an animal was unwell. This boy was under 'special training' for having joined school late; the other students would not interact with him and the teacher was not sure if he would ever learn as he never spoke in the class. Yet, here he was, an expert in his area and winning the admiration of his classmates.

More recently, in a Dharavi slum school in Mumbai, interacting with supposedly 'backward' students of class IV, I asked them what they did the whole

day and what they ate. I discovered that many of them enjoyed biryani. On asking if they knew how to make it, some fifteen children raised their hands. I asked one of the boys to tell the class. He began, midway, he was interrupted by a girl who said his method was not 'correct'. That led to a fine debate between the two on the nuances of making biryani! As everywhere else, the teachers were surprised at how articulate the children were, as they had never heard them speak. A few minutes later, when children revealed that there was a local biryaniwala they liked and I asked them how much profit did they think he makes every day and the children stunned their teachers by immediately breaking down his expenses and incomes in detail and making calculations. 'But, they're always so poor in maths and uninterested!' said their teachers.

Teaching in a changed scenario

It is always a little surprising to discover how teachers and other adults are astonished that children who are supposedly dull are not so at all! For some reason, we are unable to see the rich knowledge they bring in from their own lives outside the school. They often have a deep understanding of their environment, for instance, think of a tribal child; of the materials of a ragpicker; of those who cook, provide childcare and of the numerous other dimensions that somehow do not get treated as 'knowledge' and do not figure in our textbooks or classroom processes.

This is not really the teachers' fault as they have stepped into a system created in another time and context. When I began working in education in the 1980s, only around 40% children were in school and a large proportion dropped out before completing class V. The system in place was one that was geared around those who could afford to be in school, could attend every day, were supported at home and could manage in the language of the school. Just two decades later, more than 90% children were in school. This meant that the *majority* of children now in school were from groups that traditionally never attended school. They were not

first-generation learners – since all generations learned a great deal – just first-generation school-goers.

A major consequence of our success in bringing children to school has been that the student profile has changed. In most government schools and lowfee private ones, we now have students who do not have the middle-class background or the cultural capital that our curricula, textbooks and processes assume. For those who are poor, it may be difficult to attend every day, for a variety of reasons. Nor will there be adults in the family who can help a child with their studies. A large number may not know the school language well. In a slum school in Delhi, for instance, migration and urbanisation may easily lead a class to have more than ten languages. These may include, say, students speaking Punjabi and Odia sitting next to each other. How do you teach in a class like that?

'Designed to fail' situation

Given the diversity of our country, we have always had a degree of variation in our student population. However, as we successfully moved towards universalisation, this diversity morphed into 'super-diversity' - yet our approach to students' learning remained more or less as it used to be. We still expect our teachers to teach all the children the same thing at the same time with the same method and get the same results - an idea that is 'designed to fail', because what this does is to make sure that a great proportion of children, who are otherwise so bright and capable are left out of the learning process for one reason or the other. By creating a one-size-fits-all system we have created a 'leaves-out-most' situation where most children (and their families) cannot fulfil the basic expectations of the system. The consequences of the inherently excluding nature of the system are reflected in the great difficulties teachers face, the low levels of learning it generates and the low levels of motivation it creates.

Taking a responsive approach

What can we do to deal with this 'designed to fail' situation? To begin with, especially if you are a teacher, start with what is called the children's fund of knowledge. This is the knowledge that children bring with them from their world outside the classroom. Every child is an expert in something or the other. A child with an intellectual disability, for instance, might surprise you about how well she knows the moods of her caregiver.

How can we get that expertise and knowledge to come out, be shared, discussed and connected with what we are trying to teach? What this assumes is that, in your class, children speak. So, the first expectation really is to ensure that we run a lively classroom where children do not hesitate to participate actively. Here, our secret weapon is to smile a lot – it helps! Next, as mentioned earlier, ask questions about children's experiences and then find ways to connect them with what you are trying to teach. This will work many times (though not always). However, once the critical breakthrough is made – of getting the children engaged in the learning process – you can proceed much faster, often using the methods you usually do.

Teachers are, of course, always under pressure to 'complete the syllabus' or 'cover the textbook lessons' by certain given times. They may also have textbooks that are dull or do not appear to offer many possibilities for lively engagement or may not connect with children's lives at all. Even under these conditions, it is possible to have a highly active and engaged classroom that involves each child. For instance, with the old hare-and-thetortoise-race story, how about asking children to make a consolation card for the hare, or to tell us of the dream the hare had as he slept or to conduct a press interview of the winner, Mr Tortoise? All teacher training programmes advocate some form or the other of activity-based learning or constructivist pedagogy, so any teacher trying to get children to participate in challenging tasks, reflecting on them, or applying what they have learnt into new situations, will essentially be doing what is expected of her.

In such a process, how can we address the different needs of our children? This is possible every time you create a task on which many children can work on their own. For example, make a drawing/role play based on the story we just did, or make a map of the classroom, or work out how much the midday meal costs per child. This leaves you free for 10-15 minutes, while the class is going on, to then work with children who for some reason or the other, are falling behind. It provides an opportunity for focused, even individual, inputs to those children who need more time and support. Equity in the classroom, thus, comes to mean 'to each child as per her need' – in terms of support, opportunities, and the teacher's time. This is far better than teaching in the usual, whole-class manner and then, doing 'remedial' teaching a little later.

But we do not have the freedom to do all this, you might say. This is an interesting point to think about – somehow, we are all free to teach poorly and attain poor results, but we are not free to try things to improve our processes! Do give this a try, see what happens and take a call based on that.

Being responsive

All this is not to say that the solutions only lie with teachers. On the contrary, we need to strengthen their efforts by carefully re-designing our core educational processes in light of our ground realities as well as contemporary, evidence-based thinking. This applies to re-examining our curriculum to effect a shift from content to core capabilities; our textbooks from sources of information to triggers of learning processes; our assessment from a feargenerating judgmental process to a pedagogical

tool that also empowers children to take charge of their progress; our teacher professional development from hierarchical and instructionbased to an enabling partnership with teachers for whom we jointly set goals and then support them in achieving those.

These shifts are needed because it is not the children who have to adjust to school but the school that has to adapt to the children. Such a school is a 'responsive' school. I do not use the word 'inclusive' because it, somehow, implies that we have included you — a somewhat condescending approach when children are actually the rights-holders and we are only the duty-bearers. So perhaps the biggest shift needed in enabling each child to have a fulfilling learning experience where her potential is realised is the one in our own way of looking at education.



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Shikhshamitra

An Experimental School and Resource Centre

Sudeshna Sinha

A background of special education and years of experience in running a Hindi medium school for migrant children in Kolkata (1994-2004), often left me and some of my close associates reviewing the educational needs of children, especially those from the lower-income groups. My experience during these years confirmed what many people already know - a schooling system of 10-12 years with a fixed syllabus for all neither respects the individuality and ability of each learner nor equips them to cope better with life. Moreover, in trying to fit into the system, most of those at the margins ended up being pushed out, losing their survival skills in the bargain.

In 2004, along with some associates, I decided to set up a Bengali medium school for the 10-14 age group, who were at their creative and critical best. They were also the most vulnerable and likely to drop out of school. Moreover, that age group was expected to have acquired basic literacy and numeracy and therefore, be ready for the various curricular experiments we had in mind.

The Beginnings (2005-2011)

We found a space in an area called, Chetla, near the famous Kalighat temple in south Kolkata. As we surveyed the registered slums in the neighbourhood, we repeatedly presented the new school concept to the residents for a couple of months. Seventeen children enrolled and *Shikshamitra* began in April 2005. Most of the children had been going to government schools, some had dropped out. All were disgusted with their schools and had come to try out something new. *Shikshamitra* school ran for six years and, till the very end, the enrolment number fluctuated between 25 and 30.

The initial period of turmoil

We found that these students were restless, aggressive, openly exhibiting their suspicion of and disdain for the teaching community; they were prone to violence and were averse to learning. While teaching, learning plans had to be postponed; art and clay work helped to calm them down to some extent. The children were invited to do role-

plays on topics like break time, classroom teaching, closure time at schools, games played outside, time spent at home. Under the garb of acting, children narrated stories of humiliation and torture endured as the marginalised, both in their previous classrooms and in their neighbourhoods and how they had resorted from revenge to submission and resignation at the end.

The role-plays gradually built a bridge of understanding and initiated the democratic practice of students and teachers sitting together discussing issues, difficulties, positive moments and also reviewing school activities, along with suggestions. Cooperation, care and efforts made to learn and own up to mistakes were rewarded with encouragement and open appreciation.

To ensure and uphold the dignity of physical labour and sense of ownership, the teachers and children were engaged in the everyday maintenance of the school. A roster listed the different tasks - dusting, mopping, closing doors and windows, cleaning toilets, ringing the bell etc - and the names of those in charge. It took a while for the school community to accept and value the practice, of course, with exceptions.

After settling down in about six months, the school ran for six to seven hours, five days a week. The curriculum involved a lot of music, art, crafts, hands-on work, dance, theatre, games, films, visits to streets, the old dock, bazaars, art galleries, horticultural park, crafts organisations and often, these were integrated with the regular academic subjects. The emphasis on the arts was so strong that some parents who came to admit their children thought it was a music and dance school!

Learning Bengali

Sixty percent of the students, between 9 and 14 years, who had formally passed classes II, III and IV, had not achieved the basic levels of literacy and numeracy, some even failing to write their own names in Bengali. Ensuring basic reading and writing skills in Bengali now became the foremost challenge. We tried different methods

that had previously worked well elsewhere. Faced with repeated failure, we turned to the *Reading Guarantee Scheme*, initiated by Prof Jalaluddin. With this method, most of the children learned to read and write within three months while some took a little more time.

The method involved:

- Interpreting a picture or a story from the children's own perspectives. The learners constructed a new text in their own language with help from the teacher. The method made reading meaningful and enjoyable. Learning and retaining words became easier as they came with a context.
- Simultaneously, the Bangla Barakkhari chart with combinations of consonants and vowel signs (matras) was introduced. It was used to construct simple words (without sanyuktakshar), reinforcing correct spellings. Further, it helped learners with dyslexia, otherwise unable to insert the vowel (matra) signs correctly. Before we introduced the Barakkhari, we made sure that the students knew the Bengali letters and the vowel signs.
- A third component that we added was the use of appropriate worksheets, which later became very popular with learners and teachers.

We soon discovered how crucial it was to use appropriate texts in simple language: just because they were all beginners, it did not mean that the older children would enjoy the same texts that were being used for the younger age group! There was a dearth of right kind of appealing texts as those by renowned authors, otherwise very good, were not effective for these beginners. The context and the language of many texts appeared unfamiliar to the first-generation school-goers.

Short reading material, not exceeding a page, written in large fonts and well-spaced out was preferred. So, we, teachers and students, started creating our own texts often in the classroom. Teachers created short versions of stories from Grimm's Fairy Tales, Chekhov, Tolstoy, Sukumar Roy, Leela Majumdar and other authors. The entire school was caught in a frenzy of writing small and big pieces, simple in language but complex in thought. *Shikshamitra* began printing these with the students' illustrations. Within a year, there was a magical rise in interest in the library books, their illustrations and designs.

Learning English

Unlike Bengali, we did not have a tried-out path in

teaching English to first-generation school-goers. We got tips from places like the *Isai Ambalam* School and Auroville and used techniques from special education. We evolved our own English package through experimentation. Some methods used are:

- Students were helped to master phonic skills for word attack and spelling and acquire a basic vocabulary of fifty words within three months. More words were subsequently added. Word attack, a decoding skill, is the ability to connect the printed word to the spoken word and is basic to learning to read. It also helps in decoding similar-sounding words, such as chant and pant.
- Using that basic vocabulary (nouns, verbs, articles, adjectives, prepositions) they were quickly introduced to step-by-step construction of very simple sentences. Once they became confident of building, writing, reading sentences and saying them aloud within five months, students started writing on their own. This was followed by writing short descriptions leading to writing paragraphs and small stories by the end of the year.
- Illustrating a text, read or written, was encouraged. It helped the teachers to understand how much the learner had grasped. Interesting affordable materials emerged out of this process.
- Other things were tried simultaneously -listening to carefully chosen songs and stories, watching movies, interacting with teachers and visitors in English. All these helped children develop an ear for the language.

Learning numeracy

This was somewhat easier to achieve. Manipulatives, or concrete materials, were developed in-house. Some outside materials from organisations like *Jodo Gyan* were converted to suit our needs and pocket.

A variety of materials were designed on a single concept and these were used by different learners, including the ones who were numerically challenged. Usually, maths manipulatives remain restricted to the junior classes. For the first time, appropriate manipulatives in algebra and geometry were skilfully developed for middle school levels. A marked increase in understanding of concepts was noticed in the middle school with the aid of manipulatives.

Other subjects

We were free to try all the rich pedagogic practices developed all over the world for the teaching of standard school subjects like history, geography and science. Going outside the class into the neighbourhood for local surveys and interviews, discussing current issues, studying history and geography from local to global, doing hands-on experiments and repairing with easily available materials, emphasising on ecological science and appropriate behaviour, involving in day-long cooking classes, doing art at art galleries, relating theatre shows to the texts being read, fun annual exams with parents as judges, learning to assess one's progress – the school was ready to try out all that would reinforce learning.

Open zone technique

This encouraged practice and independent learning. In a span of 45 minutes, students were expected to work by themselves to complete a given number of worksheets in various subjects, without any teacher intervention. Procedures were also put in place to enable self-correction. Of course, rules were flouted and there were irregularities. Yet, independent learners were in the making.

Art

Art and all that it encompasses simply became a way of living for us as it took root in the lives of both children and teachers. Art was not merely a class or an extra-curricular activity. It was everywhere: on walls, on doors, on notebooks, on paper and on cloth. It even entered most of the exams.

Films, songs and music

These, very often, were chosen as texts, as these brought out the best in children with dyslexia since they did not have to read the text. They participated in discussions, activities, often, much more perceptively than the others and filled in the related worksheets with as much interest as the others.

School closes down

In spite of its rich pedagogy, *Shikshamitra* could not attract a sufficient number of students. Fathers, in particular, preferred traditional schooling. Finally, it had to be wound up for a host of other reasons including, a dearth of funds and introduction of the RtE. Most children were admitted to government schools. Some continued schooling, going on to college while others took up jobs.

Shikshamitra Resource Centre

Shikshamitra had started sharing its pedagogy with organisations from 2007. As the school closed down in 2011, the organisation started training others, creating and supplying materials as a full-time activity.

Bengali training

Shikshamitra started sharing the method of accelerated reading and writing in Bengali through 3-day workshops. We found that it excited teachers from varied backgrounds. The process of interpretation of a text, voicing one's views and being involved in creating a text of one's own filled the teachers with a sense of empowerment and joy. They felt confident in going ahead and trying the method. We trained many government school teachers, both from Kolkata and other districts of West Bengal as well as from private English medium schools.

We even trained NGO teachers working with children in very difficult circumstances on railway platforms, in bidi-making and rag-picking communities, tribal children and children in various slums of Kolkata and other towns. Many of the groups created texts suiting their own environment. The teaching-learning materials, worksheets and the books developed by *Shikshamitra* have always been in good demand.

English training

Our training Foundations of Basic English became very popular and is one of the most sought-after programmes of *Shikshamitra*. It has been delivered in several states of India, in the northeast, Bihar, and Haryana. It has been used in the Azim Premji Foundation schools, several schools in Bangalore and also in Bangladesh. Teachers with weak foundations in English found the programme extremely beneficial, learning English afresh in a novel way.

Government school teachers of classes II to VII (primary and middle school) have used the programme successfully; some have used this as a quick remedial measure to teach primary school children who have missed the bus in primary schools. The resource teachers of the Haryana government commented after the training that for the first time, the programme told them what actually needs to be done in the classroom instead of mere theorising as regular workshops do. As in Bengali, the time-tested worksheet compilations and workbooks ease the learning process.

Maths training

Requests for workshops in maths came from the same government and non-government schools and learning spaces that had availed of the languages training.

Our maths materials have been bought by schools and individuals from all over India. Some schools made their own materials to cut down the costs. It was through these workshops that *Shikshamitra* discovered that maths learning was most effective when participants made their own set of manipulatives. This practice has been encouraged

since then. Resource persons have been created in different organisations and schools for teaching maths and Bangla. However, finding English teachers remains a challenge.

Shikshamitra continues as an Educational Resource Organisation, to disseminate its pedagogic knowledge, provide material support and act as an advisor to many schools, organisations and even parents in several states of India. We are driven by our conviction that learning is for every child - only opportunities have to be created.



By profession a special educator, **Sudeshna Sinha** has been largely involved in establishing experimental elementary schools (*Aashirvad* Vidyalaya, at St, Joseph's School and *Shikshamitra*), developing curriculum, pedagogy, materials, books and assessment tools. Teachers' training and writing and preparing books and documents for teachers and children in lucid language have been her areas of interest. Designing methods and materials for effective teaching, especially languages, is her specialization. She works as a resource teacher and has taken classes at the Teachers' Centre, Modern Academy of Continuing Education, *Digantar*, Azim Premji University and Wipro Foundation. She is a resource consultant to an alternative school in Bangladesh and to the Techno India Group of Schools in Ariadaha, West Bengal. She had been also been a consultant to the Oxford University Press. Along with her organisation, *Shikshamitra*, she is currently, also one of the resource providers for the Wipro Foundation. She can be contacted at shompare@gmail.com

The Second Sex? A Conversation on Gender in a Rural Classroom

Sunil Kumar

Being a social science teacher in a class of students where 19 out of the 30 students are female, this topic was certainly not an easy one to deal with. Children in the class also come from different socioeconomic backgrounds. While teaching the chapter 'Society and Role of Women' to class VII, the children would be reminded of many experiences they live with and endure every day in their homes. Patriarchy still reigns supreme in their households. Many differences can be seen in the way boys and girls are brought up, such as the practice of sending the male child to a private, English-medium school while the girl child is sent to a government school. The children were soon to become very aware of many other forms and modes of discrimination.

The first day of my plan for this topic began with a discussion on gender roles. The children were asked to list the tasks and roles that men and women take up in the village and the society at large. All children were a part of this discussion.

The discussion began with the boys. All the twelve boys present on that day proclaimed their views on men's roles. The chief amongst these were: men handle the non-domestic affairs, they go out to seek work, they work in the fields, and they take the decisions of the family. As the boys presented their views, they were noted on the blackboard. The tasks performed by men had taken up onetenth of the space of the blackboard.

Then, it was the girls' turn. They began recounting all the tasks from the beginning of the day - getting up to fetch water, sweeping the house, feeding the animals, cooking breakfast for all members of the house, getting children ready for school, cooking lunch, washing utensils, looking after the children and the elders of the house, helping men in the fields and so on. The tasks they recounted filled up the entire blackboard. I questioned the children whether women are remunerated for all this labour. There was no answer. I posed a second question and enquired whether men are remunerated for their labour outside the household. All the children replied in the affirmative.

As homework, children were assigned two questions. Firstly, to find out the reason why women are not paid wages for their work. Secondly, they were asked to observe any discrimination in the upbringing of men and women (especially young boys and girls) in their homes and their neighbourhood. As a start, the children were able to understand that women provide a lot of unpaid labour and even then, they are not granted the same respect at home as the men are.

The next day, the lesson began with a discussion on the questions that had been assigned for homework. Many children pointed out that women are not paid wages for their labour because it is their duty to carry out domestic tasks. They were baffled as to who else could perform these tasks, if not women. Other children countered this with the view that when women did the same work outside, they are paid wages for it.

During the discussion, more questions arose: should domestic tasks not be considered as worthy as other labour? Is it really only the woman's duty to carry out domestic tasks? In the end, there was a consensus amongst the children that domestic tasks are the duty of both men and women, and they should share these equally. I also put forward my point that the Constitution of India recognises that equal wages be paid for equal work and therefore, it is wrong to discriminate on the basis of gender.

Then, the second question was addressed. Girls presented the myriad forms of discrimination they observed and encountered. While boys are given toy planes and cars to play with, girls are given dolls. While boys are given plenty of food to eat, girls are given leftovers. Girls are taught to speak in a submissive manner, but boys are not. While boys are free to roam around and play outside wherever and whenever they please, the movement of girls is strictly monitored and going out at night is forbidden. Boys are given good clothes to wear, sent to a good school and even tuition classes. Girls are rarely afforded the same treatment. Girls are married off at a young age, but not boys.

Post the dialogue, I laid out the principle of equality for the children, especially that people are equal, and gender has no bearing on it. However, our social system decreed that men and women are not treated as equals. Domestic tasks were assigned a lower value and written off simply as a private family matter to be taken care of by females. This gave rise to gender-based discrimination in our society. Despite the Constitution rejecting gender discrimination and there being provisions for legal action against the same, gender discrimination has persisted. Due to many such reasons, girls are not able to go to school and get an education, they are not able to get jobs and a respectable and fulfilling life remains a far-fetched dream for most of them.

Our society is eager to assign women the role of a *devi* and put them on a pedestal. However, it never engages in a dialogue about their socio-economic status. The class discussion revolved around these issues. Children raised several questions: 'Why do men act like this?', 'Who made these rules and assigned these roles in the society?', 'Why is the birth of a girl child considered inauspicious?' 'Why are girls either killed in the womb or after their birth?'



The homework assignment for the day was to find and collect information about women who have contributed towards the development of the nation.

The third day began with the children's responses again. The children named many women who had contributed to the nation's growth: Indira Gandhi, Sania Mirza, P.V. Sindhu, Saina Nehwal, Manisha Thakur, Kalpana Chawla, Kamla Bhasin and more. With this, I added that the driving force behind these women's success and their contributions was their education and their awareness of their rights. The plan for the day also included bringing to the children's attention the injustice being meted out to women in the present day as well as making them aware of the laws that protect women from harassment and sexual violence. Children were also introduced to the Protection of Women from Domestic Violence Act, 2005. They were told how under the purview of this Act, women who face physical violence or mental abuse in a domestic space are provided with legal protection. The Vishaka Guidelines were discussed which lay down provisions to protect women from sexual harassment at the workplace. Lastly, they were made aware that the Constitution accords equal rights to all citizens of the country and that legally, they cannot be discriminated on the grounds of gender, caste or creed.

The biggest challenge that I encountered while teaching this lesson was to acquaint children with gender-based discriminatory behaviour in their own families. Sharing their personal and family affairs was not easy for the children. Making them aware and empowered enough to raise their voice against the ill-treatment and violence meted out to them (as girls) was a herculean task in itself. The children's experiences were eye-opening, thought-provoking and poignant. They opened the doors to learning about different forms of discrimination.



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Learning by Experimenting Why Things Float or Sink

Umashankar

In our daily lives, we see that many things sink in water, while many others float on it. This raises a question in our minds: why do some things float and some others sink? An obvious answer that comes to our mind is that a stone sinks as it is heavy and paper or plastic floats as it is light. But does this answer some other questions? No. A massive ship does not sink, but a small stone does. Therefore, we accept there must be some reason behind these riddles. It is said if there is a reason, there is essentially science behind it. So, what is that science?

While teaching measurement in class VII, I had to work on the concept of density.

I asked students, 'How is it that some things float on water and some sink?'

To this, children had a logic. 'Some things are light in weight, and some are heavy. Things that are light in weight float and the heavy ones sink.'

I said, 'Okay. If that is so, let us conduct an experiment. Look, here is a bowl and a small iron nail. Tell me, which one is light, and which is heavy?' 'The bowl is heavy, and the iron nail is light,' answered the children.

I dipped both things in a container filled with water. We all saw that the nail sank, while the bowl continued to float.

'Why did it happen?' I asked the students.

One child said, 'The bowl is shallow which is why it swims. But the nail is not shallow.'

'But all of you said the thing which is heavy will

This put the children into a dilemma. They said, 'No, no, we cannot say that.'

'So, what else could be the reason?' I asked.

The children began to discuss among themselves. But when they did not arrive at any original answer, I took this a step forward and showed them one more experiment.

I took a beaker and put 200ml water into it. Thereafter, I put 200ml kerosene oil into it. After some time, we could see that the kerosene oil and water separated and formed distinct layers. Perhaps, the children had seen this earlier also, because some children could be heard saying, 'Look, both will get separated.'

I asked, 'Why didn't these two liquids mix with each other?'

One group of children explained, 'It happened because kerosene oil cannot dissolve in water.'

A second group of children said, 'Water contains salts as a result of which it is heavy and goes down. But oil may be containing air because of which it comes up.'

The third group of children went on to say, 'What you put first went down and what was put later, came up. If we had poured oil first, it would have remained below.'

One child said, 'During the first experiment, we saw the nail sank, but the heavy bowl did not. Here, the difference is how diffused the matter is. Maybe oil has greater diffusion.'

Since all felt that their logic was better, there was no other option but to find out by conducting another experiment. It was imperative to draw an exact conclusion.

We took some water in a test tube and heated it. After some time, it started giving out bubbles, proving that water contained air. It did not take long for children to understand that there is air in water, which negated one of their arguments.

Then, we turned to another argument. One child put kerosene oil first and then water into a beaker. The entire amount of kerosene oil came above water gradually. This way, another argument was proven wrong.

Then, we moved on to deal with the next argument. I took approximately 100ml water in a beaker. Then, I slowly poured glycerine along the inner surface of the test tube. The children were quite eager to know what would ultimately happen. A layer of glycerine settled down at the bottom and water came up.

I asked, 'How come this happened when glycerine dissolves in water.'

The children said that we cannot say that the matter is insoluble hence, the layer is formed. This layer was also formed even when it dissolved. 'Perhaps glycerine is more viscous than water,' they suggested. But this almost rejected the logic of the undissolved matter.

The last logic was way too different and forced us to think. A child said if we expand this nail by beating, it may float. The boy said oil spreads more and water spreads less. This logic gave a new direction to our understanding. But many students still could not understand it.

I asked children, 'Which of the two is lighter, one kg cotton or one kg sugar?'

Many students replied at once, 'Cotton!'

But after some time, and some more thinking, they concluded that the weight of both would be the same since the quantity is the same.

I asked, 'Which one will occupy more area?'

The children replied, 'Cotton, as it is sparse and sugar particles are closer to each other.'

Less dense (sparse)= More area expansion = Less density

More dense = Less area expansion = More density In this way, I was able to explain to most of the students the characteristics of density. Had not the same thing which applied to the solids also applied to the liquids? During the experiment, the volume of water and kerosene was the same. Was the weight of the two liquids different because of which they became separate by forming layers? This question crossed their minds.

To make it simpler, I put the same volume of glycerine and sesame oil along with water and kerosene oil in a beaker. Some liquids started coming up and some were going down even as I was pouring these one after the other. The children were surprised to see the separate layers of each liquid.

This made a child ask, 'Teacher, if each matter has the same volume and yet separate layer is formed, there must be a difference in their weight. We must weigh each matter.' All students nodded in agreement.

But how to measure the mass of a matter? One boy suggested they can measure it with the help of a syringe. 'We will take the same volume of different matters in the syringe and take their weight using an electronic balance.' The children, by turns, demonstrated this action before the class and formed a table.

SI No	Substance	Volume	Quantity/Weight
1.	Kerosene	1 ml	7.6 mg
2.	Water	1 ml	8.7 mg
3.	Glycerine	1 ml	11.7 mg
4.	Sesame oil	1 ml	8.3 mg

The children arranged these in order of reducing weight.

Glycerine > Water > Sesame oil > Kerosene oil

The weight of glycerine was the highest and kerosene, the lowest. This arrangement showed the order of layers from the lower to the upper in the beaker. By now, the children were able to understand how volume and mass affect density and why matters float or sink.

It was a great experience for me as the children were able to understand a concept on the basis of logic, experiment, analysis and by linking it to their daily lives.



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Nali-Kali A Step Towards Quality Education for All

Umashanker Periodi

Background history

My introduction to Nali-Kali was in 2007 through the *Child-Friendly School Initiative* (CFSI) in Surpur, Yadgir district. We were working in one block for the overall, holistic improvement of government schools and Nali-Kali was an important component in this initiative. For the team in Surpur, after a lot of struggle, it was clear that the education level of the children would improve only when attention is focussed on the teaching-learning process and that was possible through the Nali-Kali methodology.

Nali-Kali was important also because through this multi-grade, multi-level, activity-based teaching-learning process, it would address another critical constraint: the lack of required numbers of teachers. As we worked through it, we were convinced that this methodology, more than anything else, would reach every child with quality education as its core element — a foundation on which the Nali-Kali methodology is built. It boosted our motivation to reach each and every child with quality education in all the 309 schools of Surpur.

To make this a reality, we organized a large scale, online capacity-building process in the third week of May, in six districts of north-east Karnataka for the Nali-Kali teachers. Eleven thousand teachers participated in this capacity-building process for a week at the invitation of the Education Commissioner's office in Kalaburgi. We assisted them in all aspects: visualising, planning, training the resource persons, and assisting smaller groups in the field to handle the digital platforms. Interestingly, this week-long programme was received very well by both the teachers and the functionaries. Barring the initial glitches, teachers were able to make meaning of what was being discussed and interacted actively.

This was an achievement, considering these were mainly primary school teachers and the majority of them were from rural schools from the most backward districts of Karnataka. A study attributed this success to Nali Kali's organised system and a clear-cut methodology. By and large, the process is laid down with instructions and the TLMs provided.

It guarantees a basic level of learning to all children, giving importance to *self-initiated*, *self-paced learning*, with the support of the teachers and the peer group. In this methodology, the teacher's role as a facilitator is very important. Hence, reaching every Nali-Kali teacher was crucial for the success of this programme.

For Team Surpur, the work around Nali-Kali was quite intense as we were involved at three levels: first, weekly onsite support to individual teachers at the classroom level, second, review meetings once a fortnight of the work done, and third, planning bimonthly teacher capacity-building processes at the cluster and block levels. For the team, too, it was a process of on-the-job learning, like the in-service training of teachers. Consequently, the learning and the contribution of individual members was quite high.

We had started the CFSI in 2004 and in 2007, we had an evaluation of the learning levels of the children. To our surprise, the results were disappointing, because evaluation revealed that, even after three years, there had been *no improvement in the learning levels* of the children. Obviously, we were questioned. With so much investment, how could there be no results? Or no improvement in learning levels of the children! We were a bit shattered. We requested for three more years, which we were granted. Now, the expectations were very clear.

Ringing in changes

We started a focused journey of working with teachers to build their capacity. One thing that was amply evident was that resources were not freely available for teachers for their own development. Additionally, there was no space for teachers to come together, discuss, share their experiences and challenges, get inputs and upgrade themselves. We found that creating a voluntary learning community of teachers was very important for their professional development.

Teachers' forums and learning centres

Thus, was born the Voluntary Teachers' Forum (VTF) for teachers who wanted a space of their

own, to meet, discuss and share. This led to creating *Teacher Learning Centres* (TLCs) which were very well-resourced. They had a good library, collection of science and maths TLMs and computers with internet connections, though our experience tells us that attracting teachers to the resource rooms is not easy, not even with richly equipped teacher learning centres. However, the TLCs slowly became popular and today, we have fifty such teacher learning centres in ten districts of Karnataka.

Establishing a newsletter

One criticism of Nali-Kali was that the existing structure did not give teachers space for thinking and reflection — speaking about their experiences helps in thinking and reflecting. Since writing is a step ahead in helping people reflect, we started a newsletter which carried articles on the teachers' classroom experiences. Initially, teachers wrote only on what they did, but slowly moved forward and started reflecting on these experiences. Writing led them to read other material too and this helped in expanding their horizons.

Melas

Another innovation which moved learning beyond the classroom and textbooks was the *melas* where children prepared material on different concepts of science, language, maths and social science and made public presentations to other children, parents and the community. Though there were no dramatic results, all these things helped in moving beyond the narrow structure and complemented the Nali-Kali process.

Mentoring

A thorough review of the Nali-Kali programme was enabled by the interventions of Hridaykant Dewan who, by then, was working closely with us. He helped us to analyse and understand the Nali-Kali programme. An important insight gained from this was that our methodology was so structured and centrally driven that it did not leave room for the agency of the teacher. Everything could not be predesigned and structured for a teacher without any space for her to think, respond spontaneously and make learning happen then and there for a particular child, in a given context. It made teachers follow instructions and do what they were told!

Hridaykant Dewan pointed out that such a method is more an activity and less an education. So, although it had been a good start, teachers had to go beyond this. They had to think independently, creatively, understand the child and her context and

respond favourably to it. The teachers would have to go beyond the instructions, not just follow them and limit themselves to doing what they were told! They would have to think for themselves, reflect on the process and innovate to facilitate learning in every child.

That is when we started the entire process of creating opportunities and spaces for teacher education. We started working very closely with teachers and together with them, co-teaching, supporting, hand-holding, while continuing with our initiatives of VTFs, *melas* and TLCs. The entire focus was on the teaching-learning process.

The long haul

As anyone who has worked in education knows, improvements take a long time. Seeing results and creating impact are slow processes; a long haul! It tested our patience, because the improvement, though steady, was slow. We saw slight improvements in the learning levels of the children only after seven years of dedicated work. It is only now, after 2015, that we see seeing Surpur performing consistently better in the SSLC results in comparison to all the other blocks of north-east Karnataka.

Looking back, Nali-Kali has been in existence in Karnataka for a quarter of a century now, starting in 1995 as a UNICEF-assisted pilot project in HD Kote, Mysore district. The person who was instrumental in starting this multi-grade, multi-level, activity-based teaching-learning process was M.N. Baig, the then, Block Education Officer of H.D Kote. He started with a few interested teachers, who went to the Rishi Valley School in Madanapalle, Andhra Pradesh, to study the Rishi Valley Satellite Extension Programme started by Rama and Padmanabha Rao, who had transformed the Rishi Valley School's Rural Extension Centre into a model for effective primary education in rural areas.

The work of these teachers of H D Kote in 1995 is commendable. They were a motivated and hardworking lot, who worked and created everything needed for Nali-Kali – the curriculum, teaching-learning materials, the process, the review and research. More than anything, they had a deep faith and hope in this experiment.

A child-centred approach

As Mr Baig used to say, Nali-Kali was designed to be a joyful child-centred approach which paid attention to the multi-grade, multi-level learning in a classroom. Taking into consideration different learning styles, it made learning a fear- and stressfree experience by changing the typical assessment styles to continuous and comprehensive assessment as part of the learning process.

The curriculum is reorganised into small manageable units called milestones. There are milestones for each subject (language, mathematics, environmental studies). The child goes through the learning ladder, with activities and learning material as steps. Classes are clubbed together and there is ample scope for peer group learning. Children actively participate in the learning process, they identify their positions, select an activity group card and join the activity group they belong to. These are:

- 1. Pre-preparatory
- 2. Preparatory
- 3. Competency preparatory activities
- 4. Learning
- 5. Practice
- 6. Evaluation

The teacher moves around the classroom to provide different type of support to children in different groups. The materials produced by children are exhibited in the learning pandal/roof created in the classroom.

Progress and present history

In its 25-year journey, the Nali-Kali programme has gradually scaled up from a few blocks in H D Kote to across all the forty-nine thousand government schools in Karnataka. Starting with the help of the UNICEF in 1995-96 in a few schools in H.D Kote, by 1999-2000, it had been adopted by all the schools of the district with, again, the UNICEF and World Bank support. In 2004-05 it was introduced in all the small schools in eight additional blocks of the state. By 2007-8, it was introduced in all the schools of the state with less than thirty pupils on their rolls by combining classes I and II. In 2009-10, Nali-Kali was introduced in all the Kannada medium schools of the state integrating classes I, II and III. Now we have Nali-Kali in all the schools of Karnataka. There is now a lot of thinking happening around Nali Kali in Karnataka and it has become the subject of many studies. The main aim of the method is to see that every child participates in the learning process and enjoys learning.

The way forward

For an all-inclusive education, the teacher reaching out to each and every child is very important. The advantages of this are:

- Children can ask questions without any fear and teachers and peers answer patiently.
- Every child who needs guidance is getting it from their teachers or peers.
- Children's work is prominently displayed on the Organised Learning Roof (the makeshift roof that is created inside the classroom to hang all the materials prepared by the children, and other learning materials for them to see).
- Learning materials are available in the classroom.
- Students work in a fear-free environment.
- Children's responses show that they have understood the teacher's explanations and instructions.
- The home languages of the children are freely used.

In conclusion

Though there have been lots of ups and downs, we feel that the 25-year old journey of Nali-Kali has been a successful one. We have been able to train our teachers; the training modules, resource persons, and material are in place though there is now an immediate need to recruit more teachers. *Education for All* is not a simple neutral idea; it is a very potent concept and, in some senses, a highly political one, where 'political' means empowering everyone by making education available to all, including the most marginalised sections of society. For that to happen, we will have to be prepared to walk the extra mile, because merely reaching every child is not enough. What is equally important is the kind of education that is being imparted. Inbuilt

into the idea of education for all is quality education,

for which we have a long way to go. We may have

reached almost all children through Nali-Kali, but

are all children receiving quality education?

To answer this, a LIRIL study done in two districts (one in Karnataka and another in Maharashtra) by the Azim Premji Foundation and Tata Trusts gave us some insights into improving the language learning in the lower classes. The study has revealed that in both the districts, language learning is below average. The methodology of Nali-Kali is child-centred and individual learning processes do not allow room for the much-needed skills of listening, speaking, interacting, working in groups and giving the child opportunities to use language to communicate. Group work in Nali-Kali is also limited since the child may sit in a group but is

working individually. I feel that this aspect — of the classroom and its processes being conducive to learning with a lot of latitude for children to listen others speak, being encouraged to speak on a variety of topics themselves, from concrete experiences to abstract ideas — is very important. This happens only in different groups, occasions and situations because, in these interactions, children have to use language for communication. It is a very important insight from the LIRIL study that we will have to take seriously and incorporate

into our Nali-Kali methodology to reach every child with quality education.

Today, the situation is very different from the one in 1995, when the Nali-Kali experiment began in H.D.Kote. Over the years, the Nali-Kali methodology has created a wide base, reaching all children with a basic minimum level of learning. The challenge in front of us is to empower teachers to go beyond the basic framework and structure and to use their agency to make quality learning available to *all* children.



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Will a Skills-Inclusive Education Enable Schooling for All?

V Santhakumar

Many concerned individuals perceive that the inadequate inclusion of skills in school education is harmful because it makes many children (or their parents) lose interest in schooling, takes children away from the traditional skills of the parents or community and is one of the reasons for the widespread unemployment of adults who have completed schooling in India. This is a complex issue and we need to look at the historical and international experience, including that of India, to understand this.

Colonial education

Many commentators have blamed the British colonial rule for starting a general-purpose school education in India which did not inculcate different kinds of skills. There was a reason for this decision by the colonial administration. While designing an education for India, there was a debate in the UK where, until then, there had been two kinds of schooling: one, a general-purpose schooling, patronised mainly by the affluent and the second, called 'apprenticeships', for children from poorer families. There were concerns about the social implications of such a dual education system. Those who were concerned about inequality argued for extending the general-purpose schooling to all children for a specific number of years. It was this change of tactic in the UK that influenced colonial education in India.

Gandhi's approach

Gandhi was against colonial education and one of the reasons was its disconnect with the livelihoods of the majority of Indians at that time and his concept of *Nai Talim* espoused the idea of agriculture and artisanal skills being included as part of education. There was opposition to this idea from certain quarters, for example, the *Dravida Kazhakam* (DK) leaders of Tamil Nadu, who thought that its implementation would lead to the persistence of the caste system.

Though liberals within the Indian National Congress, like Jawaharlal Nehru, were not enthusiastic about Gandhi's approach, post-independent

governments in India supported a number of schools in the country in their experiments with *Nai Talim*. However, a few decades later, many of these schools had begun providing mainstream schooling.

There was an important reason for this. Many farmers and artisans did not want to send their children to schools which taught agriculture or artisanal skills. They believed that their children would learn these skills even better from their parents by helping with these tasks and by doing so they would also not have to spare the time to be in schools. It became clear that poorer parents were only willing to send their children to school if they could see a different and, according to them, a better life possible through education.

Vocational skills in other countries

Europe

Germany is one country where sections of children are diverted to a vocational stream as part of secondary schooling. Most Germans who take up jobs in factories that make cars and other such engineering products are those who have gone through a vocational education. There are two important factors to be considered with regard to Germany: firstly, because of industrialisation, those who go through vocational education, get jobs with decent salaries and all the social security benefits. Secondly, it is the school which streams children into the vocational and the general categories (it is the students in the latter group that may end up in universities). Hence, the socioeconomic status of the parents does not influence this choice.

The situation in Italy is somewhat different, though there too, students have the option of pursuing the vocational stream as part of secondary schooling. In Italy, parents play a greater role in deciding the selection of the stream for their children. Working-class parents may want their wards to take up jobs as early as possible and for this, the vocational stream is suitable. Hence, they may encourage their children to opt for the vocational stream, irrespective of their ability and interest in

the general stream and later, university education. This might have contributed to the persistence of inequalities and class differences in Italy.

The UK and USA

On the other hand, it is in the UK and, due to its influence, in the USA, that a general-purpose schooling is provided to all children for 12 years. This has both advantages and disadvantages. All children, irrespective of their socioeconomic backgrounds, retain the option of pursuing a university education. However, many students who may not pursue such an education due to the lack of interest or other reasons could end up wasting a number of years that could have been utilised in picking up a useful occupation or skill. Although skills education is available in polytechnics or community colleges after 12 years of general-purpose schooling.

Some experiments

There have been other interesting experiments which are noteworthy here. Towards the end of the 19th century, the then, princely state of Travancore decided to start a school for farmers' children. The purpose was to make informed farmers. However, after the completion of the course, none of the students wanted to go back to agriculture, instead, they demanded jobs in the government.

There were also efforts to start schools for the children from fisher families, in different parts of the world, notably, Kerala, Brazil and Indonesia. In some cases, these schools were useful in providing mainstream education to fisher children as their family environment is not very conducive for schooling in regular, mainstream schools. Some of them could get out of the fish trade and take up regular jobs. However, the objective of using these schools to create trained fishermen was not achieved in most cases. If marine fishery continues to be small--scale (and a major part of the fishery in many parts of the world has continued to be so), then boys of school-going age have to participate in fishing activities early, taking their time away from schooling.

Let us consider another situation. Countries like China, Vietnam, Thailand and to some extent, Indonesia have been performing much better than India in terms of creating employment in the manufacturing industries. There are millions of factory workers in these countries. Who are these workers? Are they people who have received certain skills as part of their school education? In

all these countries, boys and girls who complete regular schooling move towards cities and take up jobs in factories which assemble mobile phones, toys, laptops, etc or make garments. They get inhouse training for a few months depending on the tasks that they are expected to do.

If we look at our neighbouring country, Bangladesh, nearly 60 percent of the adult female population takes up paid employment (the corresponding figure in India is less than 30 percent). A notable part of this employment in Bangladesh is in garment factories, which export stitched clothes to international markets. These workers come after a certain number of years of school education, sometimes even after completing schooling, but the skills component of that schooling is not very different from that in India.

Schooling and skilling

Hence, this idea that youngsters fail to get jobs in India due to the lack of inclusion of skills in school education may not be empirically correct. There could be other reasons for unemployment in India. Several organisations working in the field of education which are concerned about inequality in society argue for providing a common education to all children in schools. If exposure to skills or work is provided in schools, they argue for providing such exposure to all children irrespective of their socioeconomic backgrounds. They would advocate other means of bringing children from families engaged in small, traditional trades, even as their concern about them not using schooling optimally, remains. Mandatory schooling policy or different kinds of support to parents to send their children to school could be part of the strategies towards this end.

Importance of connecting lessons to life

If we want every child to learn, all that happens in the classroom should be made interesting for children. There have to be changes in pedagogy and other practices of teachers to make schooling interesting to each and every child. Connecting abstractions (the lessons) with reality (the lives of children) is important, this is equally important for all children, including those who want to pursue a university education. The lack of connection with real-life is an issue in college and university education too and this may make the learning not very useful, even though degrees are helpful for some sections of students to get jobs.

So, what about traditional skills? There is an exodus

of people from traditional occupations as part of industrial or economic development. Is agriculture not a vital need? Are we losing traditional skills as part of modernisation or development? These are genuine concerns.

There are two important points here. First, there could be certain issues if some people or specific socio-economic groups who are involved in agriculture or in artisanal or traditional skills, have to remain in these occupations just for their subsistence. This is not a desirable prospect as it will work only if the children of agricultural workers become agricultural workers themselves. Secondly, the returns from certain occupations, such as farming and artisanal skills, have declined and may continue to do so as part of socio-economic development and there have to be ways of addressing this issue if these occupations have to survive and flourish.

Traditional skills benefit from mainstream education

Let me highlight two experiences in this regard. During a visit to the Amazonian settlements of indigenous groups, I met people who had received school or college education but continued in traditional, familial livelihoods that depended on the land, forest and river. Life in such settlements is not vulnerable due to the availability of enough food, such as tapioca, river fish and several varieties of fruit and hence, these educated people from indigenous groups do not want to take up jobs in industries or cities and live in urban slums. However, education is important for them for various reasons: to resist the incursion of outsiders and legally protect their territories, to sell their traditional products in national and international markets and to connect with others in different parts of the world.

Recently, I visited a set of 'educated' farmers in Punjab. This included software engineers, who

have returned from Delhi; a former school teacher; and, a USA-returnee. They are practising organic agriculture without the use of pesticides and, according to them, they are reviving the traditional farming methods of Punjab. Formal education has helped them to learn newer ways of farming without using chemicals, developing networks across districts and marketing their products through such networks. They are conscious of the importance of what they are doing and are able to articulate these well to outsiders like me.

In both these cases - the Amazonian indigenous people and the organic farmers of Punjab - there is a practice or revitalisation of traditional skills or livelihood and formal education has been a tool to extend the reach of these skills, to deal with mainstream society and for meaningful interaction with others.

In summary

While I am sympathetic to the concerns of individuals who see the lack of a skills-based school education as a severe constraint in bringing all children to school and facilitating successful completion of schooling, individual desire to achieve social or economic mobility or society's concern about growing inequality may make certain experiments in this regard ineffective.

Moreover, there is merit in each and every child getting a general-purpose education for a certain number of years. This is not to underestimate the severe problems that India faces with respect to schooling. More than half the children of schoolgoing age do not complete schooling or they do not learn much even if they do go to school, and; even after the completion of education; many fail to get decent jobs. Another concern is that many girls are not in paid employment. There could be other socio-economic and cultural reasons for this situation that we need to be concerned about and work towards addressing them.



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Children's Literature and Child-Centric Practices

Vartul Dhaundiyal

'Ma'am may I also do things which bhaiya and didis do?' asked Diksha. Her teacher asked her with a gesture of pleasant surprise. 'What things?' 'Chamiksha', said Diksha. 'Oh, why not! Go ahead,' her teacher said joyfully. Diksha, then, very shyly asked, 'Then my video will also be sent?'. The teacher laughed at the charming expression of the child. She promised her that if she did the sameeksha (review) of a story, then, she would share her video in the teachers' group.

Diksha is a student of class I in a primary school Danda Jungle, in the Vikas Nagar block of Dehradun district. She belongs to the *Jaunsari* tribe and her father is a daily wage labourer. Most students in this government school have a humble socio-economic background and are first-generation learners who do not have anyone to support their study at home. So, it is their teacher who can be given the sole credit for their learning and achievements in school.

Role of teachers

Working with government school teachers, I observed that there are teachers who believe that all students can learn. These teachers are found to be progressive in their methods of teaching and they try new methods to keep their students interested in studies. They also keep in mind the varied needs of their students while designing classroom activities or assessment tools. Unfortunately, the number of such teachers is limited.

On the other hand, there are teachers who stick to the belief that only a few students can learn well. These teachers often back this perception with their personal experiences of teaching. The observations of the classroom practices of such teachers reveal that they follow a traditional approach while dealing with various subjects. They follow the textbook and give common, one-size-fits-all instructions to the class, despite the varied learning needs of the students.

Unimaginative teaching

In such classrooms, one can observe a complete disregard of the fact that every individual has a

different learning style. Students who are able to learn through such traditional practices are mainly the ones who already come with some sort of social and educational capital; at least they have someone educated in their family and their socio-economic status is better. Often, these students already converse in a language that is considered 'civilised' (urban) and follow a form of social etiquette which is considered 'suitable' by the teachers.

The traditional approach also lays emphasis on memorisation of facts and content, with not enough attention on understanding and assimilation. Assessments based on such an approach only test for the content that has been memorised by the students. These answers or the methods for problem-solving do not offer space for individual thinking, creativity and innovation or for trying new things. The whole approach seems to be very textbook oriented and teacher-centric, in which the student is often treated as a passive learner who has to acquire knowledge and reproduce it when asked or assessed. This is a boring, tiresome and redundant method in which not all children can find interest. Many children also find the classroom situation alien, where their previous knowledge about the world, their language, their context have no relevance and they have to learn the expected discipline, ways of articulation and memorisation. As most students are unable to cope with these methods, they are soon branded buddhu, seen as lagging behind and even considered 'slow learners'. This works to further distance them from education and they are ready to drop out of the school and education system.

Teaching the individual

On the other hand, teachers who believe that all students can learn despite the difference in ability levels pay a lot of attention to identify their individual talents, likes and dislikes, learning styles, challenges, socio-economic contexts and the learning need of each student in their class. These teachers are found to have a good and friendly relationship with students and are open to the different views and opinions of individual students.

For these teachers the meaning of learning is not limited to the memorising of concepts and content; they are aware of the optimum learning objectives for a given class and emphasise on the competencies of the students rather than the content of the textbook.

These teachers usually use different instructions, varied examples, activities for individual students or groups of students. They do not teach the whole class in the same way. They even know that onetime summative assessment does not tell much about all the competencies a student might have acquired in an academic year. Rather, they see assessment as learning for the teachers¹ when the assessment focuses on identifying the learning gaps of the students and helps in planning future teaching. In turn, for the students, it is an aid to self-assessment because it helps them understand what more they need to learn. Such assessment is a kind of formative assessment that has inbuilt scope for identifying the strengths and learning needs of the students.

Many such practices were observed to be taking place in the government schools of Vikasnagar Block, Dehradun during the *Potali* Library Programme in 2018-19 in which teachers from twenty-eight schools volunteered to participate. There are many anecdotal accounts that give us enough evidence that during the programme, the learning levels of the students improved, and the most observable changes were among the students who could not read or write – they were found to have developed an interest in books. Although initially, they could only enjoy looking at the illustrations, later, it became apparent that these children showed interest in learning to read and write and picked up these competencies.

The programme was based on the assumption that if adequate and good children's literature and support to teachers in terms of pedagogical inputs demonstrations on child-centric practices are provided in a school, it might bring the desired change in the students' learning levels. The focus of the programme was to promote differentiated instruction² to ensure that all students within a classroom, regardless of the diversity of learning ability, can learn effectively. The design of the programme was such that it provided an opportunity for the teachers to examine and reflect upon their practices.

Analysing results

When the teacher's reflections, teaching accounts and views recorded during the meetings were analysed, we got a clear idea of what the focus in the language teaching programmes should be.

Some underlying principles that emerged during the programmes provide insights that might help all children learn, though at their own pace and in their own way. These principles can be summarised as:

- 1. The programmes should guide teachers on the elements of what to teach and why to teach it. Teachers should be provided support and guidance to evolve their own pedagogy that best suits the need of their students.
- 2. It was very clear that every child can learn, but one common instruction programme will not cater to the varied learning needs of all students, nor would it suit the different learning styles and processes of the students of the same class.
- 3. The differentiated instruction method is best suited to the present multi-grade, multi-level teaching situation in rural government schools.
- 4. Graded and adequate reading material, which includes various genres of text, such as stories, poems, plays, help children to develop an interest in reading and writing. However, this interest must follow individualised instruction and support from the teacher since interest alone cannot enable a student to learn to read and write.
- 5. Teachers are willing to learn new perspectives and methods, but theoretical lectures do not help them much in negotiating the day-to-day challenges and situations that emerge in classroom teaching. It is imperative that resource persons visit and spend time in classes to be able to help the teacher develop customised solutions for real classroom situations.

A month after the brief interaction in PS Danda Jungle, Diksha's teacher shared a video in the teacher's group. I was thrilled to see that Diksha had reviewed a story from her textbook. She discussed the storyline, characters and what she liked and disliked in the story. She also said that unlike the protagonist in the story, she would not hurt her friends. Though this was not the kind of review that we often get to read in the general scheme of things, it represented the reflections

of a student who thought about the story and expressed her own (read as 'original, unpolluted by external pressures') views about it.

Such examples and experiences boost the conviction

of teachers and teacher educators that every child can learn, all it needs is for the teacher to regard each child as an individual and provide personalized inputs that suit the need of the learner.

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Letters to the Editor



Just a Gentle, Affectionate Touch... I really liked the way you have articulated this article. Also, in a child's learning, there are diverse factors influencing the overall education. In the article, you have not only talked about the emotional aspect but have also referenced the documents which assert your argument well - the right to education is equivalent to the right to life. This piece of writing also emphasizes on drawing learnings from some minute observations. This also made me realize that our interactions at the school level give us resourceful insights to reflect on our experiences. Thank you, ma'am, once again. Your observation and article encouraged me to write too.

Sweety, Srinagar, Garhwal

I really enjoyed reading, **Education for All: A Potential Pretty Picture**. It is very well and simply written. The message is visible and clear. I do not have as much knowledge or exposure as you in education, but I have the same concerns as I have been working in this area for the past one and half years.

Education and health are two such sectors which cannot be experimented with, as it can make or spoil the lives of millions, a full generation. It always tears me into pieces when I see all this happening, teachers not taking responsibilities, parents ignorant, society judgmental and children helpless. Where are we heading? Sometimes, I feel that rote learning was best as, at least, a person learnt the basics.

Binnie Thakur, Assistant Manager, Jankidevi Bajaj Gram Vikas Sanstha, Kangra, Himachal Pradesh

I must say that the articles in the Learning Curve (across the issues) are distinct; it's like a catalyst bringing a vast experience of renowned educationists/practitioners to readers like me. As a member in the field, I feel that this issue (Every Child Can Learn-Part 1) has brought some credible classroom pictures and given perspectives to deal with those particular situations. Swati Sircar's Four Operations for Every Child was of great help in understanding the math classroom. Use of pictures of children's writing in Kamlesh Chandra Joshi's Children who Struggle with Reading and Chandrika Soni's A Letter Rides on the Train of Subjects would help members immensely when shared in teachers' workshops.

Having more classroom-based articles that have data and experience will help. The book reviews help us choose the books to read.

Ravindra Jain, Resource Person, District Institute, Azim Premii Foundation, Mandya

I found Rajashree Srinivasan's 'Preparing Educators for Inclusive Classrooms' very intriguing because she is talking about a program that 'challenges' students. Therefore, I am attempting to understand what happens if I compare the way a student feels challenged by a visit to orphanages or urban slums with a teacher who is equally challenged when she tries to get her children to talk about a story for the first time in her classroom? Both of them would be faced with a fresh experience, exploring unfamiliar territory and return with a few ways in which they may have felt inadequate (in experience, perspective, or preparation). However, this inadequacy can be turned into a positive experience, a potential for development through a well-modulated discussion.

For teachers, I think, the most potent moment for change or learning is when they truly feel this 'inadequacy' in their own classroom, among their own children. It means they have tried something new and can choose to bring change to overcome that inadequacy.

Archana, Associate, District Institute, Azim Premji Foundation, Yadgir, Karnataka

Letters to the Editor



The cover with a girl reading in front of a beauty parlour is nice. The Editorial gives an overall idea of the journal with a positive and welcoming note by the editor. In **Education for All: A Potentially Pretty Picture**, Anant Gangola, explains the road map for evolving of the Education for All policy in India; how it has led to the over flooding of schools with unprepared teachers to deal with first-generation learners. He highlights the failures of Education for All in reaching out to the so-called lowest strata of our society particularly Dalits and tribal children who are not accustomed to fit in to this system thereby killing their innocence, originality. Having worked in a similar tribal community I could completely relate to the author's sentiments. One-size-fits-all is just not possible in the education system. This is doing more harm than good to the education system. 'According to me, the kind of preparation that a teacher needs to work in the context of Education for All is not being provided by either the government or society, though it is unclear whether the reason is the lack of will or the dearth of resources.' This summarises the whole idea and throws light on the most important aspect which we should work on preparing our teachers to work in the context of Education for all.

Vimala Ramachandran's Teacher Belief in Children's Potential is Important made me rethink the importance of working with teachers about being conscious of their prejudices and helping them to reflect. It was interesting how Amrita Masih (Engaging Children Through Storytelling) has made the children owners of their own learning. In Creating a Supportive Learning Environment, Aruna Jyothi explains various practical ways to engage different types of learners. This article also explains ways of engaging parents so that they get a sense of ownership in their child's education. Chandrika Soni's A Letter Rides on the Train of Subjects...captures the experience of a teacher who was able to introduce the art of writing letters to the students by helping them simulate the journey of a letter. In Journaling as Reflection, Gajendra Dewangan's ideas of how he was able to engage a small boy with short attention span, were very practical and we can definitely use them in our work with teachers in the field. I shall use this article as an example in my discussions with teachers to motivate them to write diaries. Written by two practising teachers, Janak Ram and Munshilal Barse, TLM - A Friend in Learning and Understanding Maths tells us how they were effectively able to use various teaching aids to help early graders learn with concrete objects. Especially pertinent is their point, 'When children themselves formulate a definition, the understanding stays with them forever'. Kamlesh Chandra Joshi's Children who Struggle with Reading is very relevant to our work with higher primary teachers. The most important point the author makes is that reading materials should be around children's lives and the work around developing their skills should be systematically planned to achieve the desired success. There are many other interesting articles in this issue - Children Learn in Diverse Ways by the ECE Team, Sangareddy; **Teaching Language- Connecting Content to Context** by Kamala Bhandari.

Akshatha S Belludi, Resource Person, District Institute, Azim Premji Foundation, Koppala, Karnataka

It was delightful for me to read all the interesting and inspiring articles in the Learning Curve, especially 'Children Learn in Diverse Ways' in the recent issue. The platform you have given to share the thoughts, experiences, works of all enthusiastic practitioners is very useful for everyone in the education sector. I personally experience that children with different backgrounds have different interests. There was an inactive child in an Anganwadi because of her language issue. She later became very active in the class because of the special focus we gave after understanding her interests and background. We are waiting for the next issue!

Machender Jukanti, Early Childhood Education Initiative, Azim Premji Foundation, Sangareddy

Letters to the Editor



The ECML programme, in my understanding, is reaching out to the most vulnerable group of children who, if not reached with support and convenient schooling options are more likely to drop out of schools and may also work as child labour. Reading about Sumati, Bheema and Vishnu gives me joy that some children have been able to escape early school dropping-out and have been able to pursue higher education. At the same time, it makes me think of the children who have not been able to benefit from such programs and have fallen for the fate of hierarchical society.

Supriya Narayankar, District Institute, Azim Premji Foundation, Bengaluru

The empirical article titled **Opportunities for Children of Migrant Labourers** expressing the thoughts and current work of Shobha and Shubha is remarkable. It brings before our eyes, the migrant labourers heading to the metropolis looking for jobs in different parts of the country. While reading this article, we could appreciate the impact of socio-economic conditions on child development and learning. We could make out the sincere efforts and innovative approach towards migrant children's education. It also conveys the possibility of a novel philosophy of education.

Thank you for sharing the full outline of the program for the education of migrant workers.

Hanumantha Raju, District Institute, Azim Premji Foundation, Bengaluru

In the field, we quite often, refer to articles from Learning Curve for our own capacity enhancement and aiding our work with teachers. I recently read the article on Opportunities for Children of Migrant Labour (April 2020) and it gave me some very insightful information about the philosophy, process, pedagogy and involvement of stakeholders. This article shed light on the purpose of 'bridge schooling' for 'mainstreaming' children who are having multiple disadvantages comprising both systemic and social constraints. The role of teacher and community including parents and children who have earlier been part of this centre is well articulated. The success of a number of children who have been mainstreamed helps readers to build a complete picture. The fact that it has taken 12 years in one city tells a lot about the importance and complexity of issues to support and build an equitable learning environment. The efforts of the team, including the authors, in bringing out such educationally and socially relevant articles are very much appreciated. The field members are always waiting for the Learning Curve. Thank you for this wonderful read.

Ramchender Giri, District Institute, Azim Premji Foundation, Bengaluru

Thank you for publishing the article related to Early Childhood Education. Being a Teacher Educator in the field of ECE, the case studies have helped me in understanding the ground realities. I could relate with those case studies to the things I have observed. The struggles and passion of Anganwadi teachers in conducting ECE with the available resources and knowledge is inspiring. I agree with the statement that Anganwadi teachers still need more support in terms of understanding of curriculum and methods of teaching. As someone knowing the importance of the ECE programme, I feel it has to get more recognition ranging from policy to parents and more professionals need to enter this field.

Chinnabrahmaiah, District Institute, Azim Premji Foundation, Sangareddy

Write to us at learningcurve@apu.edu.in

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