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**CLASSROOM EXPERIENCES** PART 1

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*“Learning Curve is a publication on education from Azim Premji University. It aims to reach out to teachers, teacher educators, school heads, education functionaries, parents and NGOs, on contextual and thematic issues that have an enduring relevance and value to help practitioners. It provides a platform for the expression of varied opinions, perspectives, encourages new and informed positions, thought-provoking points of view and stories of innovation. The approach is a balance between being an ‘academic’ and ‘practitioner’ oriented magazine.”*



## FROM THE EDITOR



Classrooms are spaces in which teachers come into their own, a magic area confined perhaps by four physical walls, but in fact as large as the teacher makes it. For it is the teacher's own constituency where she gives a large part of herself and receives a lot more than she gives.

Such is the significance of this exchange that we decided to devote an issue to 'The Classroom', which, of course, is not a confined space but extends to the playground, the labs, the library, the corridors, everywhere from the gates of the school.

What happens within the classroom has the power to change lives - for the better or for the worse. We ourselves know from our own school experiences of transactions which empowered or disabled or left us unmoved, according to the atmosphere in the classroom. This is not quite the same as the relationship between teacher and student, vital as that is. It includes the tone and mood created in the learning space between and among the students themselves, as well as the individual and collective response between the children and teachers- all of which are among the richest exchanges a teacher is privileged to have.

Indian classrooms rarely convey the significance of their existence: they are often smaller than optimum size, not very well ventilated, with few even essential comforts. For example, there may be one fan, sometimes none, to thirty five to fifty children. They are sparsely furnished, with just utilitarian shelves, tables, chairs, benches. Within these spartan surroundings, significant human endeavour is carried on, day after day, year after year. The young individuals passing through have to learn facts, pass exams and, while doing so, get opportunities to question, reflect upon, analyse, and critique their own beliefs. It is true that sadly sometimes instead of the safety children have a right to expect, there has been cruelty and intimidation. However, it is equally true to say that the majority of teachers have a clear understanding of the importance of their jobs: and give children a feeling of freedom to express their own ideas and take the risk of putting them out there in front of others.

To illustrate these beliefs, this issue we have a number of articles which explore the boundaries of the classroom and its importance as an investment for the future. Practising teachers have written about the 'experiments' they have had success with, others which were not quite so successful because they were ahead of their times. Other articles recount and convey the sense of responsibility a teacher feels when she realises that she has to play a gamut of roles, the sense of achievement and satisfaction when an unexpected learning takes place. Documented, too, is the tremendous hard work and thinking that most teachers put into their work, thereby enhancing the sense of optimism in these exciting new times.

When we decided to devote a whole Issue to Classroom Experiences we got such an overwhelming response that we thought we would devote two Issues, as Part 1 and 2, to accommodate all the very inspiring articles we received. They were all so thought-provoking that we felt every one of them would be read - and re-read - to absorb the ideas, the thought behind each contribution, such that it would truly be a reference manual for others in similar situations.

We would like to mention here that we received quite a few articles in Hindi. We would like to acknowledge the commendable work done by our translators, Ananya Pathak, Nalini Ravel, and Ramneek Mohan, in presenting the true essence of the write-ups in English. We also thank our colleague, Rajesh Utsahi, for effectively coordinating the translation work.

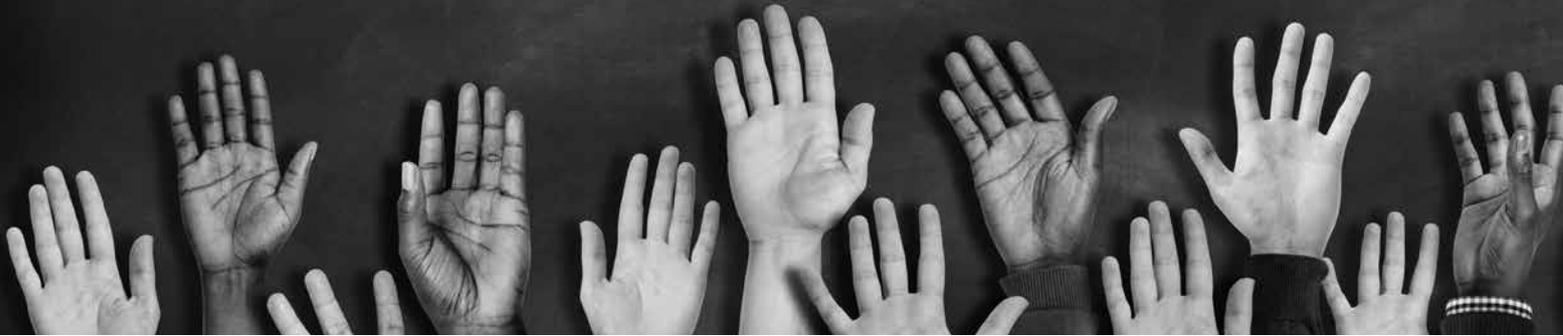
What we would like is for readers to share with us any other ideas that bridge the gap, so that the process of sharing could be extended. Criticism and feedback are always welcome and we look forward to hearing from our readers at the email below.

### **Prema Raghunath**

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## I Am a Teacher Who is Also a Student

Lubna Ahmed



All of us are.....all good teachers are ones who are good students.....always on the lookout to learn new facts and new ways of handling students. That's what keeps them on their toes and makes their job interesting.

Actor. Performer. Director. Guide. Counsellor. Facilitator. Role model. Mentor. Guru. Multi-tasker. Life coach. Mediator. Manager. Leader. Agony aunt. Communication skills, convincing skills, oratory skills and so on. The list is endless, and we are talking about just one person – A teacher.

### **Many roles – one person-all rolled into one.**

The one person who is expected to play these roles is the school teacher. The challenge faced by teachers today is how well the roles are synergised to finally enable efficacy in the teaching - learning experience.

So neatly put, so easily said, and yet so tough to implement.

I have attempted to recreate my journey of ten years as a school teacher and tried to put on paper the insights and experiences gained which have shaped my personality and helped me grow professionally. In this article I have referred specifically to the experiences in the classroom.

### **Expectations from a Teacher**

A teacher has to be a good theatre actor and have a loud and clear voice to capture the students' attention. Her performance in the class should enable the students get interested in the subject. She should be able to direct and facilitate the students in the process of learning. In the half-hour or forty minutes provided, the teacher has to ensure that the objectives set for the day are met and the students learn the subject as well as imbibe good values.

Every aspect of the teacher – from her personality, her dress sense, her communication skills, even her patience level, are observed and scrutinised by students. The teachers are constantly judged on these.

One should not forget the ratio, which is it is forty to

one or fifty to one or sometimes even sixty to one. One being the teacher and forty being students. And if the class is, say, 10<sup>th</sup>, 11<sup>th</sup> or 12<sup>th</sup> then the students are as tall or maybe taller than you (also stronger). Dealing with such classes requires skills of leadership and high degree of maturity. Shouting, scolding and getting emotional in these classes will only make matters worse. A tough deal indeed.

I have been in this profession for ten years now but I still feel that I am far from perfect. I am still trying to learn and to hone my skills to become a better teacher: each year each month each day and each teaching period when I teach students the core subject skills and interact with them, I learn a new aspect of dealing with my students and enhancing the teaching learning process.

### **My experiences and challenges and what I have learnt from them**

My experiences, some of which I am sharing here, are in the form of some key incidents or challenges which I have faced over the past 10 years which have shaped my performance in class, behaviour towards student-learners and given me the impetus to change and evolve.

The other day I entered my class to teach trigonometry and observed that they did not seem to be in a mood to learn. One person passed a comment and everyone started laughing. Instead of reprimanding and giving a lecture on respecting teachers I decided to start the class and ignore their behaviour. So I introduced my topic differently. This would serve two purposes, divert the students' attention and bring them to the learning mode. I asked them if they could find the height of the school building without touching it or going near it. The question set them thinking and I gave them time to ponder over it. I then said that the topic to be learnt will teach them how to do precisely that. It caught their attention and I could proceed with my class.

My learning: draw attention away from negativity and move towards positivity

During one classroom session I noticed a student

yawn (this usually happens in the last two periods of the day), then another and then another one... ..I realised that it was my lecture which was doing it. I had been speaking nonstop for about 10-12 minutes and that's way more than the average student's attention span. So I stopped, just completely stopped talking. The students noticed the silence. I got the attention once again and this time I decided to continue teaching by questioning them, encouraging them to participate and arrive at conclusions. I helped them answer the question by providing keyword as hints and praising them when they got it right. This motivated the students to learn and helped in achieving the learning objectives of the day.

**My learning:** student participation in the learning process helps break the monotony and makes teaching learning process effective

Each learner or student learns at his/her own pace and we cater to a mixed crowd. My concept introduction session always starts from simple to complex. For example, while teaching algebra to class 9, I revise and recapitulate the concepts done in earlier classes, say classes 6, 7 and 8. This way the students relate better to the subject and learn the topic better. Use of multimedia tools such as computers and the readymade modules also helps improve learning.

**My learning:** always keep in mind the student mix during classroom session. Keep adapting your teaching method accordingly.

A few years back, I took feedback from my class. I asked them to write two things which they liked about their teachers and two things which they disliked. A lot of answers were predictable and expected but I was surprised that many of them wrote that one of the teachers would get angry and shout at them. They also mentioned that the teacher was very good but got angry too often. I guessed they were talking about me. This worried me because the students felt this strongly enough to mention it. I realised that I should have kept my emotions in check as it was affecting the students.

**My learning:** A scolding from a teacher distracts the students from learning. Teachers should try and provide the students a 'happy' atmosphere.

At a staff meeting one day, our Principal asked

me if I had completed an assignment. I had not. I expected a reprimand, in front of all teachers and felt ashamed, in fact I wanted to sink to the centre of the earth (figuratively speaking, of course). Instead, she looked at me and said that she understood that I had been busy handling other responsibilities and asked me by when she could get it. Her smile and her encouraging words put me at ease and made me respect her more. I completed the assignment with lot more interest and enthusiasm and I think I did a far better job. I implemented this learning in the classroom. Students are expected to complete their work daily for all subjects. I now check their load and accordingly give them work. While they are solving questions, I take a round of the class and try and encourage them to do better by giving positive verbal comments like "Well done", "Yes you are right....but correct this". Even if it one line which they have written correctly or even partially correctly.

**My learning:** The teachers encouraging smile, or an understanding look goes a long way in improving a teacher-student relationship leading to better learning.

Mathematics is a subject which cannot be memorised. It requires drill and practice – lots of it, which in turn the drill and practice help internalise concepts. After I complete a classroom session I expect the students to go home and practice the concepts learnt that day. Some students do it, but most don't and so are not prepared to 'digest' another concept. If this cycle continues then over a period of time they lose control of the subject. I then ask them to spend just fifteen minutes on the subject - and not a minute more. That has worked to a certain extent.

**My Learning:** still learning. I need to work more in order to 'inspire' students to learn.

### **To conclude**

There is a Japanese word kaizen, which means continuous improvement in small increments. My journey so far has been a series of 'small lessons', learning from which have helped enhance my skills and become a better teacher and a human being.

And my journey as a teacher continues and as they say, Learning Never Stops....

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**Lubna** is a post graduate in Mathematics from Delhi University. After graduation, she started working at an IT company and worked there for about 12 years. At NIIT, she handled a variety of roles from being a senior group leader to heading the Quality Control. She took a break in order to take care of her family. During this time she also completed her PG in Mathematics and B.Ed. She is now working as a Mathematics teacher at a leading school in Greater Noida. She may be contacted at [lubnaafaque@yahoo.com](mailto:lubnaafaque@yahoo.com)



## The Beginning of Inclusion – Classroom Seating Discipline

Nilam Shinde

When I first started to work with children with special needs, I was passionate and loved my subject area. As an Occupational Therapist, I had to observe the students in classroom and also while doing other co-curricular activities like sports, art and self-care, etc. Despite this, I was clueless when it came to classroom management with special needs children. I went into the classroom thinking that a well-planned lesson plan would take care of itself. But I found that it wasn't so!

In a given special school, you may ideally have heterogeneous group of six to eight children with special needs unless the school is into training and providing support to specific category of disability. Two students needing some help, two with attention deficit hyperactivity disorder (ADHD), three with physical limitations and one or two with autistic features. In such circumstances, anyone you can see may fall short without anything to support you.

I realised that's when classroom management is most important and desired. It is very important to know your subject but, you may not be able to teach all those wonderful things without classroom management. Fortunately, you will recognise that classroom order improves not only with those big strategies like curriculum, discipline and lesson plan etc., but also with lots of those little ones.

With the changing scenario in the education system, including the children with various needs in a general classroom is big concern to our teachers who have not had any experience with inclusion. Personally, I find the term 'inclusion' very fancy, derived from the western talks. It is not about mere placement of the special need children in the regular classroom. It is about the attitude and not the programme.

Let's have a look at some of the 'small' changes that made a big difference like the seating arrangement and see how it can have impact on the student's performance without adding any cost to it.

When we think of a traditional classroom, we

envision children sitting at their desks and a teacher at the front of the room teaching or explaining a concept of the lesson. We observe that the students who occupy first row are considered diligent. Moreover, they don't want to miss on the important things. Sometimes the teacher arranges the students to sit according to their height so that visibility is not obscured or may even prefer smaller group for academic concerns and to promote student cooperation

You may have even come across the latest and newer methods where you find the children are allowed to move in order to learn and explore. This is not an uncommon phenomenon for children with special needs too. You may wonder that I may advice you to do away with the desks and replace them with the tables or mats. I won't do that. The desks are equally good when a child has an issue in working in close proximity with others.

The seating arrangement in a classroom plays a central role, especially if you have a student who displays behavioural problems or someone with physical challenges/visual issues. Here, the situation demands some creative thinking. As a teacher you may have to go the extra mile with the students with special needs who take some time to process the things and their self-esteem is largely influenced by how the classroom is organised.

May be you are familiar with this method and are probably already doing some of it; row arrangement, circle, and semi-circle, free seating etc. Each style has its own pros and cons. The seating arrangement can play a huge role in the performance of the student. The teacher can wisely select the seating arrangement and its duration that suits the particular circumstances, classes and allows visibility to all the students. There is no one-size-fits-all since you are dealing with different needs and teaching objectives. The students get singled out by the announcing in the class that you are making such arrangements because there is a student with some impaired in the classroom. I would advice to treat it as a general classroom

policy, instead.

Some reasonable solutions to illustrate how you can modify the environment for a child with special needs is to enhance his / her participation in the activities and be a successful learner.

A child using a wheelchair may need an open row. Some child may need an adapted furniture in form of low height chair with secured desk and slanted board for writing support. In the same way, a structured programme for an autistic student is just as vital as a syllabus is for any course. You may not like to take a chance by placing a student with poor attention span to sit near a window or door which will provide enough scope for distraction.

Children with hearing difficulty mostly rely on lip reading. They should be encouraged to sit in the first three rows and try not to pace or turn your back to them while speaking. Be patient to repeat yourself sometimes. In the best arrangement, student and the teacher should have good light source to their side to facilitate the student's ability to lip read and understand you. Whereas, in the case of autistic children, adjustment in the intensity of light would benefit them greatly.

Secondly, provision of moveable chair, if possible would be convenient for children with hearing difficulty since, the distance from the speaker can significantly affect the level of comprehension. During any activity or school functions, if such students are using sign language interpreter, preferably avoid walking in the front of the interpreter while speaking which we often do unknowingly. You may have even noticed children with hearing difficulty using hearing aids. Hence, control of noise level is must. Few students speaking in the background or their whispering conversation can make it difficult for them to hear.

While working with children with visual difficulty,

be consistent with physical arrangement in the classroom and avoid frequent changes. They should be warned ahead of time for any change. The same applies for autistic children who dislike frequent changes.

These children continuously feel very anxious and may be even reluctant to express their feeling. Hence, by simply changing the layout of the classroom, in regard to the furniture, seating arrangement can help them not only to move around, but also participate willingly. There are situations when more than the furniture, a peer buddy or a teacher sitting beside the child during the activity can bring significant change.

In the inclusive system, the teachers have to address the need of students with various personalities and learning abilities. The children with special needs run a high risk of becoming drop-outs and suffer psychological trauma. I feel other than lesson planning, the most careful thought needs to go into creating some basic practices, such as understanding the routines of the child, adapting the seating arrangement to have better control over the class and also help these children achieve academic success. Thus, it is essential for the teachers to have knowledge about seating arrangement where children with wide range of behavioural, physical and intellectual characteristics are served in an inclusive setting.

The movement of "Education for All" and Right to Education Act is gaining recognition from all the spheres. This could be a way forward to bridge the gap in the inclusive education and prepare our teachers for educational practices for all the students. The more you plan beforehand on some of the basic educational practices, easier it would be to face the unplanned situations which it always does.

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**Nilam** has professional experience of managing programmes/projects for adults and children with disabilities in India and Pacific region. She designs curriculum and prepares special educators to manage learners with special needs in special and inclusive settings. She crafts livelihood activities and develops adaptive strategies for optimal independent functioning of children and adults with disabilities in home, school and work environment. She may be contacted at [nilshind@gmail.com](mailto:nilshind@gmail.com)



## The Maze of A Map

Ranjana Singh

My students have passed the second grade and are in third grade this year. I have been working with them since they were in the final term of grade one. Government schools of Delhi follow NCERT textbooks in classes 1 and 2 for Mathematics, English and Hindi. In class 3, two more text books are added as a part of curriculum which are '*Aas-Paas*' for EVS and '*Meri Dilli*' for social studies. Since we live in Delhi region it is understandable that we should know about our state, therefore '*Meri Dilli*', which is prepared by SCERT, plays an important role in the curriculum.

Now my purpose of writing this article is not to negate the role of this book, but to understand its context and interaction with the children. Because when I opened the first lesson of '*Meri Dilli*', I was surprised to see that it begins with the map of Delhi. My students had developed an understanding of only some geometric shapes and their pattern up to the second grade. This made me feel that starting with the map of Delhi in the very first lesson was not a very natural thing! Somehow I was not comfortable with it. So I started looking for some links in the other textbooks of class three such as mathematics or *Aas-Paas*, through which the children could be led to the map of Delhi, because I was afraid that if I introduced them to the map straightaway then most of them would not understand it and further, due to fear, they would distance themselves from the very process of learning.

I found that link after scrutinising the textbook of mathematics in which the first lesson was '*Dekhen kidhar se*' (Perspectives) is based on looking at objects from different angles and drawing them. For example, if one looks at a car from front, back, side and top; different images/shapes can be seen. Based on this concept the children were given the opportunity to draw various things present in the classroom (water bottle, book, duster, toy, chair, etc.) from different angles. Later they were asked to draw these things from memory. After this they were asked the following question:

'If you grow wings and fly to the top of the class room, how will the class room look?'

I was not very confident before asking this question. Somewhere in my mind, there was a doubt. Was it too big a leap between drawing the pictures of the objects from different angles and asking them to draw the map of the classroom? I was aware of my doubts and made a few points for myself to work on, such as – draw the map by starting with the outer shape of the class room which was rectangular. Then go on to the other main things like doors, windows, almirah, blackboard etc. and discuss their position in the map and finally mark the small things like the switchboard, dustbin, desk and the children sitting there.

Having prepared myself thus, I did the above activity in class. All my doubts vanished when I saw that the children could easily identify the shape of the rectangular classroom. We were progressing stage by stage. The children's ideas and discussions were being put together on the blackboard as well so that they could understand the plan and the location of the objects on it. Gradually all the objects in the class were marked on the plan. What the children enjoyed the most was marking themselves on the map, one by one. Even later they were going to the blackboard again and again to tell me and their friends where they were marked in the plan. In the end, I asked them about my position when I was standing near the board and drawing the plan and they could tell me that correctly. Finally the children drew the plan on the blackboard and highlighted themselves on it.

### The Plan of the Classroom

This was the right point of time to end the day because the children were very enthusiastic and happy about the plan of the class. Also it would have been better if they were left with the task for the rest of the day, because then they would get enough time to assimilate the idea and the process of making it.

The next day when we discussed the plan again, one child asked me 'Why did not we mark the charts

that are put up the class in the plan?’ The other children agreed with the question - perhaps it was equally relevant to them also. Now the children wanted every single item or object of their class to be shown in the plan. This was the right time to discuss the difference between the plan and the purpose of drawing a map although I had not planned the discussion. Perhaps I underestimated the abilities of children, but it was really heartening to see that the children were ready to learn about it. So the purpose of map drawing was explained in a general way like this – ‘The picture shows all the objects of a place exactly as they are arranged, only their size becomes small. In a picture one can see the smallest and the biggest object. But in a map we show a place with a few important locations, roads and objects of that place. If we start marking each object in a map then there will not be any difference between a map and a picture’. But I could feel that even after this explanation the children had not understood it fully. So I asked them – ‘If you had to direct someone from the main gate of the school to your class, how would you do it?’ One girl answered – ‘I will ask them to climb up the staircase next to the hall. Then leave the class that they see first and the next one is ours.’ My next question was based on this answer. I asked her whether she had to tell about all the things that were there on the way to her class like charts etc.? The children answered in the negative. Now the children had understood the meaning of a plan.

The next step of this activity was to draw the map of our school. Before doing this the whole class visited the school. We saw all the classes, toilets, laboratories etc. situated on the ground floor. I especially drew their attention to the wall at the back which is a little slanting. The shape of our school is not rectangular, it like a quadrilateral. The three sides of it are quite straight but the wall at the back is like a trapezium. After the visit we came back to the class, discussed and drew the map of the school following the same procedure as that of drawing the map of the class room. This time, while drawing the map, I faced a problem in maintaining the ratio of the distance and the length of the walls as this was a map of a larger space. I tried my best to keep the exact ratio of the length of the walls and the size of the classes and the distance between them. But every time it was not possible. Still we made a casual or basic map of our school on the black board and the children drew it in their notebooks later.

### The Next Step

The next activity for the children was to draw the plan of their homes for homework. To explain the basics of this activity and to provide a sample to the children, I drew the plan of my home and showed them the way to mark the objects kept there. Then I asked them to draw a plan of their home and bring it to the class.

Some of the children could complete the task while others could not. Some maps appeared haphazard but when they started explaining, these unrefined maps started looking beautiful and clear. Now the time had come to read the map given in lesson one ‘*Meri Dilli*’. I was glad to see that now children were trying to understand the map of Delhi and were able to understand its meaning.

Some of the questions that came to my mind during this experience are still bothering me. For example, why was it necessary to give the map of Delhi in the very first lesson of third grade? Does it meet the expectations of children’s age and cognitive maturity? According to what I have read and my experience, a third grader is 7-8 year old and is in concrete operational stage, as suggested by Piaget’s theory of cognitive development. The child at this age creates knowledge from tangible/concrete objects and experiences, but struggles with abstract ideas. So, understanding the map of Delhi demands an abstract thought process and cognition for which a 7-8 year old child is not ready.

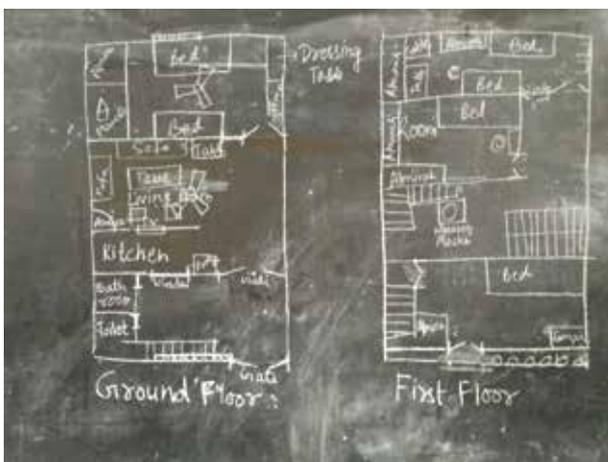
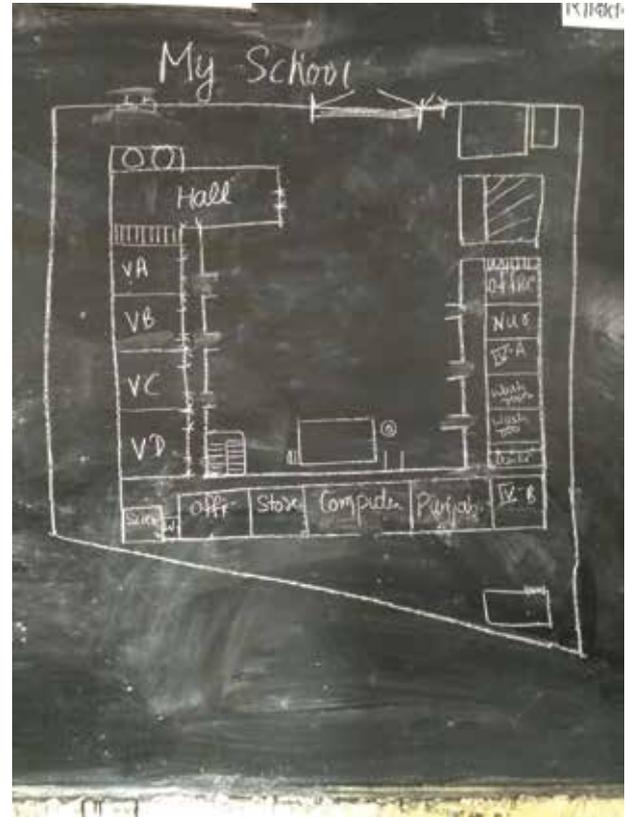
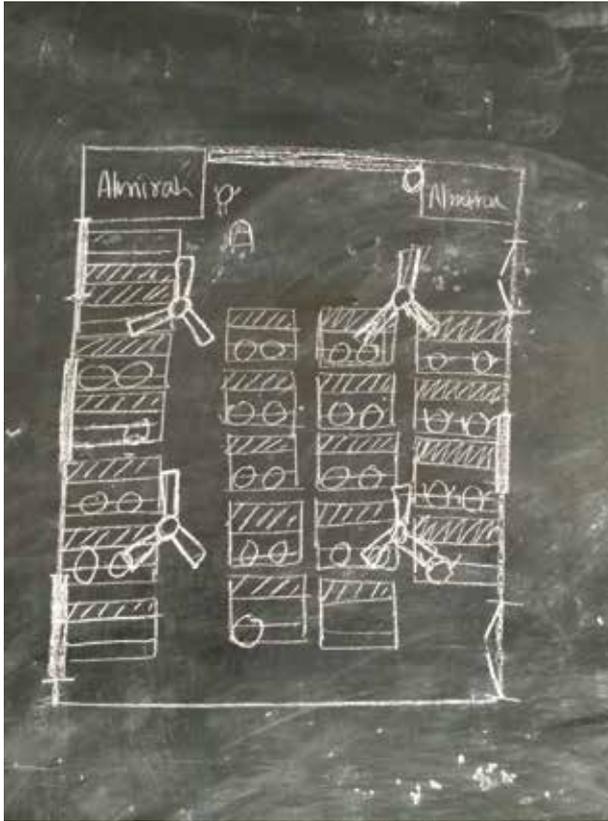
There were many other problems in the textbook ‘*Meri Dilli*’ apart from map of Delhi such as the language used in the lessons. Very complex and difficult words and sentences have been used in both Hindi and English medium books. For example, in second lesson we find phrases like ‘inhabitants of Delhi; knowledge of constructing the houses with concrete; till the nail stays, the dynasty will stand’ etc. In the name of ancient facts, a lot of information about many great kings and warriors of history has been poured out in a few pages without any context.

When compared with the other NCERT textbooks of class three, ‘*Meri Dilli*’ of SCERT appears to be dry, difficult and does not create opportunities to the children for exploration and thinking. All the lessons in the entire book are written in the same pattern in which a lot of information has been given in the beginning and then the questions related to that information are asked. Except a few questions,

all the others expect the children to copy the same information that is given in the lesson. There are not many activities that the children could do. So there is very little scope for the children to interact with the book.

One has to give a thought to whether we have any better option than textbooks as a resource.

Because according to NCF (2005) the textbook is just a resource and the teacher is free to use other resources also. But the issue gets stuck on the availability of other options, especially in government schools.





## Institutionalizing Thoughts and Ideas

Anil Angadiki



During every instance of any practice, it is evident that we get new thoughts about improvising, changing or leaving the task. I am trying to aggregate my views around the area of education, especially mainstream school education.

The key stakeholders in this system for establishing a learning environment for children - the teachers - also come across several ideas for implementation, either on their own or from authorities. But these thoughts when tried by a practitioner, especially if the person wishes to institutionalise them in the schooling system, come across several challenges. I am sharing few examples of my experience.

I was in a state of confusion when we started thinking about how we can bring the thought of freedom with responsibility into the school. As our organisation (where I am serving) believes in a culture where the children will enjoy free, fearless and fair environment, which can be more effective in establishing a real relationship between children and teachers, children can get freedom to speak/ask questions that lead to inculcating rational thinking with any content. Such a thought sounds good while hearing, but our prior experience in other organisations had been different from this, our present school children are from small villages and many of these younger children come from their home where their curiosity and questioning is answered with a slap. The free and fearless environment in school has started giving the children a space to enjoy their time in the school.

Thanks to our support system in the organisation who regularly interact with us regarding our challenges of classroom management and the teacher to play the role of a facilitator, we started exploring things like children participating in the process of setting rules and regulations, and had regular dialogues with them to bring down behavioral challenges. Of course these ideas (already under practice in many schools) started giving results in establishing some of our beliefs. However, this resulted in another challenge: the children's caregivers started blaming us for what they thought was spoiling their

children for not taking disciplinary action against the children's odd behavior as it was difficult for them to understand the language of dialogue for resolving issues especially with children.

In many instances where lack of children's internalising their responsibility were seen in the school. We started thinking about some borrowed ideas, like forming children committees. After discussing the idea in the weekly teachers' meeting where we share our concerns, we approached the children with the idea of forming committees in our school. Even though some of them couldn't understand much about what we were trying to communicate, they agreed to try it out, as new things usually fascinate children. I think it was a good step that we involved the whole school in the committees so that each member of the school (younger or older) could participate in the functions of at least one committee. Eight committees were formed, roles and responsibilities of each committee were to be evolved by the members. Each teacher as a member in one of the committee started playing the role of facilitating this evolution. During the first year it was very difficult to get both the children and teachers together to make this work because we were ourselves not very clear on what to do and how. I think it is very difficult for one to adapt an idea from another when the larger purpose of it is achieved slowly. A few meetings were suggested among the committees to discuss strategies for effective functioning.

The initial excitement started diminishing among the larger number of children as they didn't feel excited by the idea or because they did not get a chance to play a decisive role. Those who were actively involved started undertaking the tasks on their own and completing the routine. It was very difficult to bring in the idea of delegation of responsibility. The challenge during the first year of children getting roles in one or two committees - was discussed with all and the rotation of members into new committees has since been implemented every month, with two more new committees added to old list. Ten groups with members from all

classes and a teacher were formed and the choice of a group to serve in a committee is decided through drawing lots in the assembly. This gives every child a chance to serve in all the committees in a year.

Now, we have achieved some regularity in team meetings of committees, delegation of responsibility and children playing their roles. The frequent follow up by staff with the committee members to resolve issues/challenges, the members' presentation about these in the assembly is supporting the idea to move in a constructive direction. Thus the functioning of committees in school is addressing the routine challenges in the school practices like mid-day meal, school assembly, school garden and its maintenance, cleanliness of the school, maintaining the library in school and class, designing and managing events and celebrations, etc. I am not claiming that we have achieved complete success, but this thought is contributing towards a slow development of shared responsibilities in managing school operations. We have sensed some progress in examples of children having meetings to discuss, delegating responsibilities among members, evolving rules of their committees, identifying and bringing issues in front of all, bringing down hierarchy with almost all members of school serving in the committees on rotation basis, children's understanding about the school practices and their mechanism. We are still working on grey areas in developing sense of responsibility of self and towards others, bringing awareness in the children's parents to establish environment of dialogue in their home.

I want to share another example which is related to my practice with younger children, about my success and failure in achieving certain idea/thought (as I haven't experimented this before). From the last two or three years we have been trying to engage children in library related activities, for which a few discussions were also held amongst our group.

I was wondering how exactly we could develop the practice of reading the newspaper or magazines among children. For this, I started trying to introduce the children of fourth standard to some interesting news from our daily newspapers. Out of the news that was shared, the children were excited to listen to reports of accidents and mishaps. I discussed this with the language teacher who introduced the children to the practice of writing certain quotations printed in the newspaper and displaying the same in the classroom. This was

done on a rotation basis and with a little discussion on the display in the class to involve all. Initially the children were eager to write but slowly the practice diminished. This may be due to language reading and writing problems faced by a few children or lack of follow-up of the activity after displaying. So I felt that I should do something else to introduce the newspaper concept. Most of the times when I asked children to go through the paper and share whatever news they had read, it did not work as the children were unable to get news relevant for them to understand or interesting for them. This led to idea of developing a newspaper of our school where children can write the news within the context of our school, but I found it difficult to explain the concept to the children. Even my attempt to start the paper with a small group of children with mixed learning level did not work as I imagined, since the children were unable to comprehend my thoughts. I left the idea there thinking that perhaps the children are too young to perceive what I envision.

This year I got the opportunity of having library periods for the same class who are in fifth standard. Now I started thinking about the same idea of getting our children to work on newspaper reading. For this I planned few activities for about two months, which included picking of news from dailies, reading them, discussing a few, collecting information other than news, making small groups of children and cutting the interesting and varieties of news from old papers, making one single paper of these cuttings and displaying the same etc. Slowly I started putting the same line of 'Can we bring out a school newspaper?' This time, I found not much confusion on the faces of the same children with whom I had failed to convince earlier. They agreed happily and we made five groups and started thinking about the nature and kind of efforts we could put into this venture. During the discussion I slightly modified the thought of daily newspaper to a Weekly as it would be difficult to get news on a daily basis in our school. Hence the first group started its operation of collecting news, writings like poem/stories and drawings from children of all the classes. I was very careful this time about not leaving the initiative in the middle and made sure to follow up with the team every day and motivated them. Finally it was a happy moment for me and the team that we came up with our first weekly paper of our school under the name '*Shala vaara patrike*' (School weekly) as suggested by children.

I am not claiming here that I achieved success because major portion of the paper was covered with a lot of drawings/paintings, poems and stories and a corner space for news. But the initiative has given me confidence that the children can slowly get into the idea. All the groups brought the weekly on regular basis and they got opportunity of releasing the same in whole school assembly. Now the children of other classes have started asking for their opportunity of publishing the weekly of school. I happily agreed and the Class 6 children started bringing out the same (with more news items involved and other staff involved). I personally feel happy that slowly the newspaper concept is getting integrated into the institution. The students from the pioneering group asked about their role in the current weekly paper, I suggested that they support the ones who are involved by giving more news/articles. But the joy is missing. My original thought of bringing children in reading newspaper is still to be worked on, as most of the children with whom I am working are still staying away from reading. My efforts are still on with some more activities planned.

I have many experiences like this one, of bringing an idea of mine or others' which seemed to be getting partial success or failure because of several reasons. I think it may be because:

*If the rationale is not clear for the practitioners/ if the dialogue hasn't happened with stakeholders clearly with a regular follow up*

*If the contextualisation doesn't happen, keeping high expectation with rigidity (less opportunity for change) in the idea or having openness but not losing the originality of the thought.*

*A thought can never be institutionalised if it has been understood/claimed by the person for ownership*

*Unless we get understanding of a challenge or come across that challenge in our practice (the one faced by others) will not be dealt by us seriously.*

*Clarity on the matter, its consequences before, during and after execution is necessary.*

The practice of a teacher as facilitator in education field is always under lot of experimentation where she/he struggles with many ideas, the ones printed in guiding documents like National Curriculum Framework, learning theories of children by educationists or ideas of a specific school. During institutionalising these, the teacher should feel her own responsibility and add her own thoughts so that the learning is increased. If they are documented in reflection dairies as a practitioner they can contribute a lot to the quality of our education system.

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## Clay Art

Chetan Patali



If we ask a question to ourselves in the context of formal Indian schooling system, do we focus on core subject areas or co-curricular areas? The answer would be core subject areas, where the co-curricular areas are dealt superficially. But these co-curricular subjects also play an important role in the overall development of child.

In this context, art is one of the co-curricular areas which needs to be strengthened and practised in school along with core subjects with structured curriculum, design and planning. Art is an effective tool to communicate one's feelings, ideas and thoughts in several modes, such as drawing, painting, sculpture, music, dance, drama etc.

Since the last four years our school is practising different forms of art, providing time for it in our school time table. However, in the academic year 2016-2017 all of us teachers felt that we should try an art form from the basic level to its next level. We all sat together and discussed what type of art form we could try and practise it from the scratch. In this discussion two main ideas came up. One was carpentry and the other was clay modelling. We selected clay modelling on the basis of availability of resources and resource people to aid the teaching.

At that stage I was dealing mainly with the core subjects and part of the art syllabus, like drawing and painting. However, I didn't have any qualifications or experience of teaching art as such, but had an interest in it.

I started working on the new art curriculum to enhance my knowledge and understanding on what art is and its role in education, what clay modelling is and how it can be taken to classroom, etc. Then I planned the timetable - my art classes where I could include the clay modelling activities, types and their frequency.

Prior to starting the actual classes, we needed proper clay for the process. So, along with my other preparations, I interacted with Hanamantappa, a local potter from Naikal, from whom I got ideas regarding what type of clay to use, where

it is available, how to prepare the clay and other related facts it. The potter had suggested us to bring clay from Mudnal village, near Yadgir. Then we as a school contacted the members of Mudnal panchayat where the proper clay could be collected and got the required permissions to take it. After this the first class was arranged as a field visit, where we planned to collect clay and had discussions with the children related to the purpose of the visit and safety measures to be taken. The purpose of the field visit was for the children to understand that not all clay is suitable for modelling and that it is not so easy to make the objects out of it.

On a chosen day all the children of class five went along with three teachers to Mudnal to collect clay and store it. Although the potter who had agreed to come and support us during the process, due to some personal reasons couldn't come. So I started preparing the clay as per the instructions given by potter. The clay was cleaned with wire mesh by children and then made ready for modelling by adding and mixing with a specified amount of water. After two to three days the clay was ready for modelling.

Then as we started to make the articles, we faced different kinds of challenges, and so discussed them with the children in the class and got a few ideas. After all this, the children and I had discussions about the methods we had followed. Here are some of their responses:

1. *'When we were in fourth standard we did not have clay work, so when we went to collect the clay, I was unsure about how we were going to do it. But when we gradually proceeded I got the confidence to do it*
2. *'Before starting this clay work, we were only drawing, painting and doing craft work indoors, which began to get boring. But this work outside of the classroom made us happy and we even exhibited our work in the library'*
3. *'In the initial days of clay work, I was unable to make any objects. At that time I sat quietly and thought of a few ideas. Then I tried those with*

*clay, which turned out very nicely.'*

4. *'I was very happy with this work because we went through the whole process in which potter carries out his work. In this manner we too put in the same efforts as the potter does.'*
5. *'So far, we have been able to make simple articles, if we get the support of potter, we can do more.'*

The challenges faced as a facilitator and learnings have been as follows:

1. The non-availability of resource person (potter) caused a delay in starting the work.
2. Maintaining the consistency in preparing clay was a challenge. Sometimes the clay was getting very wet, sometimes dry.
3. There was a question in my mind as to what kind of objects we could create.
4. There was some anxiety when I gave themes to create articles about how the children would imagine and express themselves.
5. Needed support from the expert to practice it more effectively.

My learning has been significant. These are some observations:

1. The process motivated me to identify ways of preparing clay, choosing the theme, searching for the different ideas to create articles.
2. The children expressed their ideas in three dimensional forms, whereas before this we were only trying to express ourselves in two dimensions. The children did very well.
3. Each and every child was involved in gathering

the ideas and information to create objects, resulting in co-operative work.

4. The children began to own the process and the objects that they made, so that there was accountability. We were able to see the ownership of the process in children.
5. Some of the children were creating stories through what they had made.
6. The children were able to appreciate each other's work.
7. The children who had so far hesitated to draw and colour showed interest in making things with their hands.
8. The participation of children was satisfying.
9. As a facilitator I was able to understand while working the new area of art and got some new ideas about this new form.

Throughout the process our objective was to involve and expose all the children to a new art form with consistency. In this process, our main motto was to think and express - not the end product of it. I also conveyed and ensured that there would be no comparisons, either good or bad.

We have to look at art as an integrated part of every subject. There is lot of scope in the subjects also to use different art forms, which will help us in developing the art skills not only in the art classes.

So in this way the journey of clay art was executed for a year. I would like to thank Principal and my colleagues of the Azim Premji School, Yadgir for supporting me as well as the project in the mobilising of resources and helping in the video documentation.





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## An Observed Class

Deepak Dixit



Classroom observations have always been seen with a sight of doubt from the teachers' end and, being a teacher, I also realise the authority a class observer has whether communicated or symbolic. It gives a feeling to the teacher that the observer is on a higher plane and that by the end of the class the observer will point out the issues with the class and the way they were dealt with. As a teacher, I too have seen this happening and others will also agree that observation is more in the mode of inspection of the class than a way of helping out the teacher in some possible way.

In the Azim Premji School, the meaning of classroom observation has been seen in a different perspective. Here, classroom observation is meant to help out the teacher in such a way so that he is able to see those things which he would have missed out in the flow of the class. It's seen more as an assistance to the teacher in observing the micros of the class than a fault finding mission. These type of class observations involve a lot of patience and thought of converting a challenge into a learning opportunity.

I was in 5<sup>th</sup> class of EVS. The teacher was prepared as the classroom observational plan was already shared with him. The topic-Water - was quite interesting though common. So as a process I had a discussion with the teacher concerned and he had shared his plan with me, giving a brief of what he would be doing in that period. It looked like a smooth plan: there were some activities, some discussion points, some writing work and a brief small group discussion. On the whole, the lesson plan looked well balanced and together, we went to the class.

The teacher started the class with a recap and students were quite participative, so now the teacher moved to the plan of doing some activity on 'safe drinking water' as a part of his agenda. It was to bring awareness in the students that how water gets polluted and becomes unsafe for drinking. The idea of the activity was to have a transparent glass of water and mix some dust into

it and ask the students that is it now fit for drinking? The expected response was 'No', when the teacher would have followed it up that mixing of impurities make the tap/ ground water unsafe for drinking.

When the teacher started off with this activity, he took a glass and poured some water from a water bottle and asked one of the students to come and take a sip from it, he came and took a sip. So it showed that the water is fit for drinking. Now on the next stage the teacher mixed some chalk powder to the water and asked now can anyone drink it? It was anticipated that the answer would be a big, one -voiced NO but .....it was a silence..... why? What happened? The teacher asked again can anyone drink it?

'Yes', said one boy.

It was a challenge to the teacher. 'I can drink it', he said, 'but you will have to keep the glass still for some time'.

I, who was an observer in the class, also had no clue regarding the solubility of the chalk powder in water as I had never tested it. But my misconception was that chalk would get dissolved in water. (Now I am calling it a misconception).

It was a challenge to the status of a teacher, which was clear. Now the teacher posed another challenge by adding more complexity to the situation. He said that 'Ok, maybe with chalk powder you will be able to drink it, but now let me add mud and sand and dust,' which he actually did and then asked the class, 'Now can any one drink it?'

Here the situation looked as if the plan would be executed as a demo class to the observer. But kids being kids now had a different line of thought: again one of the students said, 'Yes, I can'.

'How?' asked the teacher.

'I will pour the dirty water in the RO mechanic's inlet and get portable water from the tap,' was the reply.

This was another level of challenge the students posed for the teacher. The teacher also didn't

want to lose his face. So he said, 'Fine, but what if you don't have an RO machine?' The idea was to bring the students to the pre-decided and expected response, but the students were not ready to give the standard response which was as expected as per plan. Silence..... once again!

Then, a mild voice: a girl said, 'Yes I can do it without RO'.

At this, the teacher ran out of patience and he said 'Fine. You may be able to do it, but the idea is to say that if the impurity is mixed with the water, it becomes unfit for drinking.' And then the period went on as per the plan of the teacher. The class got over.

After the day was over, both of us sat together to discuss on how the class went off. In the meeting, the teacher acknowledged that because of some of the students the class went for a toss, and his plan got derailed, etc. Over the discussion I asked him what if he had asked those who still felt that water can be made fit for drinking to prove their claim. As teachers we can always throw up challenges and ask them to prove the opposite. So in that feedback session I shared a plan with him for the next day that he would continue the topic and ask those who felt that the water could be made fit for drinking should come forward and show us how they intended to do it. Let them make a list of the materials needed which we would try to provide. Let's see how it unfolds.

Next day teacher went to the class openly and went on with the discussion we had. It came as a surprise that almost 75% of the class was ready to show

and prove their claims. So he made the list and arranged for the required material. It was a surprise that many group of students who had no clue of distillation and other techniques of separation were using them in practice.

One group of students was boiling the water in the glass over a candle and the vapour was being collected and condensed vapour was being collected in a separate glass.

Another group was using three water bottles which were cut open. One was used as a sieve and the water collected in it was filtered again using a piece of clean cloth, followed by a layer of stone, sand and charcoal.

Though there were limitations of the equipment and the experience, the theoretical part of the process was intact. One student showed me how he would have separated chalk powder from the water. I could see it that the chalk powder became a sediment and the water above it was clear and transparent. Though chemically it might not have been fit for drinking, physically the process of separation was clear.

The best part was that for all of us it was a pleasant surprise that the students of 5<sup>th</sup> class knew more than what we had anticipated. We had never thought that the students would know these complex separation techniques. Now I think that maybe we underestimate our students and keep them confined only to a certain level unless they clearly show that they are capable of doing much more than what we are making them do.





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## Teaching Maths Through A Story

Gajendra Kumar Devangan



Friends, everyone loves to listen to stories. It is very easy to convey a concept or a message through stories. But we need to keep certain things in mind while using the story as a medium to teach concepts. There should not be any room for discrimination or cause pain in using children's names, family, social and economic background. Let us know more about this endeavor.

This is an account of an attempt made in February this year to clear the concept of perimeter to class five. A story was narrated that was connected to the environment of children. The children loved the story from the beginning to the end. This story had the names from their surroundings, village and rural environment. The children understood the concept of perimeter almost in the first attempt itself. There was a village called Ichhapur where this incident took place a few years ago. There was a big open space in Ichhapur. But as the number of people increased in the village, they started occupying that ground. They started using a large area for farming and granary. A few people of the village began to worry when they saw this. Their concern was that if people continued to encroach the open space then the children would not have any place left to play. So, they also thought of occupying a part of the open place to be used as a playground. Some of them liked the idea and they decided to go ahead with their plan the next day.

The whole village learnt about it and all of them liked the idea. The next day many villagers prepared themselves for this event and marched towards the ground. One carried lime to draw lines, another had spade, another took a sickle with her so that she could cut grass or weeds that were growing there. Another had the rope. . All of them reached the spot with necessary tools. People got ready to occupy a large portion of the ground. One of the villagers held one end of the rope, another caught hold of the other and started walking as far as he could. Someone put the lime on the rope to mark the lines. Thus the place for the playground was marked. A smile of delight lit up everyone's face because now they had a big and permanent place

for their children to play.

While returning home the villagers were discussing the idea of the playground. Meanwhile, some of the villagers started worrying that if the marked area is left alone then after a few days the lime marks will get erased and somebody else might occupy that space. If that happens then their plan will go kaput. Therefore the proposal was to go to the collector and demand for the safekeeping of the playground and to provide funds for the same. Everybody liked the proposal and agreed to meet the collector the next day.

As per their plan, people assembled in the courtyard and from there went to collector's office together. After a while the collector came. He asked them the purpose of their visit. People put forth their demand.

The collector asked – How big is the ground?

People said – Very big.

- What does very big mean? Is it as big as this room?

- No sir. Much bigger than this.

- Is it as big as this building?

- No sir. Bigger than this.

- Oh! Have you occupied the area till *Saphalpur*?

- No sir. Not such a big area.

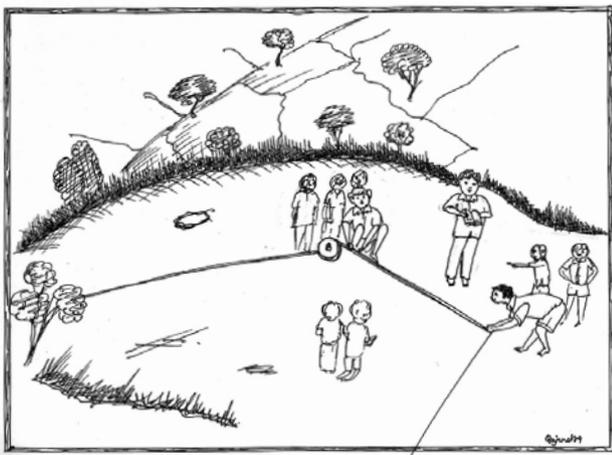
- Then why don't you tell me the exact measurement of the place? Give me its exact length and breadth.

Now the people were tongue-tied. They had not measured the length and breadth of the playground. Hence they did not have any answer to the collector's question. Now, they had no other option but to return to the village. The collector once again advised them to measure the ground properly and come back.

The villagers went to the ground again with the necessary stuff, such as a metre measuring tape and a pen and a notebook. The area that they had occupied was straight. How should they measure the ground? Everyone came up with their own

suggestions. One suggested that they could measure each line one by one. There were five lines on the ground. So they could measure them and then...

The immediate reaction to this was – yes, and then let us add up all of them. This way we will come to know the total length of the wall that has to be built. All of them understood the procedure and started measuring. The total measurement was 38 meters. Then they went to the other end which measured 23 meters, the next was 27 meter, 44 meters and the measurement of the last line was 49 meters. T was writing them in the notebook and U was adding them in her mind. As soon they finished measuring the lines the result was ready. Total length of the wall was 181 meter. The satisfaction of accomplishing the task was clearly seen on everybody's face. This was definitely an achievement for the villagers.



The next day all of them went to the collector again. This time they happily repeated their demand along with the measurement.

The collector asked – Do you want the enclosure to be made with thorny wire or do you want a

concrete wall? All of them shouted in unison that they wanted a concrete wall.

Collector – How tall do you want the wall to be?

- Three meters.

- Do you want to enclose the complete ground?

- Yes sir, complete 181 meters.

- Just think about it. You may want to leave some area...

- No sir, we have thought about it.

- If you construct a wall in total area of 181 meters, that too a three metre high wall then how will you enter the playground?

The villagers began to whisper among themselves – We never thought about this. What do we do now? Sir is right. We have to leave space for passage.

In the midst of the whispers the collector said – Please decide how much space do you want to leave. If you want you can go out and discuss.

They came out and discussed the matter. It was decided to leave four metres of space for the passage. They conveyed their decision to the collector. He appreciated this decision and happily allotted funds to construct a 177 meter wall. The villagers were delighted and their faces were beaming with happiness.

During the process of telling the above story, I was continuously drawing the shape of the playground on the green board and went on writing the measurements of the wall. The children not only understood the process but they also did mathematical calculations in their minds. The next day when I talked about the process and gave questions for practice, the children were calculating and answering.

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**Gajendra** is currently a teacher at Azim Premji School, Dhamtari, Chhattisgarh. He has been teaching here for nearly six years now. Prior to this, he was a primary school teacher in a government school in Chhattisgarh, where he started his career and taught for twelve years. Some of his hobbies include writing stories and poems for children, listening to music, and painting. He may be contacted at [gajendra.dewangan@azimpremjifoundation.org](mailto:gajendra.dewangan@azimpremjifoundation.org)



I joined Azim Premji School, Dineshpur in July'16. Its been almost a year working with this school. I am a graduate in science and did my BTC from DIET Lucknow. Though I have worked with children before in some government primary schools during my internship but working here is a totally different experience, even a challenging one.

So when I joined the school things seemed quite easy. I had to teach English to primary classes and Science to upper primary classes, but as days flew, things became a bit difficult. Managing the students was a hard task for me, specially the younger ones; they drove me crazy.

The lesson plans that I made, the TLMs that I had, were never enough for the little 'jumping jacks'. I was really struggling with my English period in class 3. I shared my thoughts with colleagues and wondered how this would get better. When everyone shared their own thoughts, I was able to make a connection between the situations I was facing and their experiences. I did many things but something just wasn't right.

Soon I was announced as the class teacher of class 3. 'Noooooo!' – yes, that was my expressions – 'How could this get even worse'.

So as a new class teacher, the first day I entered the class, I just made some ground rules, changed the seating plan and all. Even a week after that things weren't going well. From July to December, I was literally struggling to handle a bunch of kids of class 3. So now it was high time. I thought and thought and thought, 'What is wrong? Why are the kids just not listening? What I should do to make things better? Am I bad teacher? Should I resign?'. These thought constantly occupied my mind, but I didn't have an answer to any of these.

We had a meeting and were discussing about how children learn and all other important stuff and came to the point of 'Teacher student relationship', and that random thing clicked my mind. 'Where is that bond? How well did I know them? I actually knew nothing'.

So I finally had a hint to my questions. I never built that bond. I was just reacting according to my colleague's experiences - what they did to solve the problem, I did the same. But kids are different, I am different, how could I expect the solutions to be same. After this, I tried to be a part of them and wanted to know more about them. We had conversations about their likes, dislikes, problems, families. During the class or outside the class, I tried to be there with them. I made myself more accessible to them. I talked to their subject teachers about their work, behavior and where they were lacking. We (the kids and I) talked about their views on what kind of class they wanted, what kind of problems we are facing in our class, what kind of rules should be made to resolve those problems. Now I knew them a bit more and what they are capable of; so I allotted them with some duties according to their interest and to my wonder, they are actually responsible!

I am still growing as a teacher and still facing problems with a few of them but that is just fine. We will know each other better soon.

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## Making Room for Insignificance

Malavika Rajnarayan



Try giving a child a broken biscuit. Even if she accepts it, there will be some amount of displeasure about its deformity. I face this everyday with chalk-pieces, sheets of paper, paint-boxes, brushes and even old newspapers.

‘Teacher... This box doesn’t have all the colours!’

‘Teacher... This paper is torn in the corner.’

‘Teacher... This crayon is broken.’

‘Teacher... This chalk-piece is small, I want a big piece.’

‘Teacher... I want a big brush, you gave her one.’

Our lives aren’t perfect paint-boxes with equal cakes of every colour. Are schools meant to give us a taste of utopian equality, or do they prepare us to accept an unequal, imperfect world with compassion and understanding? Art can help us question and alter our existing perceptions in order to share it with others. We attempt making beautiful things with what we have and get our voices heard authentically. I try to create opportunities in the classroom for peer-communication with the hope that it will foster an ability and willingness to work with others as well as work within limitations; to make them encounter arguments and conflicts and find their own ways of transacting and resolving issues. With all this going on, what art do they make? May be a few scribbles, splashes of colour, sometimes a reflection of their surroundings, a little detail of a design, a glimpse of their memories and little sparks of imagination. This doesn’t sound like much when compared to being able to read the

alphabet, learn words and stories, facts and history, write exams that can get them jobs. Spending time arguing about a paint-box for an activity that doesn’t have much scope in terms of ‘a secure job and regular earning’ certainly seems insignificant.

But I wonder if sufficient exposure to different colours, different forms, sounds and cultures can help children see beauty in all skin types, all body types and be willing to work with diversity. I wonder if refraining to teach them ‘how to draw a cat’, might prompt them to find their own ways of drawing not just a generic cat but the cat with a blue collar that roams in our school, or the one they see near their home. When a thousand different representations of a cat from a thousand different cultures and locations can still communicate to one another that they are all images of cats, it’s beautiful. Not just the art, but the understanding it builds and the knowledge it shares is most beautiful. Art emerges out of these attempts at understanding personal experience; when it grows to merge with the universal. Children’s art has this quality of universality that slowly fades as they grow into adults. They help us adults see the world in ways that we have forgotten to see.

Classrooms are only convenient for certain kinds of learning. Children instinctively gravitate outdoors to step away from the classroom structure. For a majority of the duration in school, the classroom operates as a physical container that imposes a feeling of belonging only if they are inside. The simplest technique of managing their movement is to make the space outside the class ‘undesirable’, and so many of us facilitators sometimes tell the children that they will be sent out if they are disrupting the class. Children catch on to this conditioning very early on. The instinct to step outside and break away occurs at random with every child through the duration of the school timings, across subjects and proves to be a major challenge for teachers and facilitators. I struggle with this in every art class but am equally fascinated by it as an artist. In one class, I was earnestly requesting some students to step out and take a walk for 5 minutes and get back in, not as a punishment but simply as



*Watercolour on paper by a Class 2 student, 2017*

a change of space and the freedom to move around and return; they assumed that I was punishing them. On occasions when there have been children who have been terribly disruptive, beating up



*Group work by Class 3, 2017*

others, I have tried to send them out but have observed that they come back in on their own after a while and are usually calmer for the rest of the class. On one occasion one child decided to re-enter the class through the window, instead of the door and on another occasion a different child climbed out of the window to go and see a cat. The window isn't particularly high or dangerous for them to use as an exit and on both occasions, I couldn't find in myself a valid reason to object to their actions and was in fact happy to encounter their sense of freedom, adventure and playfulness. I have often wondered if this 'break from the classroom' could be constructed differently. During one particular session, I told a few students who had finished their work and began to bother the others, to step out and look at the plants and return. This was received with enthusiasm, to the extent that many others wanted to finish quickly so that they could also 'step out to look at the plants'! It is precisely this instinct to break away from structured environments, to be playful and take risks that nurtures imagination and creativity.

These experiences have piqued my curiosity in the work done by the more rebellious children, the ones who are 'disruptive' to classroom order. My challenge is to carefully nudge them into channelizing that same energy into working on activities or ideas that truly grab their interest so that they can get self-motivated to further their learning through methods that suit their unique growth patterns. With the students who aren't so rebellious, I play a more provocative role to push them out of an attitude of 'obedience' towards a zone of healthy questioning and discovery. For instance, some students in Class 5 and 6 are particularly quick to grasp ideas, have wider resources of information by virtue of coming from educated families but feel the need to prove their abilities and skills by faithfully copying pictures from a book and neatly colouring them. I appreciate their skills but also discuss with them the value of individual ideas and expression, how we can access it; that each of their perspectives is uniquely potent and beneficial for the growth of their own minds and the cultures they live in. These discussions seem to have a positive effect on their own confidence and their willingness to try new things. This extends to the manner in which they begin to value their own belongings, we discuss why we recycle old newspaper in the art class, how we can use discarded sketch pens for creating other objects and how every conscientious action can

contribute towards the conservation of nature.



*Leaf drawing and patterning exercise with pencil and sketch-pens on paper by a Class 5 student, 2017*

‘Why do you make drawings?’, I asked one day in the Class 5.

‘So that we learn to draw’, said a student.

‘How does it help you in your life?’, I continued.

‘You are asking question over question, teacher!’, complained a boy.

‘We can make money if we learn to draw... I have seen film posters being made and they get money from it’, said another.

‘How large was this film poster you saw? Could you tell me approximately how many feet/metres it might have been?’

‘This big’—he gestured the size with his hands — ‘I don’t know how many feet it was’

‘Was it not as big as this wall? What do you think is the size of your classroom?’

‘50 feet!’, said one.

‘No, 20 feet’, said another.

‘No, 60 feet!’, screamed another.

‘100 feet!’, exclaimed one girl.

‘A hundred feet? Why don’t you measure it and see?’ I said.

She took a ruler and began to measure it. First the length, then the breadth. Then she wrote the values on the board and summed them up.

‘Why are you adding them?’, I asked.

‘To get the whole size – Oh, I should subtract them!’, she responded.

‘No no, we should add them!’ said someone else.

‘Teacher! Have you come to teach us art or maths?’, asked a boy who was clearly getting impatient and wanted to start drawing.

‘One day, we might decide to make a large painting on the wall of this classroom. Right now, you roughly know how much paint you need for one page in your book. How many of those pages would we need to cover a wall of this size?’

‘We need to multiply the values we measured!!’, they exclaimed with a sense of discovering a connection they hadn’t seen before.



*Collage on paper by Class 6 students, 2017*

Art is an integral part of life and must be seen as an important avenue for learning. Art objects and artefacts are subsidiary outcomes of the larger process. The pursuit of knowledge and an understanding of the world is as much a motivation in art as it is in the sciences or philosophy. Recognising this is crucial for any culture to grow meaningfully.

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## Children who are Unable to Learn

Mohammad Israr



Teachers and children are the two most important links in the chain related to a school. They may be looked upon in any of these two sequential ways – first the teacher, then the children; first the children, then the teacher. This is so because till a few years ago, education was teacher-centred; now it is considered to be child-centred. New facts are coming to the fore with regard to how children learn and it is also claimed now that children construct their own knowledge. All that the teacher has to do is, create the circumstances for the child to learn with ease. Educationists also claim that eighty to ninety per cent of a child's learning happens from his or her surrounding environment and the atmosphere at home.

Even though this could be an issue for debate, it can surely not be denied that the teacher definitely has a significant role to play in whatever children learn at school. And a teacher would always like the children to be able to learn various skills and perform well. But another aspect in the process of teaching-learning is how much co-operation the child gets from his or her socio-cultural context, the environment at home, his or her upbringing, the parents' co-operation and discussions with friends. In the process of learning as well as construction of knowledge, both these points – the role of the teacher and the socio-cultural-familial context - have a significant role to play, though the level could vary, and in some circumstances also be in equal measure. I would like to underline some of the main points in this context. This is my personal view and so I would like to proceed on the basis of a small incident in which I was involved.

I was brought up at my maternal grandfather's place. We were fourteen children in all. Apart from me, the children of two other relatives were also getting education while residing with this family. Amongst the elders of the family – the maternal uncle and aunt, and the maternal grandparents (*naana-naani*) – a comparison would almost invariably crop up in terms of which of the children was the most intelligent, the cleverest and the wisest of all. One cannot really blame them for this,

for the education system in our country has based itself on such comparisons from the very beginning - in the case of education, almost at every level, children are put to comparisons. In recent times there has surely been some change in the situation and at the primary stage all children are considered to be of the same level and standard, and they move up from one class to another, but thereafter it is quite natural for some sifting to be done as they go through the system of examinations.

My grandmother considered my youngest maternal uncle's four children to be very intelligent, clever and sharp of mind. She would praise them no end as she related to me about the knowledge they had and the skill with which they would work when they were kids. I would often say to my grandmother that in childhood each child is a Birbal. The real worth is revealed only when one grows up. Back then I did not have much knowledge about children's nature, their psychology, their learning and understanding etc. But after having gained some bitter-sweet experiences related to children, I now believe that a child becomes what s/he does, moulded by the domestic circumstances and social environment s/he grows up in.

I felt this all the more deeply almost 22 years later when, in spite of having acquired quite a good education, and even after making a lot of efforts, all the four sons of my maternal uncle could not get work in accordance with their education. In the end, two of them started working on their ancestral agricultural land and the other two opened a shop. Had my grandmother been alive today, many of her ideas would have suffered a jolt. I would rather think she would also have blamed the teachers who had taught them, especially because I too was educated in the same school as theirs, except for the fact that we were not in the same class.

Having been engaged in teaching now for a long time I have now surely come to experience that a teacher never wishes that any child in his or her class should not learn or lag behind in the process of learning. The teacher prepares an effective plan

for teaching a class of an estimated 30 children. An attempt is made through various actions to reach the content to the children. Every possible attempt is, indeed, made to be successful in the work at hand. And yet some children do lag behind - a few remaining in such a state continuously. If, in a class of thirty, around five to seven children are unable to learn or are found to be lagging behind in the process of learning, why should only the teacher be blamed? Had the teaching-plan been at fault, not even twenty of the thirty children would have been able to learn – or, this percentage would have been very low. I have come across such examples in the classes of very hard-working, sincere and alert teachers.

Various educationists, teacher-trainers and those working on teacher-education give the examples of such slow learners and non-learners and put the whole blame on teachers. Questions are also raised about the teaching-methods of the teacher. Advice is proffered with regard to teaching in a different way by bringing in various theories and principles of teaching. They overlook the fact that each teacher has her or his own method and style of teaching developed during the process of working.

As has been pointed out above, many other reasons – the child’s societal environment, domestic atmosphere, quarrels between parents, lack of co-operation with the child, the company of friends etc. – could also be a hurdle in the process of the child’s learning. The child’s interest in and inclination towards a particular subject is also a factor in whether or not she or he is able to learn. It should also be seen as to how eager the child is to learn certain content or activity. In this context, Dr. Kewalanand Kandpal, Lecturer in the District Institute of Education and Training, Bageshwar (Uttarakhand) writes in an article on ‘A Model of Teaching-Learning Processes’ in the magazine *Shaikshik Dakhil* (Year 6, Issue July 10, 2017) – ‘Learning is a very personal and subjective experience. Schools try to bring in objectivity in the light of standards. This has an effect on the participation of children in knowledge-creation. There are two important parts of the teaching-learning process in the classroom. First, learning through teaching, and second acquiring skill through exercises and strengthening it. The first comes within the purview of the teacher’s work, and the second depends on the hard work of the student.’

It is thus clear that in the process of teaching-learning, the participation of the student is needed as much as that of the teacher. If this does not happen, it would be quite natural to have a contrary result. Kabir hints at this very point when he says - ‘*Guru bicharaa kya kare, jab sikhhi mahin chook/Bhaave tyon parbodhiye, baans bajaee phoonk*’ (What can the poor teacher do, when the shortcoming lies in the learner/It is just as if one were to blow on the bamboo with no results). I believe that a teacher’s method of teaching is very useful in the process of learning for the child, and so the teacher should constantly review his teaching methods and should also have an understanding of innovative practices and principles of teaching-learning.

After working as a teacher for three months in Azim Premji School, Udham Singh Nagar, I too had some experience with regard to children’s learning. When I observed issues such as the dialogue between a teacher and a child, level of attachment to classroom teaching, and the presence in school of both teacher and student, I found that of the 365 days in an year, it is just 200 days – or even less – that the teacher and the student are connected to each other or to the school. And the teacher and student are together on an average for just about three or three hours and a half daily. And even during this time, different teachers are interacting with the students at various points of time. And each of the teachers has a different way of talking and interacting with them. I therefore think that on the basis of such little time spent with the children, how do we nurture hopes and desires that the child becomes a thoughtful, alert and imaginative citizen?

I sometimes also feel that the teacher has to do a lot of work related to the school apart from teaching. Because of this even if he makes an effective teaching-learning plan, he is unable to work with the attachment to it that is required and to the extent to which he should be doing this. He is unable to keep patience and works in a discouraged state of mind. Whenever I talked to some educationists on this issue, they often ignored it by taking it to be something not related to teaching. I believe that when the issue is related to the teacher, education and the learner, why should it then be looked upon as being separate and different from teaching? This too must, after all, have some effect on the teaching-learning of children.

I don't know why but it has got stuck in my mind that we wish to view the progress of our children in the light of the ideas of foreign scholars, educationists and psychologists. We compare our system of education to that of countries like England, America and Finland and try to apply the methodologies and ways of working in those countries. We wish

our children's socio-cultural progress, learning and understanding to be in the context of the ideas of the scholars of such countries. And we think and wish so, even though the situation in our country is such that the ground for education is still culturally different to be suitable for the ideas from those countries to be sown here.

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## When a Monster Became a Friend

Pompa Ghoshal



The word 'monster' is one that we have often heard in the stories told by our granny or in fiction and brings a horrible image to our minds, something like the experience I am going to share!

It was very early days in a new school. Also it was a new experience for me to be a facilitator of English in a school where English was the second language. I found that English was a 'Monster' in the mind of every child, especially in upper- primary classes because they don't get any hearing input from outside or from their environment (where listening is the first step to learn any language). So, if there are stories and articles in lesson, and if a child is not able to read and understand four or five words in every sentence, then it really becomes a challenge to understand the lesson. And I found it to be one of the cause why the children are afraid of English.

I could see many dull faces in my class: they were asking why I wanted to teach them this horrible subject.

How to drive away this perception?? It was a big challenge as it would not allow the children to be comfortable with English. Then how to deal with this problem? It was a big question for me. Anyway I started and everyday I was trying to motivate them through words and giving some examples. But I found the children still trying to run away from reading and writing by their own. There were only two children out of 30 in class 7 who were able to read, although hesitantly. By giving a little push to these two, I prepared about six children for reading in class. I then formed mixed groups, where they could help each other to read. Slowly two-thirds of the children in the class were able to read aloud. Now they gained a little confidence in reading. I was happy to hear them to read freely.

Writing and speaking were still a challenge. The children always demanded for readymade answers from me, without even trying to find the answers. They never thought that they could also write answers on their own. I was struggling to bring this confidence in them.

Fortunately we found a way. We had come to the lesson 'Alice in Wonderland', a very interesting story given in three parts in three books: the first in class 6, the second in class 7 and the third in class 8. I was dealing with class 7. So I started the lesson by telling the story in brief from the class six and seven books. But the story was incomplete. The third part was not available because we didn't have class 8 in our school. Although the book was available in our library, the children found it too long and difficult to read. So a colleague who taught class six and I planned a movie show. My colleague asked if we should show the movie in Hindi but I felt that if they saw it in English, it would be an opportunity to try and understand as much as they could. Then the movie was shown in English in our District Institute. The children enjoyed the movie and understood the story of Alice. They were able to connect it with their lesson, also observed many differences in the movie and the story in their book. As they were slowly getting into the story, they became interested enough to attend the English class to discuss the story, its characters. Until then, we had spent about ten days in telling the story, reading, discussing the dream scene, which made them give individual views on 'I dream to become when I grow up'.

That lesson, I found, was the 'magic spell' which made my classes interesting. So I thought to continue with some more activities. I asked the children to act out the story on the basis of the movie. They replied, 'How can we? We can't remember the dialogues.' I asked, 'We can make dialogues and make it a play'. They said, 'Yes, we can do it, but in Hindi. 'But I want it in English only' I said. At first they said it would be very difficult, but later they agreed, on condition that I wrote the dialogues. To this, I said, 'If I write it, you have to memorise the lines. That's more difficult. It would be easier if we write the script together.' They agreed.

Now I got my station from where I would catch my train. The children were very excited to write the script for the role-play. They translated the words

first. I wrote all their suggestions on the board. For example, they found words for ko, kya, pasand, poochegi, tumhe, sapne, etc.

The script-writing activity made the children enthusiastic about learning English. They learnt many new words some rules of grammar, while writing the script. This script writing took about fifteen days to complete. During this time children used to wait anxiously for the English period. They used to keep themselves ready with the next scene and used their imagination to make changes in the script.

When the script writing was over, the children started the preparation of the role-play. Half of the children were practicing while the other half were preparing the props needed for it. They made trees, grass, crowns, cards with chart paper. All the children seemed to be the part of this drama. Such beautiful group work I have never seen in my life. It was an example of wonderful coordination in a group work. This preparation took ten days to complete.

At last the great day came it was a Saturday, when

all the students of class 7 were ready to present the drama in front of all. The whole school enjoyed the performance and the children got much appreciation, which increased their self-confidence.

This particular activity played an important role to build up vocabulary, sentence structure, thinking, speaking and listening skills, improving their reading and writing imagination. After this, children attended English classes in the same way as their other subjects and tried to understand and open their mind to get into the subject. Now they try to read and write themselves also take a step forward to do the comprehension part. Now that 'Monster' seems to be their friend, whom they like to talk to, enjoy and play with.

In this process, I also learnt something: I found that the major thing that pulls us back from learning any language is fear. Being a foreign language English has become a monster in our minds. First we should be friendly with it, then try to make ourselves comfortable in the environment where we are least bothered by others' reactions if we speak any sentence that is grammatically wrong. Only then will it be possible to drive away this 'MONSTER'.

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## Changing Social Perceptions

Pratibha Katiyar



‘Teachers in government institutions do not work, they have a leisurely job, ample holidays, they weave sweaters all day, eat peanuts idly and even if they decide to teach their students once in a week it is more than a boon for them. What after all will the students in these schools end up doing anyway? Not that they have to grow up and take up any prestigious, skill demanding occupations’.

These and many other such perceptions can be found around us even now. Girls are often advised to grow up and join the vocation of teaching because it is considered to be a relatively relaxed job and a job which can allow them ample time to even look after the house and the family. It is true that the times are changing but we must ask that with the changing times, are the social perceptions about teaching and teachers also undergoing any transformation? I do not know much about the other states, but based on my experiences in the state of Uttarakhand I must confess that these commonly held perceptions are becoming outdated. The teachers no more have the time to sit idly in the sparkling sunshine of winter and while away their time popping peanuts and neither do they treat their work with that attitude. They are keen to spend enough time with their students and come up with many new ways to teach them.

The geographical conditions of Uttarakhand are far different from any other state in India. And it is not possible to merely do a Google search sitting in Bangalore or Delhi and understand how different or difficult the circumstances there are. It is like safely sitting on the banks of a river and deliberating on its possible depth- this is impossible as knowing the depth of the river requires one to plunge into the water. So if one were to really know the circumstances in government schools in remote corners of the state one actually has to visit those places.

While the child reaches school he/she already starts feeling breathless, one feels as if even a single step more is not possible. But this is also the time when one recalls the fact that these are the same roads

on which both teachers and students walk miles to reach school every day. Are these difficult terrains and roads on the minds of those who comfortably deliberate on education- related matters? Are they aware of the long distances they travel each day? These everyday hardships? Now despite the fact that conditions have improved and roads have been built- roads that are long, thorny and dangerous , mud filled and slippery but at least there are roads! But what about those schools where even no roads have reached?

Getting to these schools by itself seems like an achievement. After this the whole experience of the school opens up. In a few schools, the children speak smartly in both English and Hindi, freely expressing themselves, asking questions. These children have uniforms, mid-day meals prepared fresh with delicious vegetables, teachers with innovative pedagogy who with immense love strive to work with their students.

To examine the environment and bring new information to the teachers, the children walk through the forests, they know by heart the couplets of Kabir and Rahim and even the children of the primary sections know their meanings well. Sarkhet Primary School’s student, Rahul, is in class 1 and walks 6 kilometres and crosses a river every day to reach school – his willingness and interest to come to school surely have a unique story to tell. There certainly and surely are many ‘Rahuls’ here.

What is evident is that these children are very interested in coming to school and by gaining that interest schools have at least succeeded in their first task. After this many other tasks of the school appear to get fulfilled when one enters the school. Of the many schools that I have travelled to in Uttarakhand, I found the teachers to be free of many worries and concerns. They are enjoying their work and feel that their reward lies in the sparkle in the eyes of the children.

When I was going to a school in Uttarakhand for the first time in 2012 and due to my breathlessness sat down often to rest, a teacher who was

accompanying me said that once we reached to school all my tiredness would vanish. At that time I did not believe her but when I actually reached the site all my tiredness magically faded away. I wondered whether a school could really be so beautiful.

I have studied in a government school myself but never had I imagined that there could be such a school in reality. Children had their originality and whatever they did was with complete freedom. They enjoyed studying and asked many questions.

After having visited many government schools I realised that what was unique and beautiful about them was their student's confidence and originality. They do not look as if they are factory produced. They talk uniquely, behave originally, befriend their teachers and even tell their teachers when they are wrong. It is obvious that the credit for nurturing this ambience goes to their teachers.

It is obvious that the teachers have broken free from the image of those who merely eat peanuts or knit sweaters all day. They teach with full sincerity. If we look at the situation post -NCF, then it is the government schools which are fast moving towards idealising the dream of 'Anandshala' or dream school even though there may be fewer examples of this kind. But at least the teachers in these schools have demonstrated that if one is willing nothing is impossible.

As far as teachers who are complaining is concerned their numbers are on the rise. It is legitimate that their complaints and concerns are serious. Just by seeing some teachers doing their work with happiness and sincerity, building bonds with students and communities do by no means imply that the situation has altered drastically. The point is to bridge the gap between these two realities. We have to understand what the motivation that some teachers enjoy is and where that comes from, an important step ahead can be to expand those circumstances where other teachers can also be motivated.

Sarkhet Primary School teacher Hemlata tells us, 'If children come to us from such faraway places having walked so much, if we waste their time would it not be sinful?' She is worried about the leaking school roof, the mid-day meal and its quality and the children's learning levels too. Dwara Primary School teacher Dipti Ramola says 'No matter how much we work people are going to always associate us with the image of sweater knitters'. But now we laugh off these prejudices. Earlier I used to get infuriated but now I laugh it off'.

It is not the teachers alone who have to change but the social perception of teachers also has to undergo significant change. We must cultivate a sense of trust.

## The Role of Libraries in Encouraging Reading

Rakesh Rauthan



Our school started in 2012 in the Dineshpur area of Udham Singh Nagar district in Uttarakhand. We have twelve teachers and approximately eighty students in our school. In the beginning our school had limited resources but we tried to do our best in the given limited resources. For example, we used the first to fifth Uttarakhand state textbooks and NCERT books for reading to the children.

Then we thought that there must be books related to stories other than textbooks in our school and decided to purchase new story books for the students. The District institute librarian helped us in the selection of books for the children who are early learners. We also bought books from the book fair for our students.

We had a big hall in our previous school which we used as a book distribution area because there was no library as such in our rented premises. It was different from the usual library as it did not have shelves, chairs and tables and reading corners. However, this didn't mean we restricted our students from reading. We arranged the necessary resources for reading to them. From the beginning, there was no specific structure in the functioning of our library. From the beginning, students were allowed to select the books of their choice even if the books were not their class level. They are not forced to read books that other people chose for them - the selection of books was done independently by the students. At that time more than sixty five percent of the students read the books and books were issued for reading at home. Though we can't definitely say how many of them seriously read the books, but they must have looked at them, even turned the pages of books because they could tell the stories in their own words.

### Process

We keep the books on the floor in a line so that they are visible to everyone. Students come in when school is over and see the books on the floor. They take the books, turn the pages, look at other books and finally select the book according to their

choice. They enter details of the books chosen in the notebook allotted for their class themselves and are responsible for the maintenance of the record of books taken by them. The teachers guide and support them. All teachers are involved in this process. We have a table on which we tag the newspaper so student can also access the newspaper in the lunch interval and go through it and collectively read and discuss the news according to their interests. Initially we have around 400 story books for the students of primary level. Students who find the process difficult can take the help of the teacher and elder students. All the teachers are involved in this process of running the library.

Simultaneously, we talk to the students about the use and care of books and how to keep them in good condition. Initially we teachers stitched and pasted the torn pages of the books but later on the students started doing this work with the help of teachers. We have introduced the concept of 'book hospital'. In this, those books which have torn pages and need binding and stitching are kept, later on, in a box which is kept near the books. We also check the record of the books before the end of the session, so that we come to know how many books are in good condition for use again and how many can be repaired to be used in the next session. On the basis of this, we take a decision for procuring new books for the library.

### Observation

As teachers we also know the importance not only of reading, but also of reviewing the books. So we have introduced the daily practice of reading story books and having a discussion on what has been read. It is also a part of our self-development process. We generally do this for the improvement of our English- speaking and have found that it has benefited us a lot. It gives us an opportunity to express our thoughts in organised manner in front of groups of people.

We shifted to our permanent building in Dineshpur in July 2015. We now have a big building and huge infrastructure here. We have a big separate library with lots of facilities in our new premises. The number of books is increasing day by day in our library. The District Institute librarian helps us in the process of selecting and getting books for the school library.

The increased resources and the availability of the books have made things easier for the students. There is a variety of books installed in the library according to the age and level of the students. We have tried to arrange the study material which they can use as reference in their respective subjects.

Some of the problems have been that, a few months after students started using the new library, we saw the library was not functioning well. The books were kept untidily in the shelves. It was difficult to maintain records of the books. The number of books lost and getting torn increased. As we now have from first to tenth standard in the school, we realise that different age groups have different choices and different interests. So we have decided that the selection of books should keep in mind the above points.

In the new library we arrange the books subject wise so it will help the student in searching the books according to their need. There are shelves of Hindi stories, English stories, math's, science, social science magazines and newspapers and journals. Students take the books from the respective shelves but when the period was over they put it in the other shelves so when the new class will enter in the library they have to make more efforts in findings of the books of their choice because it was not kept in the proper shelf.

Now the number of students in our school has increased to 350. We have classes from first to tenth standard and the number of teachers we have presently are fifteen. The number of books in the library have also gone up. Teachers have to devote maximum time in the classroom processes and related work in their respective subject. So it has affected their intense involvement in the working of the library. The number of active and regular readers have not proportionately increased and even those who show interest in books choose short story books as their first preference. Fewer students choose reference books and serious

reading.

However, as we know the importance of the library in developing the habit of reading among students, we have decided to introduce a daily classroom library period in our class. The students have time to go through the books everyday. The books are sorted according to the class and level of students in English and Hindi and are kept in their classes for one month so the students can read the different books daily. Knowing that students could get bored with the same books, it was decided that after a fixed period of time the books would be replaced.

We have also tried to keep the books in separate shelves according to the level as primary class level books, upper primary class level books, high school class level books, Hindi story books, English story books etc. Coloured slips of paper are pasted to differentiate between subjects. In primary class level books are kept in the lower shelves, upper primary class level books are in middle shelves and high school books are in the top shelves. This system works well, though after some time, the books get mixed up.

### **Planning**

Once the processes of reading become settled, we have decided to introduce some activities, such as sharing the stories, reading out of the stories and discussing the stories so that the students learn the ability of expressing views and putting thoughts into words.

- We have a library committee which discusses ideas for the betterment of library and which will help in improving the reading capability of the students. Every year some teachers take on the responsibility of the library.
- We try to maintain a kind of structure so that every student has access to the school library so (s)he will get the chance to find books according to their needs and interests.
- Using atlases and dictionaries for different activities also increase the vocabulary of the students which help in reading fluency.
- Sharing and discussion motivate not only the student who read the books properly but also motivate the others to have opportunities to present in front of the class.
- If the students have a close relationship with books they can write their own stories, scripts

for role play and read fluently in front of a big group of students in the assembly.

- We want to ensure the involvement of students in all aspects of the library.

This is how we have tried to evolve a sense of responsibility towards the library books and available resources and help them to learn to love books.

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**Rakesh** is a Social Science teacher at Azim Premji School, Udham Singh Nagar, Uttarakhand, since the school was first started. He has degrees in M.Ed. and M.A. (Geography).

Prior to joining the Azim Premji School, he has worked at Eden Montessori School, Chamoli, Garhwal and St. Theresa's Convent School, Srinagar, Garhwal. He may be contacted at [rakesh.rauthan@azimpremjifoundation.org](mailto:rakesh.rauthan@azimpremjifoundation.org)



## The Mathematics Class

Saud Ahmad Khan



Dr. Radhakrishnan says – ‘The teacher has a very significant place in society. He is the centre of transference of social traditions and technical skills from one generation to another and is helpful in keeping the light of Knowledge burning.’ The teacher is the foundation or axle of all educational programmes. In this article, a teacher has tried to relate the attempt made in class to arouse the interest of girl-students in Mathematics.

I, Saud, have been teaching Mathematics to students of Classes 6, 7 and 8 in the Azim Premji School for the last five years. In each class there are three to four students with little interest in Mathematics. Two years back, there were three such - students in Class-6, and their behaviour with classmates and teachers too was not proper. Speaking loudly in class, using bad language and quarrelling was usual.

I thought of working separately with these three students. As a first step, I started going to their homes and talking to their parents. I discussed with them regarding their behaviour and work at home. I came to know quite a few things, including that the parents also had sometimes had problems with their behaviour. They assured me that they too would take care of the children at home and co-operate with me. I told them that the responsibility regarding their studies was mine whereas being parents, they should take care of their behaviour and the dress they come to school in etc. I also took their permission to give them special maths coaching for half an hour after school.

I now started working with the three students after the regular classes in school. I first got them to connect with easy questions. I would ask them what they understood about a question they were able to solve and what they didn't, about some other question. I discussed the difficulties they faced in solving questions, and these were the things I understood:

- fear of maths
- being inattentive in class
- not understanding the basic concepts
- no help at home

I did not have solutions to all their problems. Together we decided that we would not think about the past, but would solve the questions and again go over them after three months. We just did not realise how time flew by. Effort and co-operation bore fruit. One could see a difference in them now. They started gathering information about the subject, discussed things with teachers and students, completed their work and, most important of all, understood the work they did - and shared it with others.

It now seemed that I had fulfilled the parents' hopes with their co-operation and faith – this faith was, in fact, the faith I had in those students. All parents were concerned about their children. They had understood the point about the seriousness of studies and so they would talk to me every now and then over the phone. The hard work of the past few months was now visibly bearing fruit. There was a change in the children's behaviour towards their fellow-students too. They started enjoying the process of finding solutions to questions in the class. Teaching-learning is a two-way process in which I too learnt a lot from them.

I find what Rabindranath Tagore says to be very apt – a teacher cannot really teach unless he himself too is not learning because a lamp cannot be lit up by another until and unless one has its own light.

### Saud Ahmad Khan

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## What Makes a Teacher Learn and Get Motivated?

Sunil Bisht



In school teaching-learning culture, it is assumed that a classroom is the learning platform for students only and teacher on the other end has a responsibility of educating them. But it is a mutual process in which both the student and teacher are in the same stream of learning. I experienced this during my classroom practice where I have got a different viewpoint. A classroom is fully meaningful if the teacher and students both are part of learning process so it is not only students but also the teacher. With such an experience I realised that, a rigorous classroom practice can make a teacher's class dealing with the content rich and also help other teachers too gain something out of it. Therein lies the importance of proper planning, sharing and discussion within teacher community. A lot of insights come from classroom practices when one reflects on to it.

Here I want to focus on the benefits and impact of questioning, sharing and discussion among the students and colleagues too. The important question became: what made me learn as a teacher, and after such kind of practices, what changes did I observe in my views?

This is part of a write-up from my science classroom diary. The theme - plant and its parts (basically study of root, stem, leaf and flower) - had been done with twenty-seven students of class six. The



main motive behind writing this article was that, how does a teacher get insights and learning from such a practice in the classroom where there is a lot of space for questioning, discussions and ideas? As a science teacher what importantly motivated, challenged and created a scope of learning for me which was beyond my expectations? The sharing of these experiences with colleagues increases their learning also.

### Day One

The first day's topic started with the introduction of theme in which the students were asked to share their previous knowledge about parts of a plant and after their sharing we listed



all these on the blackboard and then tried to understand their observation of daily life that what is called the aerial part and what is called the grounded part? So as they all had a common understanding that the aerial part is known as stem (more precisely known as the shoot) and the grounded part is the root. Then, there was a discussion on various parts of a shoot. As they all had an understanding of root and stem I gave them some samples to divide either root or stem. After their sharing it was found that, all students had a strong understanding of root and stem in, potato, onion, ginger, banana tree, etc. Then we discussed the properties of root and stem and also node, internode, bud, scars, etc. and knew all the basics about these terms in the classroom. In my plan the time was divided into two parts, the first part where we discussed the theoretical part of it in the classroom and then in the latter part a visit to the campus around the school for observation of the points which we had studied in the class.

There were a lot of moments during the classroom practices which made this journey more interesting, with greater learning, encouraging curiosity. Some important features were the questions of children and the discussion with them throughout the plan. All these activities were going on parallel to the classroom plan.

### **Brainstorming**

- How does a seed germinate?
- In which part of a seed – root or stem – does pre-growth occur?

- Is it necessary for a root to grow into ground? Can it grow in an upward direction like a shoot?
- Will a seed germinate if it is divided into two separate parts?

Such a level of questioning and discussion laid the foundation of a different kind of learning. The questions that arose in the classroom have been mentioned in the box above. These questions are those which formed the base of further exploration and investigation and, finally, of our learning.

Another interesting aspect of this journey was the sharing and discussion with colleagues, mainly Mr. Deepak and Ms. Kanika, whose suggestions helped me in experiment setup and at a conceptual level.

Here is the order of questions and their respective experiments, tagged with the letters **A, B, C, and D**.

#### **A: Exploring and understanding the germination process**

When we were discussing the root and its growth in seed in the classroom, a student showed the curiosity to know the germination process in seeds. The question was - what would be the best way to understand that process? Some students suggested that we can keep the seed in water for two-to three days.

Apparatus used: a beaker, cotton, gram seed, water, etc.

Time taken: 3-4 days

Mode: regular observation by students as well as teacher.

Conclusion: After 3-4 days regular observation we all had a common understanding of the process of germination. Some students shared their previous observation that seeds germinate on getting moisture. During this discussion one student had another question: if a seed is divided into two, will it germinate? Another student replied, yes and she shared their experience that some particular seeds do not germinate until they have been divided or separated. She gave the example of coriander and explained that the seeds germinates only when they are fragmented. We have decided to design an experiment to see it. I was also interested to see what would happen.



#### **B: Investigating growth in a root and shoot**

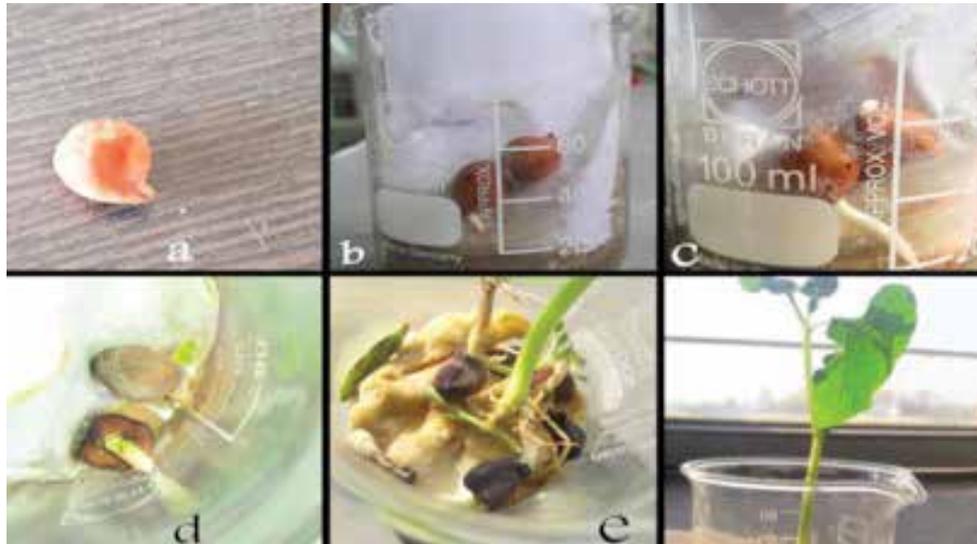
Materials - seeds, a beaker, soil, water, marker, a piece of paper.

Procedure - For this experiment we filled some watered soil in a beaker and placed two seeds in the prepared soil, one seed facing upwards and the other facing downwards. We then observed the beaker regularly. I discussed the experiment with my colleagues. I discussed the physics aspect with Mr. Deepak: Does gravity play a part in the growth and the direction of a root? I also discussed the biology aspect with Ms. Kanika.

**This created a platform for interaction and the connection between the two subjects.**



Image shows a complete journey from seed to a plant



Our conclusions were that:

- One part of the seed always had an initial faster growth that is - root and second one after some days later.
- As per our observation, initially the root had a fast growing rate while some time later the growth of the shoot part was faster than the growth of the root.

'Can a root grow vertically upward?', a student asked immediately.

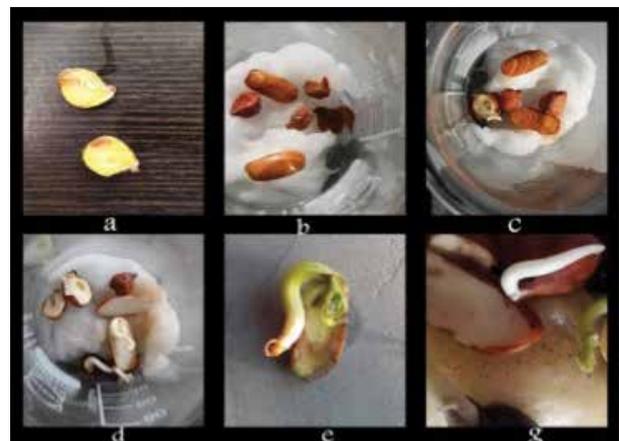
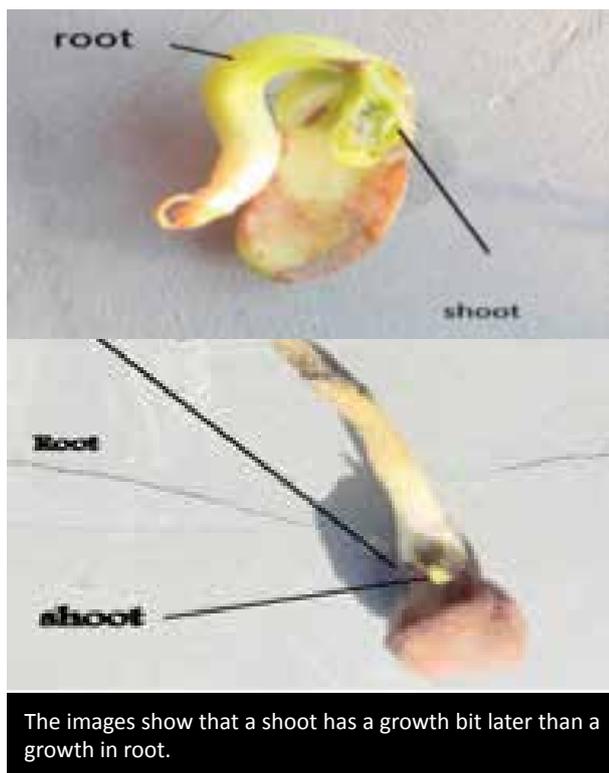
### C: Investigating germination in a fragmented seed

Materials - A beaker, cotton, water, fragmented seed, etc.

Process - Gram and beans seeds were fragmented and placed in a wet cotton and then placed in a beaker followed by regular observation.

Experiment

A germination in the fragmented seed



Conclusion: after 3 to 4 days it was observed that the separated parts of the seed had germinated at the same rate of growth as a whole seed.



Fragment seed germinate

#### D: Exploring the growth and movement of the root

Materials- gram seeds, a beaker, soil, water, marker, a piece of paper

Procedure - here, two gram seeds were placed in a beaker filled with soil and water, with one seed facing upward and the other downward. The seed were observed regularly.

Experiment

Growth of root in upward and downward direction



Conclusion: The following points were observed during the entire process.

- The seed which was placed facing upward direction had a slow rate of germination while the one facing downward had grown faster
- The tip of radical or bud of upward faced seed tended downward
- When the seed facing downward turned upwards, growth stopped



All these experiments have been designed by the students and are not merely the verification of the pre-performed experiments.

**Sunil** is currently a science teacher at Azim Premji School, Dineshpur, Uttarakhand. He has been teaching here for the last two and a half years. He has a degree in M.Sc. Physics. His interests are science teaching, making simple science experiments/toys and, reading science related books. He can be contacted at [sunil.bisht@azimpremjifoundation.org](mailto:sunil.bisht@azimpremjifoundation.org)

## Did Learning Happen?

Tapasya Saha



I had been a school teacher for quite some time. Today I am not talking about those experiences, rather I wish to pen a different kind of teaching experience.

I had been conducting workshops for groups of young men and women at the Azim Premji Foundation, for some time; this time I was to work with the members of Shorapur DI (District Institute). My work was mainly to develop the 'Perspective of Social science & content knowledge' of the participants. It meant that I would develop modules on such themes and facilitate to this group in workshop mode. Most of the workshops had a duration of three to five days.

### Background of the participants

The participants were a group of young men and women aged between 27 and 38 years and were Masters Degree holders in either History or Political Science. Most of them had never been school teachers but had been working with the Social Science teachers of various Government Schools for quite some years.

They were quite conversant with the both political science and history as per the syllabi of Karnataka State Board but were not as familiar with geography. The two reasons they gave for this should be noted. In Government schools the Social Science teachers themselves found it difficult to understand the concepts of geography; most of the time it was not their subject; also the language of the textbook reveals very little about the topic for self-learning. As a result the geography portion was not taught at all.

When I asked my group about their expectations from me, they specified their main concerns, understanding of the need for teaching of history, understanding of the various concepts in geography, getting an idea of the Indian Constitution and of course how to teach all these in classroom. They expected me to create appropriate activities which could be taken to the students aged between 12 to 14 years.

### My challenge

I have very little knowledge of the Kannada language. I can speak, read and write English and Hindi while all the participants were most comfortable in Kannada and few had some knowledge of English and Hindi.

### My role as a facilitator

I followed a structured method while delivering the module, with a good mixture of ways to help self-learning, keeping in mind the challenge of our language barrier.

I tried to introduce a topic with a story to bring clarity, showing a video or asking a question. Sometimes I would dress up and act. I included interesting reading material related to the subject in English, and created activities and games around the important concepts. To do all this, I spoke both English and Hindi.

While facilitating, I made members who understand Hindi and English, discuss the points in Kannada. We used maps and diagrams, drawn both by me and the others, labelled in English and Kannada. We moved at a slow pace, no doubt. The readings being all in English, in the beginning, it was really a challenge for them. There were certain rules. These were individual tasks of taking down notes in Kannada and drawing diagrams, and to be used in group activities. This would help self-learning later.

I made sure that all concepts and terms I used were repeated in Kannada by groups who understood Hindi and English. I made them write the points in Kannada on the blackboard and encouraged them to ask questions that cropped up in their mind unhesitatingly. I worked conscientiously on each and every doubt and questions they asked. This gave the person who asked question a sort of advantage over the others in the group, this somehow helped others to come forward with their questions. I would often listen carefully to their understanding of the topic and their experiences as well. At the end of each workshop an elaborate report was prepared which included every example, references

and questions that were discussed.

Group reading, jig-saw reading and presentation by each group also helped to build up confidence in the participants. As a rule their coordinator led the members to sit together, shared their notes and learnings and create modules after every workshop.

### **What really worked?**

The participants were able to learn through the process of self-learning, group-learning and peer-learning.

I must say in this whole activity my role was secondary. It was truly of guiding the learners towards their goals, which they have set for themselves.

The most interesting part is that we shared a very cordial relationship as is the culture of the Azim Premji Foundation. Here we all respect and accept each other as we are, have complete trust and faith in each other's abilities and share the common goal of the Foundation for everyone to achieve - 'imparting quality education' to school children.

I was working with adults and hence I did not face the issue of motivating them, all I decided to do is to make them interested, curious, and kindle a light for the quest of knowledge; as a teacher I knew it's not the delivery of the sheer content of the subject that will help the participants. After the third workshop, I started asking them about what their requirement was and created my modules based on their suggestions.

### **Was learning happening? The question always haunted me**

Some participants grumbled as they couldn't follow me, or grasp what I was trying to say and were not ready to go through the readings in English. As I could not get appropriate translations of the readings, I insisted on English readings. Initially the participants were struggling together to understand the readings, but they never gave up, and slowly started enjoying the readings. It seems they were not only understanding and building knowledge at personal level but also were able to incorporate it in their own work.

### **How it all happened**

Perhaps the power of feeling competent or enhancing one's ability through gaining knowledge sustained the participants. Their urgency, interest and curiosity in understanding or gaining the knowledge of the theme or topics, which were asked by the school teachers with whom they converse regularly, motivated them. They themselves were interested in learning what they had asked for. They felt happy and satisfied when they got what they wanted. Lastly, and importantly the learning was done collectively by the group, so no one carried the burden of learning individually.

I was happy, despite the language barrier, because learning had blossomed.

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**Tapasya** is presently working for Azim Premji Foundation, and has been in the organisation for the past 8 years. Prior to this, she was a geography teacher at the middle and senior school level for considerable number of years. At the Foundation, she works with members in different Field Institutes as a geography resource person. She tries to present various abstract geographical concepts in a simple manner. She is passionate about Geography. She may be contacted at [tapasya@azimpremjifoundation.org](mailto:tapasya@azimpremjifoundation.org)

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