

# TEACHERS AS TRANSFORMERS

## *Innovative Primary School Teachers at Work*

*Editor*

*Vijaya Sherry Chand*



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## INTRODUCTION

This collection of cases of innovative and experimenting primary school teachers at work is mainly addressed to teachers working in state-run and funded schools operating in difficult environments. These cases were finalized during the period 2004-2006, under a project based at the Ravi J. Matthai Centre for Educational Innovation, Indian Institute of Management Ahmedabad which was supported by the Sir Ratan Tata Trust, Mumbai. As part of this project, three annual conferences were held in 2004, 2005 and 2006, titled *Universalization has to be from the village upwards; Aren't four grades enough?* and *Open a school; Close a few jails*, respectively. The cases included in this volume were first presented at these conferences. Draft copies were distributed to the participating teachers at these conferences in the form of 'yearbooks'. The 163 cases that have been selected for this volume are from all the three years—cases 1 to 45 are from the first year, 46 to 103 from the second year, and cases 104 to 163 are from the third year. Unfortunately, these cases could not be published up to now. We hope the cases would now reach a wider audience.

Geeta Amin Choudhury, Samir Joshi, Umesh Patel, Manish Patel, Siddharam Mashale and Jeya Inbaraj played key roles in screening and validating the teachers' work. Vijaya Sherry Chand undertook the preparation of the cases, with support from Geeta Amin Choudhury, Samir Joshi and Jeya Inbaraj, on the basis of a wide range of material that had been gathered—audio recordings of teachers, artefacts of the teachers' work, interview transcripts, site observation notes, expert validation reports, notes prepared by the teachers themselves, and so on. He is responsible for the selection and organization of material, developing the 'story-line' and the writing, which have resulted in the case studies presented here. Since the focus was on Gujarat, Maharashtra and Tamil Nadu, most of the material was in Gujarati, Marathi and Tamil, with some in Malayalam, Hindi, Urdu and Assamese—there was material in English in just one case. The material in Assamese had to be translated and Jhini T. Khambatta helped with the Urdu material; the project team was familiar with all the other languages. We decided to develop the cases in English so as to facilitate the dissemination of the work to a wider audience. We have tried to use a first-person narrative style to the extent possible, so as to enable readers to listen to the teachers. However, a different style has had to be used in some cases; thus, some cases are in the reported format. The write-ups presented here are edited and condensed versions of much longer accounts. We encourage readers to contact the teachers directly to get more details and clarifications on the experiments or interventions described in brief here.

The documentation reported here was underpinned by a practical understanding of teacher development: build on the strengths that exist within, and build on the experiences of those who have performed well in spite of many constraints, using their own creativity and resources. The practices of the 163 teachers reported here are responses to very context-specific socio-economic and classroom situations. However, the constraints faced by these teachers may be similar to those

of a wide cross-section of the primary school teaching community. The teachers whose work is reported here were selected from a wider pool of innovative teachers. The experiences of such teachers have the potential to constitute an 'educational bank' which can play the role of a 'clearing-house for educational innovations'. While teachers would be interested in reading about other teachers, teacher training institutions and educational policy makers may also find this document interesting; the alternative solution-augmenting teacher development approach which underpins the work reported here can be incorporated into the teacher training curriculum. Learning directly from those who have realized their educational goals in contexts that are not well funded, do not reveal high parental support for education, and are influenced strongly by local cultural environments, is one way of promoting self-driven and lifelong learning-based approaches to teacher development.

We now turn to the process followed to identify the teachers and validate their work. The process of identifying innovative teachers is a crucial first step. Various methods like public announcements through teacher organizations and education departments, nominations by local voluntary organizations associated with education, and internal newsletters of teachers or educational institutions, were used. The criteria specified were the following: the innovation should have been developed (or modified after borrowing) in response to a specific problem; the work should have been monitored; and results (in line with the objectives that the teacher had determined for himself or herself) should have been achieved. The teachers nominated were then asked to describe their work following broad guidelines which included the inspiration for the idea, the process of developing the work, evolving criteria for monitoring the intervention, modifications made over time, and the spread effect of the work. These responses were screened and additional information gathered wherever there were obvious gaps in the data. The task of scouting out innovative teachers was undertaken with the help of people working in the government, teachers, some NGOs, and other individuals interested in such work. The initial phase of the scouting was characterised by network building—identifying partners who could join this task.

The second step of screening the work was equally critical, and time consuming. The outcomes were studied in the context of the constraints the teacher had faced, the innovativeness of the work, and their impact on schooling and on the community. An expert committee which also included a number of outstanding teachers undertook the screening. For purposes of this project, an innovation was understood to mean an educational practice (method, learning tool or aid, or set of actions) which has actually been tried in practice and has achieved certain educational goals that the teacher had for his or her specific socio-economic context. These goals have to be in consonance with the goals of universalization of elementary education. "Effectiveness" has been understood to mean that the innovation resulted in identifiable positive improvement in accordance with the educational objectives of the teacher. The criteria used for screening were: novelty in the activity mentioned by the teacher, the context in which the activity was performed (varying levels of difficulty arising out of the school's history, and the socio-economic status of the village), the "scope" of any single activity in terms of the number of aspects which would be affected/ number of

children benefiting, the complexity of the activity, the number of innovations made by the teacher, the origin of the idea and the spread effect of the teacher's work.

The final stage of validation included visits to the teachers' sites, and very importantly, meetings of selected teachers, in which the work was presented and the participants could challenge the teachers and ask questions. Some educational experts also attended these validation workshops. The validation process followed the procedure of case study recording and triangulation with local stakeholder groups. A number of people have helped at all stages of the project. We would particularly like to thank the institutions and individuals mentioned in the appendix below, and Professor Anil K. Gupta, who has been very supportive throughout.

As mentioned earlier, the first conference was titled *Universalization has to be from the village upwards*. The title was a paraphrase of the words of one teacher, Manibhai Vaghela, and provides an alternative perspective on questions like, "How many districts or states have been universalized?" Achieving near universalization is impossible, as many of the cases illustrate, without eliminating the context-specific social and gender disparities and overcoming the socio-economic barriers that hinder educational performance. We hope this document will provide our readers with brief glimpses of the work that many of our outstanding primary school teachers undertake in contexts that, more often than not, hinder rather than support, the achievement of educational goals.

**Vijaya Sherry Chand**

**Ravi J. Matthai Centre for Educational Innovation**

**Indian Institute of Management, Ahmedabad**

**[vijaya@iimahd.ernet.in](mailto:vijaya@iimahd.ernet.in)**

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## Appendix

### Key Partner Institutions and Individuals: Scouting and Validation

1. DIET, Aligarh, Uttar Pradesh
2. DTERT, Government of Tamil Nadu, Chennai.
3. SEVA, Madurai.
4. State Innovation and Research Foundation, Solapur, Maharashtra.
5. SRISTI, Ahmedabad.
6. State Council of Educational Research and Training, Gujarat.
7. State Council of Educational Research and Training, Maharashtra.
8. Shri Ananta Baodhankar: Primary school teacher, Maharashtra.
9. Smt. Arti P Kale, Secondary school teacher, Maharashtra.
10. Shri Rahul D Londhe: Primary school teacher, Maharashtra.
11. Prof. Satchidanand D Mokashi, Faculty, Damani Premratan Bhairuratan Dayanand College of Education, Solapur University, Maharashtra.
12. Shri Motibhai Nayak, Primary school teacher, Gujarat.
13. Shri Bhavesh Pandya, Primary school teacher, Gujarat.
14. Shri Jayesh Patel, Primary school teacher, Gujarat.
15. Shri Manjibhai Prajapati, Primary school teacher, Gujarat.
16. Shri Dharmesh Ramanuj, Primary school teacher, Gujarat.

### Related volumes of interest

1. *Learning from Innovative Primary School Teachers of Gujarat*, by Vijaya Sherry Chand (with Geeta Amin Choudhury, Samir D. Joshi and Umesh M. Patel), Gujarat Educational Innovations Commission, Gandhinagar, 2011. Also in Gujarati as *Prathamik Shikshakona Nootan Prayogo*. (Available from Children's University, PTC Bhavan, Sector 19, Gandhinagar, Gujarat. English version, Rs. 20; Gujarati version, Rs. 25.)
2. *Teachers as Transformers: Learning from Outstanding Primary School Teachers*, by Vijaya Sherry Chand and Shailesh R. Shukla, UNICEF, Gandhinagar, 1998. (Out of print. Please contact vijaya@iimahd.ernet.in for further information.)

## About the Publisher

### SRISTI Innovations

SRISTI Innovations (SI) is a Section-25 not-for-profit company set up by the Honey Bee Network to pursue several market-oriented activities of the Network such as publication of local language newsletters—societal education for inclusive development by highlighting the creativity that exists at the grassroots in India and other countries is the key focus of the newsletters, *Honey Bee Newsletter*, *Sujhbhuj* (Hindi), *Loksarvani* (Gujarati); and publication of books on sustainable pest management, livestock care, profiles of innovators, the editorials of Honey Bee Newsletter and stories for children on sustainable futures, *sattvik* (nutritious and healthy) recipes, profiles of centenarian women, and sustainable agriculture. SI has also reprinted *Hunnar Mahasagar*, a book with 2080 recipes for self-employment, which was compiled by Gangaben Pranshankar Yagnik in Gujarat in 1898, and has brought out *In defense of grassroots innovators: Book on methodologies for scouting, documentation and dissemination of grassroots innovations*, in collaboration with APCTT. In addition, SI helps in the commercialization of various products developed from people’s knowledge in the SRISTI Natural Products Lab; the income from this activity is shared with the providers of the knowledge and also used for community development.

**PRIMARY TEACHERS AT WORK**  
***EDUCATIONAL INNOVATIONS AND THEIR OUTCOMES***

## DIVYABEN R BHATT

*Master*, in Gujarati, can be interpreted as a combination of 'Ma' and 'sthar', meaning mother and status, respectively. A primary school teacher is as good as a mother, and should be as loving and caring as a mother can be. I have tried to act on this understanding. As I was fortunate enough to get an opportunity to combine what I like and what I do, my work gained me a lot of appreciation. Here is a brief description of my efforts.

### Working Against the Evil of 'Untouchability'

My first appointment was at Inaj, Veraval *taluka*, Gujarat. Children from the surrounding villages also used to come to this school. There were mainly two communities, the Ahir and the Harijan Hadi, scheduled caste. Each despised the other. This negative attitude was very evident even among the children. The Hadi used to stay in the outskirts of village since they were considered to be 'untouchables'. Their children were socially despised and so they used to enjoy irritating the Ahir children by touching their tiffin boxes. Once they did so, the Ahir students "could not eat that food", which was thrown away. This created a problem for me since the Ahir children then used to take leave and go home. I was pained to see all this. I raised the issue in the *Bal Sabha*, a formal structure which gathered the school's children for discussions, and explained to them the evils of untouchability and asked how food or a person could become 'impious' merely because of touch. My message was, "There is nothing like a lower or a higher caste." I began to discuss this issue also with the people, community leaders and other students. It took time and patience, but I won ultimately. At least my students received some sense; the breakthrough was achieved when they studied together. This behaviour was then extended to working together, and then eating together. Up to this day, I am told how people are happy about what I did. Changing children's behaviour through constant, focused, messages is possible, even if one is unable to change social mores and customs that promote undesirable behaviour.

At another place, I took what I consider a more active, and dangerous, step. There were many girls in Manavadar Girl's School, to which I was transferred. I had a special affection for them. Among these girls, there was a girl who used to come to my home regularly to play with my small son. She used to carry him lovingly, played with him, and treated him with affection. This girl belonged to a community considered to be 'untouchable'. When the people realised that an 'untouchable' girl came to my home regularly and played with my son, everybody criticised my attitude. People used to tell me that I would "destroy" my home by allowing her to mix with my family. I also incurred the wrath of my relatives. I just continued with my behaviour and messages. With the passage of time, we treated her like we would our own daughter, and she also accepted my husband and I as "parents". She participated in all my family functions. Now, she was a part of our family, and the wall of caste was broken. She now has a daughter herself.

### Education of Girls

When I was serving at Chanduvav, Veraval, I noticed that the presence of girls was almost zero. There was a strange reason. I found that the school-enrolled girls were engaged to the boys studying in the same school, and so they did not come to the school. I felt that this was not a problem which had no solution, and I talked to the parents. I repeatedly assured them that girls and boys could study together in an institution like our school, setting aside their social values which had become barriers. There was a lot of compulsion from my side, and it made girls come to the



school. Thus, both 'husband' and 'wife' used to study together. Such compulsion is necessary many times, but with a little persuasion, the compulsion can be communicated differently.

When I was at Manavadar, there were many Muslim girls in my school. After their Class IV, many girls used to come with their parents for their leaving certificates. I was surprised, and asked the parents where they wanted to put their children. I was shocked to learn that the girls would not be allowed to study further. I was very unhappy; the girls had to give in to this ridiculous social barrier, when they themselves would have loved to play and learn. I started a routine of evening home visits. I tried to convince the mothers, but their beliefs did not change. I did not lose my courage and went again and again, talking about the same issue. I cited the examples of many highly-educated Muslim women, all to no avail. Then I reworked my approach. One girl's father was the *Taluka* Development Officer. Now I had a target, since he advocated girl's education as part of the government's educational agenda. Here I had hit the right spot. He made his daughter resume her schooling. The girl studied up to Class VII in our school. This was an example for others, and a major breakthrough in my educational practice.

### **Importance of Education: Habit of Saving**

When I was at Manavadar, there was a boy in my class who was considered a problem child. The teacher who taught this class before I took charge used to make this child sit in the HM's office. There were three other mischievous students who were also made to sit with him. I felt very sorry for these children, since they had made themselves very comfortable outside their own classrooms. After I took charge, I called them firmly and compelled, rather forced, them to sit in the classroom. I saw that they had no interest in the activities going on in the classroom. And one of the four always disappeared from the school after the recess. He used to sell goods like tomatoes in the market, earned some money, and spent it on a movie almost every evening. There was also some money for snacks. I observed his daily routine for a long time. Persuasion did not work. The habits were so deeply rooted that the boy did not show any sign of improvement. I decided to try something else. I called that boy and told him, "Sharif, I teach you, so I am your Guru. And you owe me *Gurudakshina* (**Note:** refers to a tradition of paying a debt to a teacher, followed in traditional Indian education, and is a widely understood term). So, you should give me five rupees every fortnight." He not only agreed to give me the money, but within a short time he began to give me ten rupees every fortnight. Soon he started to give me ten rupees every week. The other three students also joined in this. I opened bank accounts in the names of these students. When the total reached a substantial sum, I told their parents and the other students about the incident and how the saving experiment had worked. Sharif was quite taken up by this, and gave me five rupees every other day. It was only after this sense of achievement was visible, that I gradually tried to draw him towards study. He did come back but did not go in for higher education, which was my aim. But it did him good, because he is a well-known fruit merchant today, with a good reputation. I have written a story on this experience, and it has been used in a teacher's magazine for inputs on changing student behaviour.

### **Personal Beliefs are Important**

When there was a state-wide agitation on anti-reservation, I was in a remote place where strikes did not have much impact. I was present on duty; other teachers of my school and teachers in the nearby villages were also on duty. The government declared that those teachers who were on duty would get double pay. Some absent teachers manipulated the records to mark themselves present! This greed annoyed me. As a message to such teachers, though I was present, I refused to accept the extra money. I personally believe that a teacher should stick to certain fundamental beliefs, so that one's image as a professional is not destroyed. For this lesson, I am indebted to a teacher in my

childhood. He taught the art of cultivating faith in students so as to inspire them and help them overcome fear. And I have experienced this in my life with my own students. Speaking the truth is the best way to overcome fear. For example, I made students mark out the textbook topics they have learned, and encouraged them to be honest about it. When I taught a lesson, I made the students circle that particular lesson in the textbook's contents. I ensured that they could monitor what was yet to be covered just by looking at the contents. Once we had a school inspection. The Education Supervisor was a very strict person, known for examining everything minutely. When he came to my class, he asked some formal questions to the students. The next piece of conversation between the officer and a student went as follows:

ES: How many lessons have been taught in *Gujarati* by your teacher?

Student: Sir, those lessons are circled in the textbook that is in your hand.

ES: You must have circled the lessons because your teachers must have told you to do so.

Student: Sir, the lesson is circled only when the teacher has taught that lesson.

ES: How many lessons have been taught?

Student: Sir, ten lessons have been completed and the eleventh is half completed.

ES: Your teachers must have asked you to say so.

Student: Sir, we have learned not to tell lies. We will talk about only what is done.

I could see the child got tremendous satisfaction by just speaking the truth and showing off some work done systematically. I have used the same principles in my other activities, *Garba*, drama, youth festivals, eye camps, medical camps, and so on. I have specifically tried to solve the problems of girls and women, relaxing the constraints of my understanding and capacity to the extent possible. But resources have never been a problem. The small amounts needed have always come from the people. As this money has been used well, I have gained respect in society, and so my educational work goes on without any roadblocks.

## SUNILKUMAR S BHATT

Our primary school is situated in a tribal village. As a class teacher, I felt that the recess timings of our school were more of a hindrance than a help. I did not get an adequately long and continuous stretch of time, when I could engage the children. Almost all the children's parents were labourers. Children went home just after noon for a very short break. The parents returned around that time and then started to cook. The children would wait at home and come back to school very late. Again, at 1.30, they got down to the mid-day meal. I wanted to change the timetable. In our school, we hold a meeting at four o'clock on the last day of the month. Every teacher is given a topic which needs to be discussed. Once I took up the idea of abolishing the 12.15 recess, and replacing it with a practice which allowed children to go out in pairs to the urinals or to the drinking water pot. My colleagues did not like this proposal. But, as the HM, I overruled them. Gradually, I managed to ensure continuous presence in the school from 11 in the morning to 1.30 in the afternoon. Surprisingly, this pattern, once it worked, was welcomed by the parents and even by those teachers who had opposed the idea. A second benefit was that irregular absence (disappearing from the school for the rest of the day) was no longer a problem.

A little information about the monthly meetings. I know that meetings are common in organisations. I thought of instituting this mechanism to bring about some professionalism and an element of monitoring into the teachers' work. I made the junior-most assistant teacher the President of the very first 'meeting'. Over time, the modalities of conducting the meetings have been streamlined. Now, one week prior to the meeting, the agenda book is circulated among the staff members. Whenever the meeting is held, the agenda is read out in the presence of all the participants and discussions held. Finally, the minute book is signed by all the members. For example, the meeting held in December 1995 had the following points on the agenda.

1. Discussion about the syllabus.
2. Preparing a new register for dead stock.
3. The nuisance posed by an insane man in the village.
4. Review of the newspaper bought by the school.
5. Review of irregular children.
6. TLM evaluation.
7. *Vande Mataram*.

Such meetings help in resolving problems co-operatively, discussing new concepts and approaches to teaching, and taking up creative activities. The outcomes are noted in the minutes book and they are reviewed in the next meeting. A teacher is President only for one meeting. Thus, every staff member is made active and given an opportunity to contribute. A sense of team work has been created. The minutes book helps in monitoring, since proper documentation about the work done and work pending is made.

### **Making Low Cost and Effective TLMs**

The roots of my liking for TLMs are in my childhood, when I was very good at making toys and painting them. TLMs are easily damaged when children use them. Therefore, multiple low-cost copies are necessary. When I visited rural fairs, I was struck by the toys made of plaster of paris. So I used a plastic toy mould and substituted plaster of paris for clay. The inside of the plastic is oiled and then the mixture poured in. The mould can be reused whenever needed. Children enjoy learning and making such toys. In addition to plaster of paris, we have used jute strings and pieces of jute. For the colouring, we make natural dyes in the school itself. I had learnt the art of making natural dyes as a child. I have taught this to the school children. They have to make the dye and

paint the toys themselves. The dye is not harmful, and children enjoy the activity. Of course, the scope for teaching many things in the process is immense. The models made by the children (different animals, birds, vegetables, fruits, dolls and maps) are displayed in the school. The students and teachers of my school—and also since this technique has spread, of my CRC schools—make such toys now on their own at their homes and in the schools. What better results could I expect from my efforts?

The children have made this activity a source of income as well. They sold these toys in a fair that is held at Shri Nandikeshvar Mahadev temple at Jitnagar, two kilometers from the school. These children come from very poor families, but the income from the sale is saved. Such activities, along with control over the timetable, have abolished the problem of irregular attendance.

Added to the above are my efforts in music and puppetry. Though I am not a musical person, I developed certain basic skills and this has helped us in creating a fun environment. I provide all the teachers with jingles, puzzles, songs, action songs, poems and other literature for musical activities. Every Saturday, I sing action songs with children. We make masks of various kinds. Puppet shows are held in the presence of the members of PTA, VEC and MTA. Lessons are taught by dramatising them in the form of puppet shows. The cumulative impact is that we were able to achieve almost 100% presence in the school. The teachers also felt motivated with the increased presence of children. We are still using these techniques for sustaining children's interest and to increase their participation. In addition, we have started to use Punjabi *Bhangra* dance, Sanskrit poems, and Rajasthani, Marathi and Assamese songs.

### **Student and Community Co-operation**

Once during the mid-day meal, some students got into a fight. I was disturbed. I began to sing a *Bhajan* before our meals. Secondly, once all the children are served their food, I made every child offer a couple of morsels to his or her neighbour; the act would be reciprocated by the other child. Then everyone would start to eat. This has had a good impact.

With the formation of VEC, PTA and MTA, we realised the need to get support from the community. In order to achieve this objective, I thought of a new method. We began to gather at the school at four o'clock on the last Sunday of the month. When we ring the bell, all the children gather in the school, and we go to a street or place that is pre-decided. Now, importantly, we hold a meeting there. This is also accompanied by a cleanliness drive. Due to these efforts, the village community stands by us whenever required. The key to community co-operation is making them realise that the school is a local institution, a part of the community and something that builds the future of their children. Now we invite some well-known personalities of the area (doctors, lawyers, social workers, retired HMs, President of District *Panchayat*, farmers) to these Sunday meetings, so that they can share their knowledge and ideas with the children.

## USHABEN J DAKI

When I did my secondary education, I had to go to a nearby village. This was considered a daring act at that time. The community was very conservative and very few children, especially girls, could go out of the village for education. I had to face a lot of criticism. It was at that time I decided to do something unique. I completed my higher secondary education by staying in a hostel and then underwent my teacher-training course. My experience in primary education is limited, but I will describe my experiences in Shantipara, a fairly large village. This village has four schools, three on the outskirts of the village and one in the village. I was put in one of the far away schools. Most of the people belong to the Ahir community. Though considered a 'backward' community, in recent times there has been a lot of awareness of education among the Ahirs. Their main occupation is agriculture. In spite of the relatively good condition of the schools, traditional beliefs and customs sometimes caused irregular presence of children in school. This had an impact on the organisation of activities like the prayer assembly. I decided to introduce, in the assembly, children's songs and action songs. I also realised that with the advent of television, many people watched serials with interest, and were curious about what would happen in the next episode. The serials did a good job of creating suspense, which motivated the audience to wait for the next episode. Children also like suspense. I thought of taking up a story which could proceed like a serial. I searched the school library, and finally chose Jivram Joshi's well known series, *Adukiyo Dadukiyo* which is full of suspense, thrills and adventure. It was an apt tool for my purpose. I started to tell stories from this series and saw to it that I ended a particular episode at a point where curiosity of the children was aroused. I did this for six months.

As expected, children's regularity increased. My objectives were being achieved. Children began to come in time at the time of prayer assembly, and were absent only on special occasions or during festivals. They wanted to know, "What will happen tomorrow?" Such interest also increased their imaginativeness. New words, new ideas and adventures were developed, but there was a wide variation among the children. But one thing I noticed was that in spite of this variation, there was some logic or system to their speculation. Sometimes even the teachers requested that the episode be postponed to the end of the day, since some other important school work had to be done during the story telling time.

After this experiment, the children demanded a new story. I was a bit worried, since I had not seen the initiative as a continuing one. Then I thought of using the Mahabharat. One goal was to choose a story that is long enough. Secondly, children though familiar with the broad outlines, were not that familiar with the detailed stories. There was a lesson in Class V from the Mahabharat. I also realised that the current generation was not being told these stories in their homes in detail; the assumed familiarity with our ancient epics had to be cross checked. The Mahabharat has served me quite well. I have realised that for generating interest among children, such long stories told in an 'episodic manner' are more effective than short stories told everyday.

### **Special Attention to General Knowledge**

Since the children were farm based, their exposure to the print and electronic media like newspapers and television was limited. I realised that their knowledge of the outside world was poor. My husband and I used to identify ten questions on general knowledge every week. We saw to it that these questions were in consonance with the level, the understanding, the interest and the

curriculum of the students. They covered subjects like contemporary incidents, geography, science, and sports. I used to write all these questions on the blackboard so that the children did not make any mistakes in spelling. The children were supposed to find out answers to these questions during the week. A test was held the following Saturday. The answer sheets were checked and the students were given marks like in any other examination. Then, the children were expected to write the correct answers in their notebooks. I found that this activity generated curiosity to learn new things, especially from the older people. The children have now developed the habit of reading books and newspapers from the library. The parents have appreciated this activity and motivate their children in their efforts to learn new things. One change I have introduced is that at the end of four Saturdays, that is, at the end of four rounds, I give a prize to the child who scores the highest.

I came across one more problem in my initial days. On Saturdays I found the presence of children less than that during the weekdays. One reason I found was that since this was a half day, children took it lightly. I thought of using a *BalSabha*. I used to give the children a subject on Monday. Any child who wanted to present something was to register his or her name with me by Friday. This programme consisted of many activities like children's songs, action songs, elocution, story telling, mimicry, and so on. This was just entertainment and the children liked it. Gradually Saturday attendance was almost full. Along with this, of course, the students developed different skills in stage performance. It also helped me understand the hidden potential of children. The activity became so popular among students that if I forgot to give some topic, children reminded me.

I have taken up a few other activities, which may not have a direct relation to the school, but which helped me show concern for the community. Vacation was the best time to motivate children to get involved in activities which they could enjoy and perhaps specialize in later on. Once I announced a *Mehandi* competition before the vacation. Children practiced during the vacation and a competition was held when the school reopened. Though I did not repeat the activity, I have noticed girls who started learning at that time, have continued with their practice. I also started coaching for Bharatnatyam for girls. I regularly conduct many cultural programmes and organise celebration of various festivals in the school. Ultimately, if the school is a nice place to go to, attendance, enrolment and retention are not problems.

## POPATBHAI R DEVLUK

I am the HM of Juna Padar Primary school, Ghogha *taluka*, Bhavnagar, Gujarat. I joined as a teacher at Lakadiya village of the same *taluka* in 1976. After working here for a short while I was transferred to Nana Khokhara village. Here I served for five years and developed as a teacher. The impact of the Bhagawad Geeta and Swadhyay activities has helped my educational activities. I have made knowledge, action, devotion, service and honesty as the principles which would guide my life and educational activities.

At Juna Padar, initially I was the only teacher. The school had Classes I to IV. The total population of the village was 351 and the village was very backward socio-economically. The total number of enrolled students was 24, and only seven or eight students used to remain present in the school. Not a single villager paid any attention to the education of the children. Very soon an order to close this school came from the government. I simply observed the situation of the school and the village for a few days. The village cattle were kept in the school premises. About 65 children of village were not coming to the school. I decided to accept the challenge.

I felt that a close relationship with the villagers was the only remedy for these problems. I tried my best to help them in their socio-economic activities. I met the elders and discussed the problems of the school and tried to make them understand the severity of the situation. With the help of the female members of my family, I arranged a meeting of the women of the village and they were also exposed to my concerns. The villagers blamed the teachers who had worked in that village earlier. I heard them out patiently and assured them that the experience would not be repeated. In exchange, all the villagers promised to send their children to the school. Next day I visited each home and filled the admission forms on the spot. Seventy eight children were enrolled at one go. This was a breakthrough and since then the school has made step by step progress over an 18-year period.

Initially I used to go to the homes of those students who did not come to the school on time. If the child was not ready, I waited for him, and did not leave the place without carrying him with me. The children from the surrounding hamlets used to walk to school. If some child was absent for sometime, one of my colleagues or myself would go to that place and bring the child on a cycle or motorcycle. All the teachers and students used to bring some food. We used to sit together under a tree and have our lunch together. We also arranged to start a *Bal Anganvadi* for children up to five years of age. After Class V, the girls used to quit studies. We kept track of these girls, and as new classes (VI and VII) were introduced, we enrolled them and they resumed their study. We also arranged to send these girls to a high school some distance away. A *Bal Mandir* was started under the title "Lav-Kush". We appointed a lady teacher as an honorary worker for this activity.

Once the enrolment went up, I contacted various individuals, the *gram panchayat*, industries, and the local bank for donations for the school. The villagers contributed the physical labour to build a room. We also created our own source of income in 1988 by starting a garden nursery in the school. Today our school has got very good infrastructure and physical facilities. During the 1980s we gathered Rs.1,85,000 from various sources for the physical facilities. In 1990 one individual created a fund in someone's memory and the amount was deposited in bank; from the interest, bright students are given prizes ever year. We received cash prizes from the government for attracting out of school children from the surrounding areas to our school, in 1986, 1987, 1989 and 1990. The total amount of Rs.15,000 was spent on infrastructure.

The school has also undertaken developmental activities like being part of the *Gram Rakshak Dal*, informing farmers about modern techniques of farming, facilitating a Farmer's Training Camp,

training women in reducing wastage of grain, participating in NCC and NSS camps, arranging for government support to physically challenged people, and conducting a number of literacy and medical camps.

I have founded various informal groups like Youth Association, *Bal Sanskar Kendra*, Mahila Satsang Mandal, and *Ramapir Mandal*. With their help we got a bore well made and installed three hand pumps to solve the water problem of the village. We also got a bench made at the bus stand. I am a member of the Development Committee of *GokulGramYojana*, and we mobilised a lot of facilities for the village. This village is an example of communal harmony; half the village is Muslim and the other half is Hindu. Social occasions are celebrated together. I also keep *Roza* and accomplish the *Roza* in the mosque. I must accept that whatever efforts I have done for the development of this school have been inspired by the philosophy of *Swadhyay* of Dada Pandurang Athavale.



## **DHANRAJGIRI H GOSWAMI**

I started my teaching career in 1986. My father Himmatgiri Otamgiri, a retired teacher, has been my source of inspiration. He guided me through my initial years as a teacher. I have also been influenced by Shri Manubhai Pancholi “Darshak” and Dada Pandurang Athvale. The girl students of Sindhaj Girl’s Primary School (Kodinar, Junagadh, Gujarat) where I have spent many years (from 1993 to 2001), have been a source of motivation. They always persisted with the activities I started, and completed them successfully. The school was established in 1992, but when I joined, I found that the enrolment of girls was abysmally low. I thought about the problem and came up with the idea of introducing various “cards”.

### ***Presence Card***

I introduced a ‘Presence Card’ in 1994 for the lower primary level. I used to give one such card to each girl who remained present regularly. The girl who gathered ten cards would go to the upper class without any testing whatsoever. Of course, there was a no-detention policy at the lower levels, but there was a minimum attendance requirement. Regardless of these policies, the girls felt that getting 10 presence cards was a big achievement.

### ***Birthday Card***

Another card was the birthday card, which was given to a girl on her birthday. This generated a sense of respect for the school and the teachers among the students, since they became aware of their birthdays. This may sound very simple, but recognising birthdays in such difficult contexts motivates the girls.

### ***Absence Card***

A third card was the “absence card”. It was sent to the parents of girls who remain absent for a long time. The intention was to sensitize parents about absenteeism and to motivate them to send their girls to the school regularly. The card provided information about the exact number of days attended and not attended by the child.

### ***Pravesh Din Card (Enrolment card)***

Sindhaj Girl’s School was the first panchayat school in the state to introduce ‘enrolment cards’. Such cards were sent to the parents of the girls who were in the relevant age group.

For our school development activities, we designed the following rules.

#### ***From where will the money come?***

- When enrolling in Class I, instead of *Shreefal* and *Sakar*, cash of Rs.10 to be donated.
- Profit from the notebooks, pen and other stationary that students purchased.
- After Class VII, the passing out students shall give a donation of Rs.10 as *Gurudakshina*.
- Collection of old books from children and selling them to generate money.
- Donations from retired teachers.
- Funds raised from the community during the Republic Day and Independence Day celebrations.

#### ***Where will the money be spent?***

- Giving prizes or presents to children.
- For electrification, fans and other school requirements.
- For study material to needy children.
- To buy useful implements like a sickle.
- To sponsor various study visits of the children.

In addition to the above activities, I started a newsletter to disseminate my activities to the neighbouring schools. It was called "*Jharukho*", and I have come to know that many of the ideas have been adopted by other teachers. In my current school (Girdevli) I have started a similar newsletter called "*Manthan*". One idea I have tried here, and described in the newsletter, is to build two rooms in the school, and call them '*Shabd Vatika*' and '*Ank Vatika*'. The first would have paintings of the letters on the outside walls, and the second would have numbers. These rooms are specifically used to teach words or numbers. Another activity is the *Annapurna* Bank, a grain donation bank, created by children who bring a handful of millets each. The grain is donated to the needy. The children learn the value of donating to society. '*Sanchayika*', a savings scheme, and *Vidyarthi Grahak Bhandar*, a students' store, are similar activities which communicate various desirable social values.

All these activities, cumulatively, have improved the atmosphere of the school. The number of girls in my previous school, for example, increased from less than one hundred to 545 over a short period of time, so that full enrolment has become possible. In my current school, the variety of activities, and the strong school-community relationship, have contributed to increasing attendance from less than 60% to more than to 80%.

## PARSHOTTAMBHAI V KOLI

I have been working as a teacher in the Maroli primary school, Valsad, Gujarat, since 1975. From 1971 to that point of time, I had worked in two other schools. In my first school all children belong to the Warli tribe. There were 35 enrolled children, of whom about 10 to 12 attended regularly. My HM and I visited the parents, but no amount of persuasion would work. One day I noticed that some programme was going on in front of the school. A black magic player was performing tricks. The villagers had a lot of faith in him. I decided to take this as an opportunity and arranged a meeting with that man in private and requested him to ask the villagers to send their children to the school. His appeal affected the villagers greatly and they agreed. However, they put two conditions: their children should be allowed to graze animals in the evening and they should be allowed to bring their younger brothers and sisters with them. I accepted these conditions and this increased the number of students. Once the beginning was made I used various joyful methods like games and songs to retain the children. This helped a lot to increase the strength of the school. Soon, regular presence in the school touched 60%. I worked here for one and a half years.

In the school where I am working, it took me five years to solve the problem of non-enrolment and to bring down dropout to near zero. I tried to combine educational messages with the people's religious activities. The *Swadhyay Parivar* was active, and I asked them to include educational messages in their activity. I did the follow up, and this worked. The school building was in bad shape and all four rooms had almost collapsed by 1979. At that time, if the community paid 25% of the budget, the Government used to give the rest. We needed Rs.40,000 for four rooms. Firstly, we formed a committee of parents and went on a mobilisation drive. We got Rs.20,000. It was not possible to get any more money from the villagers. Then I had an idea. Movies in those days were popular. We discussed the idea of arranging a few shows of a movie and it was accepted with some protest. We arranged four shows of the movie in the village and that fetched us Rs.12,000. Our school is on the seashore, and when the fishing boats were pulled into the sea after the monsoon, each boat owner paid Rs.300. We did this job with our students. This created an uproar in the village, but we gathered Rs.6,000. Thus, four rooms were built.

There was no pre-primary education in our village. I formed a committee with the people, and for the Rs.15,000 that were needed, I arranged a "lucky draw". A few people disagreed and protested. However, we did the draw successfully and a good deal of money was generated for a nice shed. We decided to charge five rupees per child as fees and pay a teacher from that amount. The beginning was very good, but we noticed that 50% of children stopped to attend the nursery within six months. The reason we discovered was that people were not able to pay the fees. As a solution, I got a trust registered for grants from the Social Welfare Department. I went directly to the state's Head of the Social Welfare Department and explained my predicament. A grant was sanctioned in fifteen days. That nursery is working even today.

I have been teaching Class VII for 27 years. I believe in identifying the weak students and giving them remedial teaching. I use story/ dialogue forms and drama to teach children who find their regular subjects difficult. I have also made a number of TLMs to solve the problems of learning basic math at the lower primary level. Some of the toys are described below.

### ***Educational Television***

This television covers 80% of Mathematical abilities of Class I.

Raw material: A big box, gelatin paper, tracing paper, transparent paper roll, four bulbs, a board with six switches.

Method: Take a box that is open from both the sides. Fix tracing paper on the front side and then gelatin paper on it. This will make the screen of the television. Divide this board into four parts with the help of a board. Fix one bulb in each box. Place the paper rolls in such a way near the screen that they can be rotated.

Use: When one turns the bulb on, the picture in that box will emerge on the screen. In the same way all the boxes will show different pictures. For e.g. If one wants to teach the concept of zero, when the first switch is turned on a picture with three birds on a tree will emerge. Beside this there will also be a figure of 3. Then turn the first switch off and the next one on. This next picture will show two birds on the tree and figure 2. That means one bird has flown away. In the third box there will be only one bird when the same method is followed. Similarly there will not be any bird on the screen in the last picture and the figure will show zero.

### ***Shadow Puppet***

This article can be used for all subjects extensively.

Raw material: Two 5x 80 cms wooden sticks, two 5x 60 cms wooden sticks, one metre white cloth, a string, ms paper.

Method: Make an 80 x 60 cms frame out of the wooden sticks and tie the white cloth on it. Tie a string horizontally behind the cloth. Make the screen stand with the help of a stand. Make cuttings of animals, trees, birds etc. out of ms paper.

Use: While using this instrument, it is better to place it near a window so that the natural light can help. If you want to show an elephant on the screen, put the cutting on the string. You will find the shadow of an elephant on the screen. Now if you want to say  $3+2 = 5$ , move three elephants from one end and two from the other. They will gather in the middle and make 5. This method can be followed to teach any other suitable concept.

### ***Educational Tree***

This also can be used for any subject.

Raw material: A piece of hardboard of 60x 30 cms, ms paper, velcro strip.

Method: Cut the hardboard into the shape of a tree and paint it. Paste velcro strip on the branches. Make leaves, birds and fruits out of ms paper and paste velcro strip on them.

Use: As velcro is used, the birds, fruits and leaves can be manipulated as needed. This particular toy has been of great interest to the children.

I have made many other toys to teach place value, addition of single digit numbers, using just hardboard and paint. As our school is near the sea, we easily find a lot of sea shells. We have made various charts out of these shells. Just to give an example, we have made a chart which helps in teaching identification of figures from 1 to 10. Write the figures on one side of the board and stick shells before them according to the figure. This kind of chart can be used to teach numbers up to hundred. It also helps to teach the concept of descending and ascending numbers. The same method can be used to teach mathematical tables. In addition to these, we have also made puzzles dealing with the organs of body. In this game, the organs of human body are drawn on the pieces of hardboard and they are used as a puzzle game.

## **BALDEVBHAI N PANDYA**

I started teaching in 1984. After about two years, I realised that no teacher was ready to serve in another nearby school, Karshanpura Primary School. The reason was that the area was dominated by socio-economically and educationally backward communities like Thakore, Rabari, Vaghri and Raval. The school had poor facilities and was not connected by bus. A single teacher in the school taught Classes I to IV. I decided to take up the challenge of working in this school.

### **Community Mobilization**

There was a forest of *Babool* trees near the school at Karshanpura. I sought support from the *GramPanchayat*, got the forest cleaned and the lake filled. Whatever work was left was completed with the help of the village youth. We planted many *neem* trees here which provide shade today. The area serves as a temporary shelter for bypassing labourers. Since there were only two teachers and four classes, multi-grade teaching was inevitable. Handling two classes at a time caused many problems in completing the syllabus, maintaining discipline, and organising cultural activities. During the monsoon, the situation was worse, and the children had to be shifted to a temple nearby. More than one class had to sit in one place.

When I became in-charge of the school, the villagers asked the District Education Committee for Class V. The office was forced to give an additional class, but an additional teacher was not provided. I had to run five classes with two teachers in all. Such a difficult situation compelled me to find out some solution, and inspired me to develop teaching learning material that was suitable for my situation. Once I started in this direction, I got more and more new ideas. Some of these are described below.

### **Teaching with a Model of a Mountain**

While learning different concepts in geography and environment, the children used to ask many questions. From where does the water in a river come? Mountains look like what? I always felt the need to satisfy the curiosity of these children. Naturally, taking the children on a tour to visit such places would have been an ideal way to teach these concepts. This was not possible because all the children were from poor farm labourer families. The parents could not afford any travel. Secondly, whenever I drew a picture of natural phenomena on the board, children saw it with great interest and some of them tried to copy it into their books. I felt that if some models could be made, these could give children a better idea of the concepts.

I was thinking about the best way to make the model, when the villagers performed a religious ceremony. For this they had prepared some bricks. These bricks would become sacred after their use in the religious ceremony and therefore would have to be dropped into a river after the ceremony. The villagers were preparing to load the bricks onto a tractor and take them to a nearby river. I approached the villagers and explained that once they dropped the bricks in the water, they would be gone for ever. But if they gave the bricks to the school, we would ensure that the bricks would be used for a noble purpose; they would also remain as a memory of the religious ceremony performed by the villagers. My appeal overcame the villagers' religious beliefs, and they took the bricks to the school.

Using these bricks, I made a huge hollow mountain, leaving spaces in between. The waste material of the school was used to stuff the empty space in the structure. When it was filled, I made a clay layer on the entire structure and gave it the shape of a mountain. Then I placed PVC pipes throughout the structure (for water) in such a manner that they would remain hidden. Then by cutting and carving the structure suitably, I prepared models of different phenomena/ natural structures like rivers, streams, caves, forests, ravines, stones eroded by water etc. This was in the year of 1995.

Over this clay mountain, I added a layer of cement. Now it was strong enough for children to climb over it and move around. I have tried to make it a comprehensive model in the sense that on both sides of a river, I have indicated trees and forests, and have also tried to show how a river finally meets the sea. The sea has models of marine creatures.

### **Other TLMs**

Karshanpura Primary School was a small school and had only two teachers. The responsibility of teaching all the five classes was too much, and whenever some other work came up, the performance suffered. Children who were told to work on their own did not take much interest in it. In order to generate interest among them, I began to give them assignments like collecting feathers, making pictures, making toys from clay, and so on. When children were given such assignments, they found it very interesting and remained occupied. The experience of collecting or making such articles exposed them to learning. This was reflected in exercises given to them to draw pictures or write about the material. They tried to recall whatever they had done; more importantly, their writing tended to be broader in coverage.

In a science fair (1998), we presented a model for textile printing and TLMs useful in classroom teaching. Many educationists appreciated the exhibits. We received prizes, and the appreciation added to my enthusiasm. Such encouragement expanded my confidence and interest so much that

today I have an exhibition of TLMs at my residence, open to anybody who is interested. I have prepared this exhibition cum collection on my own and using my own understanding.

### ***Comet TLM***

In the year 1998, the newspapers had given wide coverage to the appearance of a comet. All the villagers and children stared at the sky to witness this incident. But unfortunately this phenomenon could not be observed. Children were disappointed by this. I decided to do something. I thought of preparing a model that shows this natural phenomenon. I worked on the idea and prepared a working model to show this phenomenon. The satisfaction that I saw on the face of my children when they watched the model showing how this natural phenomenon works, made me happy. Meanwhile our school was supposed to participate in the science fair. I thought the model which has satisfied the curiosity of my students should reach other students also. I sought oral permission from the DIET Principal and exhibited this model in the science fair. People welcomed it so well that the newspapers gave it coverage and more and more people visited this show.

### **The Best Use of My Skills**

Magic shows and puppetry are my areas of interests. According to me, the way I used my skills for educational rehabilitation of the earthquake affected children of Kutch has been the most satisfactory experience for me. After the devastating quake, the DIET had prepared teams of teachers that were supposed to work for rehabilitation. We were given Gandhidham *taluka*. When we went there, the school that was allotted to our team was Antjan Primary School. Not a single child was present in the school. The HM and teachers informed us that the children were so terrified that they were not ready to come to the school. Something stronger than the fear of children and parents was needed to bring them back to the school from the queues for relief material distribution.

We went to the places where such material was distributed and announced that the school was going to hold magic and puppet shows. There were only a few children on the first day. But I did not lose courage. We persisted and in three to four days the presence reached 90%. Gradually these shows became so popular and effective in bringing children out of the traumatic effect that teachers from the surrounding schools began to invite me to give performances in their schools. I responded, and covered seven schools. The success of these shows continued even after the rehabilitation work was done in Kutch.

The Mahant of a temple near my school organises yoga camps for people free of cost. I have been helping him and brought the yoga activity into the school in 1986. When I wanted a permanent exhibition of my TLMs, I hired a room. The Mahant came to know about this; he appreciated my commitment for the cause and spared a room for my exhibition. This exhibition is now known as *Datt Nivasi Pradarshan*. Teachers interested in TLMs visit the exhibition and make TLMs on their own. If needed, my help is also available. The TLMs include a variety of items made from coconut shell, puppets, sculptures and toys made from waste material. Some of them are:

- *Aakash Darshan*: Space View. It shows the planets, the sun, the moon, the eclipses.
- *Tarang Ullas Sadhan*: Identification of sounds and concepts of long, short, thin and thick.
- Magical glass: Information on figures 1 to 10.
- *Bahurupi sadhan*: Tool to teach letters and numbers.
- Puppetry: Puppets for language and environment: 40 pieces.
- Teaching through masks: Numbers 1 to 20.

- Our Body: A model of the human body, with all the parts detachable. The children can themselves arrange all the parts like hands, legs, eyes, nose, ears.
- Crops of our region.
- Magic boxes.
- Identification of shapes, colours, birds, pictures, flowers, currency and grains.
- Identification of the month.
- Puppets of fruits and vegetables: 30 pieces.
- Sound identification machine: This tool has five pieces. All the five tools produce different kinds of sounds. Children can play with them producing different sounds and learn concepts like sound, vacuum. This tool is made from the empty coconut shells. The shells are cut from the centre into two parts. Small iron balls of bicycle bearings are put inside the shells and the two parts are sealed again. An artistic touch is given on the outside surface by covering it with plaster of paris and creating some designs on it.
- Place value tool: This tool is made from an old window. There are four lines of nails in the tool. There is a pipe fixed on it and a slate is made above the board. Now a figure is written on the slate. This helps Classes I and II children to understand and remember the figures up to a thousand.
- Movable *Bal Mitra Varg*: Painting is my hobby. Whenever I thought of a *Bal Mitra Varg*, I felt that it should be in such a form that it can be taken to any place. From this I got the idea of preparing a *Bal Mitra Varg* on canvas. I implemented my idea on a canvas of 20 metres.



## LEELABEN A PARMAR

I started teaching in 1971. My guiding principle has been one of Mahatma Gandhi's sentences: "Education, real training, lies in the exploration of the true qualities of a child." Children are very active and so conscious efforts have to be made to keep them connected to the activities that are going on in the classroom. At the same time, outside the classroom they need warmth and care. The latter have made it possible for me to handle some very serious dropout cases: like a girl with a chronic illness for whom I arranged medical treatment, and arranging for small financial assistance to many needy girls and boys. I have found if warmth is shown and personal care taken, dropout is easily solvable.

### **Product-Oriented Activities and Leisure Camps**

In my school I emphasise product-oriented creative activities and involve my students in activities like making doormats using coconut skin, brooms with coconut leaves, cloth mats for sitting on floor, embroidered small bags, garlands, wall pieces, flags, clay models of animals and many other things. When we display them, we try to generate some income by selling the items. This gives children a focus and helps them tie up the activities with learning in the school.

During the academic year, children find some leisure. I believe that children should join a profession only after they finish their study, but spare time like weekends, public holidays, and vacations, should be used to develop some skills. The idea of a leisure camp came to my mind when I used to observe children doing many activities during the recess. I organised a 2-day camp for children. My HM and colleagues supported me. The total number of participants was 40. The children were studied and divided into teams according to their interests and their methods of working. On the first day we had a Mass-Meal and a Village Cleaning programme. During the Mass-Meal, all the children sat in a circle and shared their food with each other without any arguments. Next day all the children were left absolutely free to do whatever work they liked and in whatever manner they liked. For example, some of them began to paint, some of them were carefully observing plants, some were busy playing something and some were lost in their musical instruments. At this juncture, some experts and learned individuals were invited to watch these activities. They helped us identify the special gifts of various children and provided us feedback on what to develop in each child. This experiment proved successful and gave us insights into the meaning of total development of the child. This would not have been possible within the four walls of the classroom. The feedback was communicated to the children in order to help them pay more attention to their strengths. We call this personalised sensitisation of the students. Some of the students have become professional singers or artists. Others have developed in other directions, but the feedback from them has been very good. The experiment has been repeated many times.

### **Making Learning Interesting**

I believe in having attractive classrooms. Keeping the textbook content in mind, the rooms are decorated with charts, paintings, rangoli, mathematical tables, projects, models of sentences and other decorative pieces made out of waste material. Thus I try to develop the spirit of learning new things and frugality.

#### *Antakshari*

A fast and effective way to learn is through rhyme and verse. The children remember things very easily if they are taught poems, prayers, and lessons with music. So we organised a programme of Antakshari (game in which the ending syllable of a song is used as the starting syllable by the next

participant). We included in this programme songs, poems, folk songs, *bhajans*, with the view of improving the language skills and vocabulary of the students. We test learning levels after any such activity to assess its effectiveness.

#### *Dramatisation*

I make children play roles like Rani Laxmibai, Sardar Patel, Jawaharlal Nehru, Subhash Chandra Bose. First I give enough information about the character that is to be played. Once I feel that the actor child has enough information about the character, he or she is introduced before the class. Now the other students of the class ask questions and those have to be answered by the player. Whenever it is possible, dramatisation of lessons is done; for instance, a lesson like 'Jivram Bhatt' becomes very interesting in a drama form.

#### *Projects*

I frequently undertake projects so that children can understand things clearly and practically. I have noticed that during such projects students learn about many small and trivial things that nonetheless create a great impact on their learning. An illustrative list of projects which have contributed much to learning is given below.

Primitive man- caves and weapons	Class III
Agricultural crops	Class VI
Currency	Class VI
Kerala	Class VII
Pollution (Land/Water/Air)	Class VII
India (States, cities, rivers)	Class VII
Balanced diet	Class VII
National symbols	Class VII
Malaysia's rubber business	Class VII
The irrigation plans of Gujarat	Class IV

#### **Teaching Aids**

I also make and use TLM to explain concepts/themes. Some of them are listed below:

Periscope and Kaleidoscope (well known instruments); 'The longest hotel' (multiple reflection, with two mirrors facing each other, toy tables and chairs); Solar system model with wire, cardboard and thermocole balls; Mathematical boards, with the correct answers attached to small bulbs which light up when pressed; irrigation system of Gujarat, which works on a similar principle of using lighting-up bulbs to identify various dams and schemes and rivers.

I have tried to make children more and more active through these methods. Innovative TLMs, methods like drama and projects, make the learning process interesting. Such an atmosphere does not permit the children to leave the school. More importantly, a teacher should know the special needs of students, and students should be made aware of their strengths, so that all round development of children results.

## BACHUBHAI V PATEL

I was born in 1960 in a poor family in Dahod, Gujarat. As the financial condition of my family was not good, my parents could not receive any education. However, they put me in school. I completed my teachers' training course in 1982, and in 1983 joined a school which had four standards. The village was very backward, socio-economically and educationally. I thought it would be a good idea to make school a hub for cultural activities in order to create a sense of ownership amongst the villagers. I started interacting with the people and mobilised the support of some farsighted people of the village. We gathered a small amount for buying musical instruments. These instruments were used for different activities in the school, and this changed the school's atmosphere. Word spread and attendance improved. New enrolments took place and within two years we had to introduce the upper primary stage. This move was appreciated by the villagers. With the help of the HM, I started celebrating national festivals successfully by inviting the leaders of the village. I also attended social functions of the village community. These activities helped a lot in improving the presence of students. The school was extended up to the seventh standard. In 1986 a school name R.S. High School was started by an educational society, since the trend towards higher education had become clear by then.

In 1987, I was transferred to my home village. One of my primary school teachers was now the HM. The school had five grades and three teachers. My old teacher fixed Class VII as a target to be achieved. In the beginning, it was very difficult due to the very small number of students. But like I had done in my earlier school, we started many cultural activities with the help of the children, maintained regular contacts with the parents, and celebrated national festivals through local leaders. Our perseverance paid off and soon we had seven grades, seven teachers and seven rooms in the school.

My goal was to make my village an "educational place". With the help of our HM, we got a trust registered, the *Adivasi Pragati Kelavani Mandal*. I was elected as the President. My aim was to bring about an educational revolution in my predominantly tribal village. We built a high school, since Class VII graduates needed to have access to further education. With the help of my staff and the people, we established a fund of Rs. 50,000. We trained our school children for various competitions. As a result some of our students acquired first and second prizes in sports at the state level. I succeeded in hosting the *taluka* level and the district level sports festivals. All these activities and efforts gradually increased the people's interest in education and developed an identity for the school and the village. Three new schools with primary classes were also started in the village as extensions of the original school. The school that had only 4 teachers in 1987 has 26 teachers today and provides primary as well as higher secondary school education. The variety of co-curricular activities and entertainment programmes in the primary sections were very useful in attracting the mothers; my aim of improving the enrolment and the attendance of the girls of the village was thus achieved. Gradually, the young people of the village became familiar with the activities done by the students of the Primary School, and they helped in the enrolment programme, the celebration of religious festivals and organising Gandhi *Jayanti* functions.

### **Social Activities**

Along with educational activities, I also concentrated on social reform. We used to arrange meetings and discussions with community leaders, young people, employed people, on social ills. We have had reasonably good success in controlling some practices like obligatory gifts, dowry and

Kanyadan. I have also been actively involved in the Primary Teacher's Loan Co-operative Society, since this way I can also serve the teaching community.

## **KAILASHBEN M PATEL**

I started teaching in 1978. In my first school (Tadwadi village), all the children came from families of agricultural labourers. The school had one hut-like room. There was no bell, nor were there office records or attendance registers in the school. I was shocked to find the school in such a pathetic and disorganized state. This was my first exposure to school teaching, and I was afraid. When I was unable to mark even the attendance, I lost the courage to control the children. Soon I realised that fear was not going to help me. I prepared myself mentally and began my work. I visited each household personally, and prepared a list of 55 children in the school register, with a lot of difficulty. I needed to get a picture of who was in school and who was out of it. I started 'school' by gathering the children. But I needed to build something fast. When I could not think of anything else, I organised a cultural programme that surprisingly fetched me Rs.3000. But this was a very small amount. I again gathered courage and met the District Education Officer. I informed him of my problem with a lot of stammering. I must appreciate that officer since he took it very positively and approved one room immediately. He went further and got the Asharam Ashram in Surat to sponsor construction of three more rooms. Finally, we had a school with four rooms and Classes I to IV. Now with one more teacher, we worked hard for seven years in that school. The initial steps of this effort are actually a series of incidents and strange experiences which developed my inner strength. This gaining of strength, as part of a teacher's development, is absolutely necessary if one wants to overcome the problems of primary education in difficult areas.

Here are two incidents as illustrations. It was during my initial days as a teacher: once when I was teaching my class, a drunkard entered it without permission. He came and said, "Teacher, teach me also." I was very scared and retreated into a corner. The more I was afraid, the more he became fearless. Children were also confused and did not know what to do. The drunk man moved towards me. Now the children acted. One of the students pushed him from behind and he fell down. All the students thrashed him. This was a lesson for me, and after that I could handle drunk men very easily. Another problem was an abundance of poisonous snakes. Once I found some of the children playing with a snake's eggs. This was an incident which made me act. I decided that poisonous snakes in the school compound and premises had to be killed. I contacted the villagers and we underwent training on identification of snakes and how to kill them. We also collected information on the life cycle of snakes. With this information, we were careful, and at least, within the school premises, we killed poisonous snakes whenever we found them. This was important, since the safety of the children was important for me, especially when medical facilities were just not available.

Over a seven-year period, the school was completely revived. Our goal was not limited to just enrolling children. We aimed at seeing to it that they moved into a career track. Thus, the school now has a full strength of 850 children and 15 rooms; we have graduates who are today in the police and teaching professions. The school works in two shifts, and has a nice garden. Whenever I revisit the school, I feel a sense of satisfaction.

After a brief period teaching Class VII (when I had only taught Classes I-III earlier) I was transferred to the Ichchapor Primary School, where I served for 14 years. The HM of this school was very strict. I liked his approach. I taught in Class II for a couple of months, but was then given Class VII, since this class had been left without a teacher. I taught thus for 12 years. The school's students do well in the secondary school which caters to a total of four primary schools.

Though I liked the strictness of the HM, I did not like his rigidity regarding an exclusive focus on classroom teaching. The school neither held nor participated in cultural programmes or sports festivals outside the village. I decided to open the doors to cultural activities as I believe that such activities are very important to explore the hidden potential and skills of children. We decided to keep the HM out, initially. I started training my students for different events behind closed doors. It was a very painful experience for me to be secretive when I was doing something creative and worth doing. But I felt there was no sense in arguing when the opponent had authority. I decided to achieve results first and then argue. Even my colleagues were not ready to help me openly.

I tried to seek help from outside the school. The CRC coordinator saw my work and agreed with my approach. He helped me. We somehow managed a tractor. Now the final step was to take the students out through the back wall of the school directly into the trailer. But the CRC Coordinator panicked at the last moment and our plan was exposed to the HM. He tried to prevent us from going. This was a moment when my courage was tested. I dared to disobey him for the sake of the children. We went and to the surprise of all, won in nine events out of 13. This was what I had wanted to achieve. The HM came to my home and congratulated me. But he did not allow us to compete at higher levels when we could have managed even that. When we could go up to the district level, I decided to fight him. Officials of the department intervened, and realised that what I proposed was within the school's ambit. The HM was transferred. Other teachers refused to become HM and I was given the responsibility.

The transferred HM was administratively very effective; his records and accounts were well maintained. I did not have to face any problem on the technical side. The only limitation was that the school had only about Rs.1000. However, a bigger challenge was to improve the academic output of the school. I started to work in this direction with the prayer assembly. I introduced songs, jingles, stories, thoughts for the day, into the prayer assembly and made other teachers also aware of their potential and motivated them to take the initiative. This worked and the school did have group academic activities as part of its calendar.

When I was transferred to another remote school (village Bhatpor), the situation of the school moved me. The school building was in a pathetic condition. The faces of the children did not show joy. The community was by and large illiterate and alcoholism was rampant. Out of five rooms, four were closed. There was a snake hill on the school premises. What was most unbearable for me was to find out that children were also addicted to liquor. The school surroundings were an open air toilet. This compelled us to keep the windows closed. Drunken children wandering here and there used to throw stones at the closed windows and doors of the school. Because of this, the doors were all broken. The school walls were covered with obscene graffiti. There were hardly 35 to 40 children. The single teacher working here used to lock herself with these children into a single room. She was very caste-bound and would not even drink water given by others. She used to remain on leave for long periods. In short, there was no one to look after the school and students, or to give a hand to the community to emerge from its living hell.

One day, as soon as I had joined, I was talking to the class, and found that a girl of Class III was unable to stand. Initially I thought that she was not well and I tried to talk to her. But instead of answering my questions, she just kept smiling at me with saliva oozing from her mouth. When I asked the other girls what was wrong with her, they told me, "Teacher, she is drunk." A shiver passed through my body. I was thinking, how can this be possible? I could not help asking her why she drank. Other voices came in response, "Teacher, I am also drunk. Last night we did not have anything to eat. So my mother and father gave me local liquor to drink." Out of 55, 27 children were drunk. I thought to myself, "What is this school and where is the education we talk about?" Life

imposed this on me, and I accepted my share. I took this neither as a test of my life nor of any abilities. I just began with the simple realisation that I should try to move them from darkness to light.

My previous experience at Tadwadi, where the children had been from the same community but had been in better shape, came to my help. I gave my love and compassion to these children. I helped them prepare a schedule for daily activities of bodily cleanliness. Also I taught them to take up some cleanliness work at home, like cleaning the home, the verandah, to prepare Rangoli at the door step with flour (as they had never seen soil normally used to prepare Rangoli). These children did not know what sweets like *Penda* and *Barfi* tasted like, and so I prepared sweet *prasad* for them. We scheduled street cleaning campaign every ten months.

The school surroundings needed much work. The liquor outlet nearby, youngsters gambling, and their generally filthy state, did not help at all. One day I came out of the school and went to meet a parent (a liquor producer) whose daughter studied in my school. I greeted him. He was shocked to see me there as he was drunk. Despite this, he offered me a seat. But without giving him any time to recover I asked him, "How can you live in such a dirty place? School is the temple of goddess Saraswati. Do you think it is good to have a temple in the middle of filth? Why do you allow people to spoil the place?" This outburst had the desired effect. He gathered people from the village. Half of them were drunk. But they went to work immediately and made a five-foot hedge of *babool*. They then controlled the children who were throwing stones. He sometimes met me while passing by and asked me if I needed some help. Now was the time to ask for a little more. I requested him, "Can't you move the liquor shop a little further away from the school towards the river bank?" He was so affected that he closed the shop.

### **Developing the school**

We planted trees behind the school building. I put subject teaching aside and collected about 40 songs which could be sung, and made the children play local games till they got tired. I got some sports equipment from a public sector company, GAIL. We now had three teachers, and we played games like badminton, volley ball, *ambli pipli*, *saat thikdi*, with the children. The children were also made to sit and clean lice from each other's heads.

The public sector company also built good toilets for the people, but the outlets were choked with stones, pieces of glass and soil. I wrapped a plastic bag around my hand and cleaned one toilet outlet. When the children and teachers saw this, a teacher (who had just joined the school) and the children cleaned the others. The school had water storage facilities but there was no water, since there was no meter. We acquired one. One teacher donated five fans. Thus we made arrangements for water and fans. One day we thought that since we were spending so much time in school, there should be better physical conditions. We contacted a cooperative society in Hazira. Our entire belt of schools got donations of Rs.11,111 each. We thanked them and under the guidance of the Education Officer the school building was painted with distemper. Now the school building looked much more pleasant.

Even after rigorous efforts of six months to keep the children away from liquor, there were some children who came drunk. When I again tried to find out the reason, I found that their parents sent them to buy liquor. And of course, when food was in short supply, liquor was handy. I again met the parent who had helped me previously. He intervened and took upon himself the task of educating the parents not to send children to buy liquor, or give liquor to children. But this posed a new challenge before me. Due to irregular supply of mid-day meals, a crucial input into schooling in such

areas, the children were getting irregular meals. Again I asked GAIL for help. With their help I could provide sweet milk to the children. Often I myself made *doodhpak* (rice and sweetened milk). Meanwhile, the officer in that company was transferred. So now the children had neither milk nor liquor. However, I am proud to say that once the liquor habit had been broken, the children quit drinking completely. They are indeed enjoying their childhood now. I am very satisfied with that.

The final result has been that the villagers themselves look after the school building when I go on vacation. The youth who used to deface the school have now dumped 10 tractor loads of soil to level the school ground. There is no disturbance in teaching during the day. We have made a seating arrangement under the banyan tree outside the school compound. Now people show more readiness to help. If I try to give money for something, they say, "No teacher, we cannot take your money." With the children, their self esteem has grown. They understand that liquor and tobacco addictions are bad. Five students have progressed to secondary school level. Since classroom activities continued, I made children participate in school science fairs, at the block level, and once at the district level. The school won for three consecutive years in spite of facing competition from many schools of repute. Two items at *Taluka* level, one at district level were selected. We secured second and third place at state level.

It has taken four years to achieve all this, but I feel that three more years of sustained effort will overcome the obstacles to academic achievement and make schooling sustainable. Even now, students of Class V are able to read and write, but cannot speak well. Their unexplored mental abilities will take time to open and grow. According to me, this much change in four years is good enough. The journey is still on and the destination some distance away.



## RAKESHBHAI G PATEL

I have been working as a teacher for only five years. My first posting was a challenge. People were not ready to give me a room because their previous experiences with teachers had not been good. I finally got a room that was infested with rats. I had only five sets of clothes, and within a few days, the rats made a meal of them. I decided to resign. When I went to the school the next day, I began to think about the problems from the village's point of view. Teachers were posted here as a punishment, and they were just waiting to be transferred out. Therefore, they never paid much attention to the students. I looked at the children and decided that I could not run away from this depressing situation. The two main communities—one a middle-caste group and the other a Rajput caste—in the village were at loggerheads. Their quarrels used to be taken up at the district level also. Again the school itself was not something which would please someone. The students were very irregular. There was nothing like a uniform or discipline in the school. There were five rooms in a very bad condition.

I decided to start by regularising the children. It took us a few months to persuade the people, and finally we achieved some success in ensuring attendance in school. As a second step, my colleagues and I began to develop some discipline among the students—simple things like placing their footwear in a line, walking in rows to the prayer hall, greeting the teacher while entering class, and so on. We took a long time to develop some basic discipline among these children. However, patience and persistence produced good results. This was a good beginning. We felt that teaching children inside the classroom on the blackboard would not help to bring about change. Therefore, we called each child personally and assessed his or her level in different subjects and noted it. We maintained a register. We used to note the child's performance on a daily basis so that the next day we could help the child move one step ahead. The pace of learning was very slow due to such personalized attention, but whatever we did was very concrete. We were satisfied with the slow but steady progress. We took a long time to prepare the students, but the results were very good. We had to see that the students did not get discouraged by this struggle. Therefore, whenever we felt some fatigue, we switched over to stories, indoor games or songs. We used many TLMs to make the learning process easier for the students. Apart from the regular TLMS like cards, things, toys etc, I used audiocassettes as a teaching tool. I recorded complete lessons, except the math lessons. The recordings included questions and answers. At night, the children had to sit in groups, obtain a player and listen to the cassettes. This was a kind of revision. They could listen over and over again, and this was appreciated. The parents noticed all this. This was our reward.

We also started different programmes in school. Previously nobody used to come to such programmes organised by the school. However, the scenario changed in three years. We needed to catch the attention of the people on the occasion of *Praveshotsav* (enrolment day). I used to organise a *Satyanarayan Katha* on that day. As a result, all the members of the village came to the school. I used to prepare about 40 kg. *prasad* for this *katha*. Secondly, I started a "*Gram Samachar Board*" in the school to highlight news and useful information. For example, on so and so date, kerosene will be given. There is a programme of so and so religious speaker in so and so village. This attracted the villagers. This board was kept outside the school so that the visitors did not disturb the students. Thirdly, I planted a *Beej Vad* (Banyan tree) in the school. The women of the village began to come to the school premises to worship the tree, as it is a religious belief. These changes started showing results within a year. During this one year, we also focused on the children's health. We made them stay away from low quality and unhygienic sweets and ice cream brought to the village by itinerant hawkers. Then I taught them to make ice cream at home. Since

these village people have their own animals, the quality of milk is good. They used to make ice cream and enjoy it. Such concerns helped us win over the children.

Unfortunately, the 2001 earthquake shattered us. The entire village was in the school at that time. All the rooms of the school were badly damaged. It was dangerous to make the children sit in the rooms. Left with no choice, we made them sit under the trees. The ground was very small and it was difficult to accommodate all the students. Secondly, the heat was oppressive since there were very few trees. We spoke to the village leaders and they showed their readiness to support us. The government gave repair grants. But the villagers proposed that even repairs would not do, and wanted new rooms. We formed an education committee. We went house to house, collecting funds. The results were beyond my imagination. The village that was not ready to give 10 rupees to the school contributed Rs.1,75,000. My source of inspiration was Shri Ajitsinh Solanki of Valbhipur Manas Primary School. I used to visit this school quite often and used to talk to Ajitbhai. He used to tell me how he made his school. It was through him that I was inspired to make the school building through community participation.

Though the villagers had begun to cooperate, there were some real hurdles. The two communities of the village never saw eye to eye. The damaged school building was in the old village location. After the quake, many people of the middle caste moved to new plots. The original school location was quite distant for their children. When the *Gram Panchayat* was to be shifted to the new settlement, the matter was taken to court. Now if I wanted to move the school, the same experience might be repeated. The community which continued to live in the old village was powerful. I called their leaders to the school and explained the entire situation. Fortunately, they trusted me, and agreed to let the school move. By now, perhaps the people had realised that schooling should not be affected by factional politics.

For the additional resources, we went to the villagers who were working in the diamond cutting industry in a far-off city. We gathered Rs.1,00,000 from them. We were able to gather another Rs.50,000 from other donors. When we ran short of money, we had to borrow a small amount. During the vacation, some villagers had returned from their employment for a break. I informed them about the debt. In no time, we gathered enough to repay the debt. For the fans, I suggested that the village stop the '*Batuk Bhojan*' (a tradition where families feed children with good meals for special occasions) for some time and donate that money for school facilities. This was accepted and infrastructure like glass blackboards and drinking water, was created. The MLA of the area sponsored the compound wall from his grant. The gate was left. One day a gentleman brought Rs.25,000. His married daughter had committed suicide and her parents-in-law had given him the money. He did not want it for himself, but wanted to do something in his daughter's memory. He got the gate done. The rooms of the school have been made quake proof. The building is built at a height of four feet from the ground so that good air circulation and natural light are ensured. There are *Gulmohar* trees now. Instead of using tiles or plaster inside the rooms, we used high quality Kota stone.

A savings bank has also been started in the school with a view to developing the habit of saving among children. At the end of the year, a tour is organised with this money. The place to be visited is kept a secret until the parents are sent the consent letter. I wanted a computer. I made the children write a letter to selected donors, asking whether it was their fault that they were in a rural area, trying to gather resources from all places. We actually received a computer, and our school was the first school in the block to use computers.

The outcome of my efforts was that the children became enthusiastic about attending school. The community members and parents also began to take an interest in the school activities. Even at the time of weddings, some village members brought the *Janaiya* (the relatives and friends of bridegroom) to see the school. This was our recognition. Such people came to the school and gave some contribution or other. We were very happy. The most remarkable achievement is that, after these efforts, the children of this village have started enrolling for secondary education. At present about 80 % of the primary graduates go into secondary education.

**SHARMISHTHABEN B PATEL**

### **Retaining Children in School with Extracurricular Activities**

If the future of India is created in classrooms, then the opportunity provided to the students should be of the best quality. This does not happen in the rural areas I have observed. I demanded transfer to a remote rural area in 1992, and went there by choice.

The initial condition of the school where I work at present was really depressing. The classrooms were in bad condition. The ceiling leaked in the monsoon. The floor was infested with termites and ants. Where to sit? I got these rooms repaired. I approached the village leaders and made the community realise that the school was a part of the public property and facilities. If the school were better, it would contribute to the betterment of their children. Gradually people realised that I was right. Their attitude of looking at the school as a government organization changed. They felt a sense of responsibility towards the school. As a result, the school now had four rooms and five standards. The school has been made attractive with whitewash and with quotations and pictures on the walls. Trees have been planted in the premises. A stage has been made for the prayer assembly. On both the sides of the entrance, two round seating places have been made. The school community and the village community have together made this school like an Ashram shala. Also the school participated in different competitions at district and *taluka* level and won many prizes.

Over the years I have realised that the school needs to be an attractive place for children if they are to be retained in school. Like the popular myth that the moon attracts a bird called *Chetak*, the children should be attracted to the school. With this in view, we have made the school environment better than what the children have at home and have succeeded in maintaining attendance in school. All kinds of pictures like the season cycle, the parts of the body, birds, animals, songs, numbers, stories, have been made on the walls of the classrooms. Wherever the space was not sufficient, the ceilings have also been used. A nice garden has been created.

We make it a point to see that the different needs of the children are satisfied. For children of Classes I and II, arrangements for school bags have been made. I have a diploma in embroidery and stitching. I prepared school bags from empty plastic bags, for these children, during the vacation. A unique number is given to each child and this is written on his/ her bag. Children take their bags according to their numbers and put them back after use. Along with the bags, other things like slates, books, pens, pencils are kept. The government provides the textbooks free of cost for all children. I put a cover on all the books and write the name of the child on them. This makes it very easy for the children. The school has a first aid box which is also used by the village community. This has been extended into a regular vaccination and health check up programme.

There are many activities which keep the children busy and engrossed. Examples include, singing and story telling competitions, learning the art of *mehandi* and hair styling, good writing exercises, drawing, rangoli, clay work, paper work, and many competitions which are built around the children's skills. The winners are honoured. The names and photographs of the winners are given

to local newspapers. I also organise *Ras* and *garba* competitions. I myself stitch the dresses. Three sets of dresses are prepared so that 36 children can participate at a time. I have also made the relevant ornaments for these dresses. Children come to the school regularly to participate in all such activities. This helps in doing the teaching work well. One activity that the children have enjoyed carrying out is the “Modern scarecrow”. We used paddy straw, strings, wood pieces, old cloth and colours to make this scarecrow. First the straw is soaked in water. The wet lump is used to make the shape of a face on a stick. It is then tied with a string. Then the hands and legs are made. The stomach and back are made using wooden sticks as supports. Thus we made a six feet tall scarecrow. We put a speaker on this scarecrow and a photocell on the other end. The moment the shadow of a bird falls on it, the scarecrow makes a high sound. It keeps on producing the sound till the bird flies away. This scarecrow was exhibited in a science fair and won a prize. All these activities, taken together, have addressed the problem of absenteeism.

### **Self Made Teaching Aids**

#### ***Ank Gadi (Number Train)***

The train is made from thermocole and colours. One has to invest time only. The train has different pictures of birds and animals in the place of compartments with numbers written on them. While playing with the train, children learn the numbers.

#### ***Barakshari Stand (alphabets stand)***

Squares blocks of different sizes are prepared from thermocole. Letters are written on these with fabric colours. Similarly sized windows are made on card board. By the side of the windows the vowel signs of the Gujarati language are indicated i.e. *i, ee, u, oo*. The squares can be matched with the correspondingly sized windows, and the sound when a consonant is combined with a vowel can also be taught.

#### ***Sankhya Chakra***

Two rectangular cardboards and two circular cardboards are used. Numbers are written on the circular boards. They are fixed on the sides of the rectangular boards. The circular boards have windows through which numbers written on the other cardboards can be read. This tool is useful to teach 1 to 100, place value and can be used in a number of ways.

#### ***Vachan Gadi (Reading Tool)***

Two big rectangular boards, one circular board and a nut bolt, are required. The circular board is placed between the rectangular boards and fixed at the centre. It can be rotated, and the letters or words or any other matter written on its edge appear through windows cut into the top board. The teacher can order the difficulty levels—from two letter words to complex words, or sequence the words to form a coherent sentence, or combine consonants with vowels. Both sides of the circular board can be used, and with a little creativity, a teacher can design a variety of topics that can be taught with this set of boards. An addition that can be made is a box at the top, with windows through which thermocole blocks with letters or symbols can be seen. A teacher can use this addition to highlight particular letters or sounds or numbers or symbols that the words on the circular board (showing up in the windows) also contain. Many games can be devised around this combination.

## IBRAHIMBHAI B QURESHI

I remember the words of Ravishankar Maharaj of Gujarat: Educational reforms are possible only with the support and participation of teachers. Teaching is the best occupation of all. Through education we can develop ourselves, our society and nation. Teaching can instil new ideas and virtues in people. Today a teacher has to think seriously about various teaching methodologies since academic requirements have changed. It is very important that the learner-oriented teaching style is accepted so that all students can understand the basics taught in primary schools. I took charge as a teacher in 1985. I developed a good relationship with the villagers and began to participate in their activities. Under the guidance of our HM, we conducted a door-to-door campaign for enrolling. In 1986-87 we achieved 100 percent enrolment of girl students. They continued in school, and the Government even gave us a prize of Rs.5000. With this success, we also mobilised donations for the school.

I was then transferred to a school in the middle of the desert. The village did not have water and electricity. There was no school building and one room of a *Panchayat* House was used. The village was small, and almost all adults were labourers working in salt pans. The children went along with their parents and so were unable to attend school. I believed that arranging for a building and motivating parents about schooling would work. This strategy paid off.

After a brief stay in another school, I was transferred to the Zainabad school in 1992, where I still work. This school has given me a long enough stay in one place. The village is on the edge of the desert. The total population of the village is about 5000, with the Sipai and Ghanchi communities (socially and economically backward communities) constituting 45% of the population. There are other communities like Rabari, Valmiki, Harijan, Baniya, Thakore, Rawal, Devipujak and Bajaniya. About a fourth of the village is involved in agricultural activities. The rest of the village depends on agricultural labour and salt production activities. The village has a very ancient history. When I took over, the school already had a building which had been built before independence, and other facilities like urinals.

### Teaching Reading and Writing of Figures and Place Value

Examples from my many math activities are described below. When I started teaching Class V, I gave the students a test in reading and writing figures and place value. About 60% performed satisfactorily. About 10% of the children were very weak. These 30 students were divided into two groups. Each group had one to two bright students.

#### *Number Kho-Kho*

I made cards of numbers 1 to 7, and five cards with 0. Five children were made to stand in a row; that made a series of zeros. Now the children were allowed to play kho-kho. Once a player gives *kho*, the child with the zero moves a little aside. For example, if a child with 3 gives *kho* to the fourth player from left, the resulting figure would be 4000. If a child with 3 gives *kho* to second child from the left, it makes 4030. Thus the game continues and the children sitting and watching the game write the figures made during the game. These are checked later.

#### *Numeric musical chairs*

This game is musical chairs, but there are seating sheets on the ground instead of chairs. Number cards, from 1 to 30, are hung around the necks of the players. There are five sheets on the floor. One player rings the bell and the players run around. The moment the bell stops, the players stand on the sheets. This makes a five digit figure. The audience writes the figure. The players go on playing and the audience goes on writing figures.

### *TLM for place value*

I made a tool from five cardboard boxes. The first box had a zero in it. The boxes were marked out as units, tens, hundreds, thousands and ten thousands. Cards were made for numbers 1 to 9. Five such tools were made. The 30 children were divided into five groups. Every group was supposed to place cards in the boxes and make as many figures as possible. It was a competition among the groups over which group wrote the highest and correct number of figures. Now the children were able to read the figures with speed.

### *Cards of place value*

I made nine cards each of 1 to 9, 10 to 90, 100 to 900, 1000 to 9000 and 10000 to 90000. Totally five sets of these 45 card packs were made. Five groups of children were given these cards and they were asked to make as many figures as possible and to write the place value of digits above them. The children enjoyed playing with cards and understood the concept of place value.

After these games and tools have been used, two tests are given, a 10 mark oral test and a 20 mark written test. The results have been very encouraging.

I have observed that children are not very comfortable with different concepts of geometry. I discussed the problem with the CRC. Finally I thought of something to make an effort to solve this problem. I made a model for teaching geometry. It was called geometry teaching through pictures. Using this model, we can clarify the concepts of different geometrical shapes. Many geometrical competencies of Classes IV to VII can be taught using this model, like ray, line, line segment, angle, types of triangle, circle, diameter, radius, rectangle etc.

### **Efforts to Prevent Drop out and Stagnation**

There were about 14 children of the 6-14 age group who had left the school. I met their parents and enrolled these children in an alternative school—a mobile school run by an NGO called Gantar. Since then I have contributed to the training of the teachers of the NGO. Such association with NGOs which are working for the cause of deprived provides the teacher with an opportunity to contribute outside his or her regular sphere of activity. It is an important aspect of professional development of teachers which should not be ignored.

## NANUBHAI A TANDEL

I started my teaching career in 1963 in the tribal Dang district, Gujarat. After 18 years, by which time I had some sort of reputation as a good teacher, I was transferred to a primary school near the district headquarters, which was more like a large village or small town. I was told that the school was in a labour colony, and I was being posted there since the school had to be rejuvenated. The walls of the school were made of bamboo, but dogs, fowl and pigs used to roam inside freely. The floor was plastered with cow-dung. Whenever there was rain, the children had to be sent home because the roof let in a lot of water. The 47 students who were enrolled at the school were from very poor families. My first task was to get the children to come to school, because when I turned up, there was not even one child. I tracked them down and brought eight children to school. After the mid-day meal which we cooked, all the children disappeared. The next day was the same. For many weeks I persisted with my persuasion, but attendance was around ten children. The parents were convinced that schooling did not make any difference to their lives, "Our children have to labour for a livelihood, study is waste of time for us." I persisted, and attendance went up to 15. Then I decided to give the students a chance to play the same games in school that they played outside, including cards. They began to become regular, but came only 'to play'. For a few weeks I carried on with the games. Then I tried to associate number learning with marbles and other local games. With the cards, I brought in variations by instructing them to arrange the cards according to various colours and in ascending order. They did these things enthusiastically. Indirectly I was integrating teaching with games.

When the teachers from other schools knew that I permitted the students to play in the school compound and classrooms, they criticized me bluntly. They said that it was not appropriate for the teacher to allow such games in school. They believed that only the regular sports *kho-kho*, *kabaddi*, should be allowed. But I continued with my approach of "fun and learning". The DPEO visited my school; the regular and higher attendance was an undeniable gain of my approach. He appreciated my work.

Gradually I extended the motto of learning through fun and joy through various activities like *vanbhojan*, picnic, collection of seeds and leaves from the jungle, collection of feathers and many other activities, stories, songs, painting and writing. By the end of the third year, attendance had increased and had become regular almost fully. In about six years, the enrolment reached almost full level—185 children. From the initial regular attendance of eight out of 47 enrolled, the attendance now became 175 out of 185 enrolled. Parental interest in attendance also went up. The District Education Council rewarded us with Rs.5000. We purchased mattresses and musical instruments with this money. Then in 1989 the school won the Best School Award of Rs.2500. The school building was renovated. Then we added four new classrooms. All these results enthused the children and the teachers. After I became a CRC Coordinator, I observed the attendance of four problem schools (Ghoghli, Kasavdahad, Pipalyamal, Nilshakya) out of the 14 in my charge, and got the teachers to follow my approach. It worked well and took much less time. Ensuring attendance is extremely important, and the approach of using local games—even if they are looked down upon by educational administrators—to combine learning and play, has now been taken up by other schools in my area. Some of my classroom activities that have tied in well with learning with fun are described below.

### Teaching Fractions

While teaching fractions in Class III, I found that some students, while adding two fractions, just added the denominators and then added the two numerators. They followed the same principle while subtracting. On an average, out of 40 children, four used to do the problems correctly, 16 did not try at all, and 20 used the above approach.

Tools and material used: Thermocole sheet, coloured paper, pieces of different coloured cloth, charts of fruits, vegetables, charts, box of fraction teaching.

For teaching the concept of  $\frac{1}{2}$ , a thermocole sheet was cut into a circular shape and cut into two equal halves. To teach  $\frac{1}{3}$  or  $\frac{1}{4}$ , a square cloth or paper was cut into three or four equal pieces. Then local fruits like guava were cut into the required number of pieces. All this was accompanied by questions to test whether the basic understanding of a fraction as less than one (which was what was to be taught, numerator being larger than the denominator was not to be covered), was being conveyed.

Three circles were cut out of thick paper, and three equal parts marked out. Now one part of the first circle, two parts of the second and three parts of the third circle were marked by thick lines and shown what parts of the whole circle they formed ( $\frac{1}{3}$ ,  $\frac{2}{3}$ ,  $\frac{3}{3}$ ). After this, the children were given home tasks related to making such circles and marking their parts indicating  $\frac{1}{4}$ ,  $\frac{1}{5}$  and  $\frac{1}{6}$ . Most of the students did this homework successfully. This was reinforced with a simple exercise: Draw five circles on a thick paper. Divide each into six equal parts. Now paste over with paper of five different colours, one part of the first circle, two of the second, three of the third, four of the fourth and five of the fifth circle. Is the denominator the same? Yes. Then the learning is reinforced with questions on the activity. This is then extended to explaining fractions of different magnitudes: A thick paper is marked into five equal parts. Four parts are pasted over with one colour and the remaining one with a different colour, to show  $\frac{4}{5}$  and  $\frac{1}{5}$ . Which colour covers more area? By how much is this greater? What symbols are used to represent greater than or lesser than?

Reinforcing the learning is structured around the following points:

- 1 to 9 are non-fraction numbers.
- $\frac{1}{2}$ ,  $\frac{1}{3}$  and so on are fraction numbers.
- A fraction is used to represent a quantity smaller than 1.
- The meanings of the numerator and the denominator.
- While reading a fraction, the numerator is spoken first and then the denominator.
- The number indicating selected parts of the whole is written on the upper part.
- If the denominator is the same for different fractions, the one with the bigger numerator is the bigger fraction.

It was then simple to extend the approach to adding fractions: Ten parts are marked out on paper;  $\frac{2}{10}$  (two parts) were pasted over with one colour,  $\frac{3}{10}$  (three parts) with another colour and  $\frac{1}{10}$  (one part) with a third colour. How many of the total parts are coloured?  $\frac{2}{10} + \frac{3}{10} + \frac{1}{10} = \frac{6}{10}$ . This is then followed by the standard method of doing the sum with proper steps. A similar approach works with subtraction. My testing showed that close to 95% of the students understood the concepts well.

### **Solving Difficulties of Learning ‘Multiplication’**



One of my colleagues, Kamala Tandel, had a problem with teaching multiplication in Class III: why is the answer 0 when some figure is multiplied by it, and why is the answer the same number when it is multiplied by 1. I developed an approach to clarify these questions of the children.

Four small plastic bottles were fixed on a thick paper. Three toffees were put in each bottle and closed. The children were called to open them and count one by one. Then they wrote down the results:  $3+3+3+3=12$ ; 3 appears 4 times and the total makes 12, that is  $3 \times 4=12$ . Then the demonstration is repeated with three bottles, with four toffees in each. The total is the same. Therefore, change of place makes no difference in the result. The exercise is repeated with different numbers, using seeds for larger numbers like eight or nine. The children had to open the bottles, count the seeds, and write down the answers. Interchanging the numbers results in the same answer. This is nothing but the simple principle of repeated addition, which is appropriate at that age.

Four match boxes are then fixed on to paper. One marble is placed in each. In another bottle four marbles are placed. Children are asked to count and repeat the earlier exercise. What is being done is all four marbles are combined into one bottle, and therefore if one bottle only is used, all four have to go into that bottle only, and therefore the answer will be the same. Now seven bottles are placed in a row with no marbles in them. On the other side there is no bottle to receive the contents of the seven bottles. The children go through the exercise.

There are no marbles, that is 0. This means:  $0+0+0+0+0+0+0=0$ , or  $0 \times 7=0$ . This approach worked very well, and all children could answer the questions put to them, correctly.

Similarly, I have tried to teach geometrical concepts like point, angle, line segment, tangent, using simple charts made from bamboo sticks. I believe in finding out the results of whatever I do and so I always test the children before and after I try out something new.

## RAMESHCHANDRA M THAKKAR

It is important that a Class I child gets a pleasant introduction to the teacher, the school and the syllabus. I have been working in Class I for a long time, and my observations indicated to me that a proper introduction to the syllabus was very important. I consulted experienced teachers and studied the reference literature that was available.

### Improving Mathematics Learning by Establishing Linkages with Other Subjects

Though this work was based primarily on the Mathematics textbook of Class I, I drew on articles in monthly magazines like *Jeevan Shikshan*, *BalSrushti* and *BalMurti*, and on *Divaswapna* by Shri Gijubhai Badheka. I realised that the children spent about 45 minutes every day on mathematics. I also found that most competencies could be related with those of other subjects. The assumption I made was that when there was a gap in the math teaching, they would come across examples which had already been used in math, in the other subjects. This would reinforce learning at all levels, but especially in math. I did an exercise to correlate the competencies and then prepared my teaching material. I picked up one competency and decided to devote two days to it. I asked the children to collect bottle caps, marbles and pieces of bangles. I gave them an oral test, and on the basis of the results, divided the children into two groups. Group A (the poorer group) was taught using the new method and Group B was taught using the traditional method. Then when I found that Group A had improved, I taught Group B.

The final timetable after the initial experiment was like this.

Period	Subject	Competency	Statement of competency	Time (mins)	Time for correlation with math
1	Math	1.1.1	1 to 10 with the help of objects and pictures	30	10 minutes
2	Language	3.1.1	Letters identified separately and from words	30	10 minutes
3	Story telling		Rat with seven tails	30	7 minutes
4	Drawing		Making pictures of flag, ball, staircase, sun	30	8 minutes
5	SUPW		Making clay beads	30	10 minutes
6	Environment	4.1.2	Identification of common birds, animals and insects	20	5 minutes
7	Music		Action song	30	7 minutes
8	PT		Light exercises	30	8 minutes

I used examples from the other texts to teach counting. For example, the hen which laid eggs, counting with marbles. The students enjoyed this and there was a sort of competition among them to count. For the correlation with Gujarati, the students were shown a big circle with the letters of the alphabet written inside it. They were asked to identify a letter and draw a circle around it. The same exercise was repeated, but with the instruction being to draw squares. Then they were asked questions like, how many Ns are there in the circle? How many Rs are there?

### Correlation with Story telling

I started with the well known story of a mouse with seven tails. Many students picked up the basic number very well and some of them came forward to tell the story again. Variations introduce some fun. The children were then asked to make different pictures; I also made pictures using colour chalks. They were asked to count the number of pictures. A number of questions add to the fun element of the exercise. In SUPW, the students make clay beads, and so a counting exercise was introduced. The children extended the activity to making garlands of different numbers. As part of Environmental Science, the children were shown different puppets of animals and birds and insects they could identify. Therefore, I designed questions related to numbers, and while showing the children the puppets, used these to guide the discussion. Thus, all the subjects were correlated with the basic counting competency of mathematics. And I found that such correlation certainly helped in attaining better performance in mathematics.

### Sharing Our Experiences with Other Teachers

A group of my teacher friends and I got together and prepared a 111-page book, “*Shikshak Dwara Shikshan Vikas*” (Development of education through teachers). The book deals with the making and use of competency-based TLMs. About 1000 copies of this book were distributed to teachers free of cost. Our teacher friend, the late Dahyabhai Katariya, one of the authors of the book, had prepared about 100 low-cost TLMs for science. We had used these TLMs during our training sessions, and so the book had examples from our practice. At that time—a few years before DPEP was introduced—we were associated with the MS University of Baroda which wanted to work on management of TLMs in primary schools. An NGO, ‘*Swadesh*’, was also associated, and it provided us the financial resources to print the book. The volume was received enthusiastically, since its particular focus was on TLMs for difficult competencies of math, language, environment and science. The book listed the competency and defined it, described the making of the TLM, the materials required, the relevant reference literature, and so on. Many teachers have used DPEP and SSA teacher grants to develop the TLMs described in that book.

### Making a Manakaghodi (abacus) for Teaching Place Value in Mathematics

After learning the numbers 1 to 9 in Class I, when the students progress to two-digit numbers, it is very essential that the concept of place value becomes clear. Using a traditional *manakaghodi*, in which three beads were placed in the units, the tens and the hundreds places, I asked the students what number resulted. The majority called out “three”. To solve this problem, I taught the students using a song on place value, number cards, and a modified, self-made *manakaghodi* (not described here). In this activity also, I gave a pre-test and divided the students into two groups according to their performance. I did period-wise teaching of both the groups, and studied the results. This experience was presented in many teacher meetings, and has been used by many teachers. Over time, I have made many modifications to my *manakaghodi*. It is now used to teach place values up to 10,000, in Classes I to IV.

### A Model on the Waning and Waxing of the Moon

Two lessons in the environment textbook of Class IV have content on the sky and bodies like stars, comets and planets. The textbook does have pictures on these, but they are either inaccurate or not very clear. In 1997, I came across some rejected TLMs. Out of sheer habit, I sifted through the pile. I found a cardboard model of the moon’s various phases, presumably made by some teacher. I liked the idea and conceptualisation, but felt that it needed to be better. I spoke to two teacher friends and an electrician in my locality. We worked together for four days and came up with a satisfactory

model, which used a light source and a screen to project the different phases of the moon. This working model has been found to be useful while teaching the changes one observes in the sky.

## **MANIBHAI R VAGHELA**

My wife and I started our teaching careers in 1972. The then DPEO Shri Buch told us, "Just remember you should try to reach school before the stipulated time and leave after it closes. Try to be an ideal teacher; no officer will be able to harm you and you will leave your service with dignity." This inspired us a lot and we have never disregarded the advice.

### **Learning the Initial Lessons**

My first introduction to schooling was with a very honest, committed and talented HM Shri Yakubbbhai Alambhai Sheikh. He taught me lessons on ethics and values. He had managed to keep the school going when it was about to be closed. I did not want to let him down. The registered number of children was 115 boys and two girls. There were five teachers. The village was divided into two communities, Rathwa and Kolcha. Adult literacy was negligible, superstitions and social evils like alcoholism and gambling were rampant. The reason for poor enrolment was that people would send only one child to school, and retain the other children for farm and household work. Very often, children also worked for moneylenders. Initially, I was scared of the weapons people carried. But I was advised that it was safe to engage them in a dialogue. Gradually the people began to talk to us; we learnt their dialect, and our simple and direct approach appealed to them.

### **Efforts for Enrolment**

When I felt that some ground work to prepare the community for specific educational issues had been done, I wanted to arrange a cultural programme to attract people. I asked my HM's permission to hold a programme on the Republic Day, 1976. To my surprise, he refused. His religious background forbade such an activity. Finally, after some discussion, he gave us permission to work on our own. We organised a small cultural programme with dances and drama, to which the entire village was invited. People were surprised as they had never seen or heard anything like this before. One of the parents gave Rs.12 as a prize for the children. For me their new attitude was more valuable than the amount. This was the foundation of my later success. People started developing a positive attitude towards schooling and education. In the following year (1977), the registered number of children reached 219, and the proportion of girls also increased. Our habit of being punctual about timings also helped us in the overall impression we communicated to the village.

After three years I shifted my residence to the village. Initially it was very difficult. However, people used to come to my place at night to sit and talk. Such informal meetings and sharing strengthened our relations. Gradually the school improved so much that children from twelve surrounding villages began to come to our school (Rumadiya, Rodadha, Kanasava, Dungargam, Dhamanava, Vantada, Tava, Dhanpari, Bhumasvada, Nani Tekari, Panvad and Tani Titodi). Not a single child of school going age was out of school now in these villages—after about five years of effort. To maintain our contact with the community, we decided to visit one street every day at 8.30 in the morning. Apart from solving any problems that could potentially affect education, one major advantage of my visits was that no child roamed here and there whenever I moved around. They used to sit down for their homework. The problem of retention was almost resolved, with most of the children, especially the girls, continuing for at least four years. We monitored attendance, and managed to maintain an average of 90%. There are many blocks to universalisation, but it has to be done, and done from the village upwards.

Gradually people expected me to attend the auspicious as well as the sad occasions of the village. This helped me in gaining acceptance as a person with authority. An example: whenever someone died, the tradition was that everyone who joined the funeral ceremony carried a piece of wood in his hand. At the cremation house, these pieces would be thrown into the pyre. I also started to carry a piece of wood during the funeral ceremonies. This made a great impact on the people. I was called upon to provide advice and arbitrate whenever there was a conflict.

To make learning more interesting for my students I started to use various methods like projects, stories, picture stories, dramatization, games, children songs, and practical experiments. The results were bound to improve. Those who passed out from Class VII used to be among the rankers in the high school. Because of this, children from the surrounding villages also tended to migrate to our school. The teachers in these villages requested me not to admit their children. I accepted their request but helped them to improve their own educational standards.

The 1976 Republic Day programme became a local institution over time. People from the surrounding villages came in large numbers to watch the programmes. Usually about 4000 people used to crowd into the school compound. We gradually included local items like a dance called Jangi Dhol, a traditional tribal dance. During the programmes, appeals were made for help with the physical facilities of the school. By 1992, with 551 students, the school facilities were under strain. But with community participation, they were improved.

### **Education of Girls**

We decided to base our work on activities. These included competitions in embroidery, *mehandi*, *garba*, *rangoli*. The intention was to train girls in some economically useful cottage industry skill. The activities have definitely increased the enrolment and retention of girls in school. The work also generated some income for the girls. My wife took up the responsibility for this venture. We then felt we had to do something to make the girls and the community proud of the newly learned skills. We began to hold exhibitions of the articles made by the school's girls once a year. This was one important avenue for sales.

We were also on the lookout for specially difficult cases, the so-called 'unreachables'. An example follows. There was a girl named Jasoda K. Vankar in Class II. Her parents used to work at a brick-making site for six to seven months a year. The site was three kilometres from the village. This hindered the girl's studies. This case was all the more tragic as the girl used to enjoy schooling. After studying the problem, I decided to offer my services. I had a bicycle. I began to go to the site everyday to bring the girl. After school hours I again used to cycle back and leave the girl at the site with her parents. This went on for a long time, till the parents realised the need to stop the girl from dropping out. This girl did not disappoint me. She studied quite well, qualified as a teacher, and is now employed. Many girls have followed her example. They have completed their higher education and are serving in various capacities. Such incidents contributed significantly towards changing the attitude of the society. Today, in the entire group of tribal villages, girls' enrolment equals the enrolment of boys.

### **Improving Quality**

I realised that if classroom teaching quality had to be improved, some alternative methods were required. I discussed the idea with my colleagues. The idea was good but some money was needed to start anything. I started with whatever we had. I prepared a story in a drama form. The popular story of a cap seller and monkeys was performed with paper caps. A boy was made a cap seller. The

children enjoyed the activity. Now they wanted me to “perform” every story. We prepared projects on all popular stories. Some village artists came forward to help with painting the stories; the carpenter contributed his labour to the preparation of implements. The children supplemented these with different models made from paper and clay. These activities cumulatively made the learning process fun.

### **Physical Development of Sama Primary school**

When I was transferred to this school, I found the situation similar to the ones I had faced earlier. But the added problem was the negative attitudes of the teachers and the HM. I mobilised money for the school, but the HM spread rumours that I was swindling the money. I had to bring the donors to the school and show them the work done with their money. This slowed down the pace of work. Once when I asked the HM for chart and drawing paper, he sarcastically told me to bring it from either my home or my previous schools. Such a response pained me. I bought drawing paper with my own money and decided not to ask for anything from the school contingency grants. I prepared charts, pictures and tools for classroom teaching and started my activity-based teaching. I also came into conflict with the HM when I suggested we should spend money on a *BalMitraVarg*, before buying fans. One teacher agreed with me. First, we donated Rs.3000 from our pockets. From one of my earlier villages, I called two students whom I had taught from Class I. They had done a course in Art. They helped me in preparing the room and painting the school. When the villagers saw this they felt that some ‘real’ work was being done in the school. Then the people’s donations started coming in and we could equip the classrooms with material like charts and pictures.

### **Introducing Uniforms**

I personally believe that uniforms create an identity which children like. I decided to introduce uniforms for the upper primary classes—V to VII. There were some protests. But we made efforts to mobilise uniforms from donors. Once we had gone to buy some uniforms for girls from the money we had received as donations. We bought ten pairs. When the owner came to know of our activities, he was moved and gave 100 sets of cloth. These were distributed in the presence of the donor and the BRC Coordinator. For the last eight years, the donor has been providing this help.

Many incidents have forced me to reflect on my educational practice. I will narrate just one. The tribals with whom I worked hardly cared for matters like examinations. Often they took their children to the weekly market instead of sending them for exams. In 1978, a Class VII boy, Athiyabhai Rathva went fishing on the day of the math examination. He had learned that avoiding exams was all right. His family did not know where he was. After some searching, I found him fishing at the river. I got very angry. I scolded him for going fishing when there was an annual exam. I slapped him. My wristwatch fell and broke. I felt very bad for being so strict with the boy. Perhaps the boy had not known he had learned something wrong. But he changed, and today is working in the Indian Railways. Whenever he meets me, he recalls the incident and says it made him determined to study.

## ANAVAR M VHORA

I started my career as a primary school teacher in 1981, in a tribal area. The first problem I faced was that of language. I had to learn their dialect. I then began to teach children in their own language. The situation inspired me to prepare a dictionary of standard Gujarati and this particular tribal dialect. I worked on it but due to financial constraints, I could not publish the document. I alone used it, but when I was transferred from the school I handed it over to my successor, who used it.

In the next school, I noticed that the work done in science was not satisfactory. The laboratory was in the shape of a broken 'science box'. I made this my target. With the help of children, parents and some of my own money, I revived it. We took part in a district science fair and amazingly won the first prize. The next year we participated, but could not win. But again in 1990 we won the first prize and also participated at the state level. Due to this, my school has become known for quality science education. This recognition motivated the children and the community.

In 1991 I was again transferred, but in this school as well I took up special activities for science as a way of getting an identity for the school. I converted my innovative practices in the classroom into essays, so that others could access them. This school has won prizes at the district level regularly, and once at the state level science fair.

I used to read textbooks of Classes I to VII and then tried to look up relevant science-based articles in popular magazines and newspapers, and science magazines like *Scope*, *Wavelength* and *Vigyan Darshan*. Sometimes movies also helped. For instance, *Jurassic Park* was an important source. Later on, I have used *Minority Report* as well. I have also drawn on some of the gadgets I have seen in James Bond movies. I used to talk to students about the science in many of the gadgets or scenes. I have thus drawn on these resources for examples, so as to enrich the textbook. This approach works like a magnet in keeping students involved in the learning process. The class enjoys science learning.

I take about 15 minutes in the prayer assembly to bring in outside information and illustrations and some information which might at first sight appear to be irrelevant. However, it is still not out of place as science is holistic, though we try to study the subject in fragments. Such holistic pictures are then used to introduce new topics or lessons. Also, I take care to present proper evidence for whatever I present, so that children do not see it as 'a bluff' or 'trick' that is being pulled on them.

I have used my photography skills in teaching. I work as a professional photographer during my vacation. My favourite topic for photography is naturally "children". I try to express the various moods and states of children. My skills come in handy when teaching some topics like the one in Class V called "*Bilori Kach ni Ramat*" (game of magnifying glass). I use different kinds of lenses that I have to teach such topics. Class VII has a lesson on reflection of light. First I draw a distinction between natural and artificial sources of light, give examples of both and talk about their features. The next feature is the intensity of light. I use conventional approaches to teach that light spreads in linear manner: to see a lighted candle through a straight plastic pipe and curved plastic pipe, or three cardboards with pinholes in them aligned in a straight line. Simple and well known, but the linkages with sources and intensity of light are important. I also teach the qualities of transparency, translucence and opacity with actual materials. Sometimes, with certain concepts, mythological stories help. Children know stories from the *Mahabharata*. *Abhimanyu* was killed by betrayal, and when *Jaydrath* humiliated the dead body of this warrior, *Arjun* took a pledge to kill him before the next sunset. *Jaydrath* is hiding in the army and suddenly it appears as if the sun has set. *Jaydrath*



comes out and mocks at *Arjun* asking him to “sit at his own cremation”. Suddenly the sun appears, and *Arjun* kills *Jaydrath*. The myth says that Lord Krishna hid the sun. Perhaps it was a solar eclipse? Then it is easy to take up what is an eclipse and how solar and lunar eclipses happen.

My approach to teaching is very simple. There will always be problems and constraints in the way. All that one needs to overcome them are interest and a willingness to do something. Secondly, use your own areas of interest as resources. The bigger and graver the problems appear to be, the simpler the solutions. Finally, what is required is to reflect on past practice and employ the outcome to understand current problems well.

To help my children learn difficult concepts I undertook experimentation on my own. One of them was ‘percentage’. Earlier this topic had been taught in Class VI but in 1989 it was introduced into Class V. This concept is taught after teaching fractions, ratio and proportion. My experience told me that this topic was difficult for children of Class V. I began with a test exercise on the basics (fractions, ratio and proportions). I divided the children into two groups of 25 each, based on the scores. In one group I taught by the regular method of textbook explanations and exercises. For the other group I used teaching aids and more participatory methods and also used exercise books prepared by private publishers. I divided the entire task into 14 periods; the first three were for the test and clarifying the required basics and the last three for tests and remedial teaching. While clarifying the basics I also ensured that they remembered the tables at least up to 10 and also 11 (since it is easy). I began with charts and pictures showing various things in different shapes, emphasising that comparing them with a visual glance was difficult. (In a box I arranged arrows of different sizes randomly and asked the children to point out the bigger one; without appropriate skills in judging the proportion the children gave the wrong answer.) From such visual comparison I moved towards a complicated example requiring mental comparison e.g. asking them if some one gets 490 out of 700 and another student gets 520 out of 800, whose score is larger? Here too the children couldn’t answer correctly. Then I related it with earlier illustrations pointing out the ‘base’ (unit) that was finally used for comparison e.g. to compare arrows length of the base line was important. I explained that when a base of ‘100’ is used it is called percentage, and there is a method to find it. Then I gave a lot of illustrations. I then taught them about 0%, 100% and more than 100% by giving examples. Thus I developed the concept further by giving many illustrations and exercises and also taking a test of smaller sub-units. Here I avoided the usual practice of giving most of the sums/exercises as homework after explaining a few examples in class. Generally children are not motivated to complete such work on their own since they are often stuck without home support. In the eleventh class I took a test in both groups. I found a good outcome in the experimental group, but had to do some remedial teaching in the next two. The last class was devoted to testing.

## **Science Teaching**

Up to Class IV children study science as EVS. From Class V onwards science is taught as a separate subject. My observation is that children find this transition quite smooth, but in Class VII the difficulties begin. The classification of lessons into the three sub-branches of physics, chemistry and biology is also introduced at this level. I wanted the children to develop an interest and the right attitude for learning science, so that they could cope with the difficulties. I thought of doing it with the help of small experiments. I began with lesson 1: forms of matter. I studied all the textbooks and supplementary material prepared by private publishers for Classes III to IX, to identify material for this topic. I prepared a list of experiments from all these books. I also took a test of the children and divided them into two groups of 25 each. One group was taught using the usual classroom method,

and the other was exposed to the experiments and charts approach. I borrowed any instruments I needed from a nearby high school.

I planned for a total of 13 periods, and divided all the concepts into smaller units. My explanations include use of simple charts on carrying out experiments. To teach 'what is an element', I begin with a chart showing objects or articles made from plastic in a number of photographs. Then I explained that these objects are made of plastic. Therefore, plastic is a material from which they are made. Then I show articles which are made of two or more types of material like windows: from iron and wood. Then I show trees, remove the bark, and explore the trunk of the tree. Similarly with powder to explain the concept of particle/ basic matter of which a thing is made. Another chart shows pictures of all the famous scientists from India and other countries who contributed to the development of the concepts. The chart gives details of such individuals and their contribution. Then I also use very simple games to help them imagine the idea. For instance, I ask the students to stand very close to one another, linking their hands and legs with their partners on both sides, and then ask them to make an effort to move apart without untying their hands and legs. Naturally the students are unable to move. With this I explained that in a hard object, the particles are so close and well tied that they cannot move apart from one another. The same method was used to teach the arrangement of particles in air and water (liquid), explaining free movement and limited movement. In the next phase, I explained how temperature reduction or increase and pressure variation affect the form of elements. The scientific instruments to measure temperature and pressure, thermometer and barometer, were introduced. I concluded the study with an explanation of the spread of light weight particles in comparison with that of heavy particles, by conducting two experiments. For one experiment I used a fused tube light bulb. It was cleaned carefully from the inside, to make it into a transparent thin glass tube. Three girls were asked to demonstrate under my supervision. Two girls stood at either end of the tube. Both girls were asked to insert a cotton bud at their ends and cover the ends immediately with a plastic bag and rubber bands. One bud had been dipped in HCl (Hydrochloric acid) and the other in NH<sub>4</sub>OH (Ammonium Hydroxide). The children observed. Gradually, near the bud of HCl, a white ring was formed. I explained that NH<sub>4</sub>Cl (Ammonium Chloride) was formed due to the interaction of fumes of HCl and NH<sub>4</sub>OH. Then I asked them why the ring was nearer to HCl bud and not in the centre. I explained that the particles of HCl are heavier than those of NH<sub>4</sub>OH and therefore the ring is formed nearer to HCl. To build the idea further another experiment using KMnO<sub>4</sub> was carried out. Thus the lesson was taught by developing it in a sequence, using small experiments such as these, supplemented by charts, illustrations, and information on the scientific development of the ideas. Besides this, the students were trained to conduct the experiments. This helped in inviting active and long lasting participation. I have carried out many other activities of a similar nature. For example, the lessons on light (lesson 6: light and lesson 7: reflection of light), offer the teacher a lot of scope for creativity, but I always link the lesson to what was done in earlier classes—for light, the building is on relevant lessons of various grades like lesson 26 of Class I (sun, moon and stars). I have no doubt that teaching science at the upper primary level through student involvement in experimentation will help children overcome their difficulties when they progress to a level when all of a sudden they are confronted with an extra load to understand.

## **RAJESH M BANKAR**

I am working in a Zilla Parishad school in Pune district, Maharashtra. With the purpose of inspiring children to learn on their own initiative I started a “weekly self assessment” experiment with my Class V students. I felt that this would help in removing the fear of exams and help children develop confidence in their learning. I used a group approach. Class V children are divided into five groups at the beginning of the academic year. Every week, the topics/subtopics that have been taught are allotted to the groups; the groups have to prepare a “questions list” from that unit. They are instructed not to take questions from those given as exercises at the end of the chapters or lessons in the textbook. Each child in the group is supposed to prepare questions along with the answers, and take them first to her group. The groups are not allowed to borrow questions from each other.

On the following Saturday each child is provided with a ruled sheet of paper. I write the questions brought by all the children neatly on the board and also classify them under certain headings like fill in the blanks, answer in one sentence etc. This is then treated as a test of 20-25 marks. The students are given 45 minutes. Then the answer sheets are given to students themselves for correction, but care is taken to see that a child doesn't get his/her own paper. Under the guidance of the teacher, students check the answer papers. A note is then made of all the marks in a register named ‘weekly self evaluation’.

The major outcome of my activity was that gradually the exam phobia decreased since the children were solving the questions prepared by their own peers. The students studied with great concentration and dedication because they wanted to frame questions which other students would find hard to answer. They developed skills of framing questions and presenting them. Students could see their answer papers being checked by other students. This made them aware of the mistakes that they used to make; subsequently they started to take precautions. The concept of self-learning got an impetus. Students started to study on their own at their homes. This helped in generating a positive attitude towards the school. I could judge the progress of the students well, and it became easier for me to plan remedial classes for students on the basis of the evaluations.

## ANANTA BAODHANKAR

### ***Upasthiti Dhvaj***

The problem of poor and irregular attendance is a persistent problem in not only backward rural areas, but also in relatively better off rural areas. Since irregular children usually do not get parental support at home, missing out on school causes severe problems in the continuity of learning. This leads to uneven learning and an inability to meet the expected standards. I was confronted with this problem. I came up with a simple idea. Children were informed that a class as a whole would be rewarded for good attendance with a flag called “*Upasthiti Dhvaj*”, which they could put up in front of their class. The task of monitoring the attendance was given to children, with the class monitor taking up the responsibility for recording. The class with 100% presence got the chance to display the flag. The outcome of this ‘trick’ was that after some time, I had to make seven flags. Class attendance is now very satisfactory.

### **Weekend Question Box**

Once continuity in learning was there, I found that children would often want to ask questions, but hesitated to do so. Many times I found them murmuring about their doubts amongst themselves. I have seen, sometimes, they even discuss norms/rules/teacher behaviour amongst themselves but do not talk to the teacher. So with the idea of providing children an open forum for questioning which does not push them too much in public, I started a ‘weekend box’ in school. Children drop their question-chits into this box. The questions can relate to the syllabus or anything else connected with the school (including parent-school relations). On an average, every week I get about 25 questions. The norm is all questions are answered on Saturday in a general assembly so that the questions, and the school’s answers, are available to all children. This activity was discussed so much at home that parents got interested in it. Many parents have started coming to school on Saturday mornings to listen to the questions their children ask and the answers. In addition, parents have started putting their own questions.

An extension of this activity is the monthly discussions with various professionals and people performing certain roles in society. Some of the themes that appear in primary school lessons are best illustrated by exposure of the children to real life interactions. On this assumption, I invite two or three persons (doctors, lawyers, postmen, police functionaries, bank officials, *sarpanch*, *gram sevaks*, businessmen, officers, army men) every month for discussion. Children are informed in advance and have to prepare the questions that they would like to ask the visitors. The outcome I have noticed is that is children’s confidence improves and so they do not hesitate to ask questions.

### **Teaching Children to Communicate through Postcards**

Going one step further, I thought asking questions could be extended to communication of questions and ideas to distant receivers. The postcard offered a good medium. The objectives fixed were the following: communicate with relatives, maintain relations with other students, express ideas about your own school, put questions to or learn to communicate with government.

Children are asked to do the following:

- (a) Decorate or draw on postcards on their own and then post them as greeting cards for relatives.
- (b) Write to education officials about the activities they do in school.
- (c) If there is a problem in the village, identify the relevant official and inform him about the problem; such problems have mainly related to water and electricity.
- (d) Write to children of schools in nearby village about the syllabus and activities in the school.



### **'Yoga for Recall' Exercise**

Though yoga has been introduced in all schools in Maharashtra, it is carried out only once a week in the Physical Education class. By the next week's class, children forget what they did the previous week, since there was no mechanism for regular practice or follow up. I found this similar to what happened with some subjects, where, in the absence of support in the home environment, the students were unable to connect what happened in the previous class with the present. So I linked yoga with subject teaching for the first five minutes of a period. For example, as soon as the history class starts, all children are asked to do deep breathing three times with the sound of *Om*, as taught in the yoga class. After that they are asked to be silent and recall what was learnt in the last history class. This helps in bringing their attention to linking of previous learning with the present, and also in using some of what was taught in the yoga lessons. I have found that gradually concentration of children improves as well.

## YOGESH K CHAUDHARI

I work in a Marathi-medium school. The students often complained that they very quickly forgot what they had studied. I used to feel that 'only teaching' is not the way to develop rural students; some other ways of learning should be planned. There was another problem. Around three years ago the number of students dropped alarmingly. This was a cause for worry. One day I witnessed a sad incident in class. Students were eating their lunch together; one girl hadn't brought her tiffin box. She told me, in vague words, that there was some problem at home. All the other girls knew her history and what had happened. I realised that there was a lot of informal interaction which a teacher does not understand or come to know about. I happened to meet a management person around this time, and he spoke about a 'quality circle'. I interpreted this to mean a group working together to solve any problem. I felt that this could be a good way of letting children learn from each other as well.

I studied the idea of quality circle and made a structure for implementation. A "Group Study Circle" (GSC) is a group of students. A class is divided into four or five such groups. Each chooses a group leader, who is responsible for conducting the discussions. The leader is changed every month, so that all students get a chance to exercise leadership. This group study circle gathers at pre-decided times, with specific purposes.

I changed the timetable to accommodate the Group Study Circle structure:

Up to 7.00 am: Morning session

10.30 a.m. to 12.00 a.m.: Study Hour

12.10 p.m. to 5.10 p.m.: Regular school

5.15 p.m. to 6.30 p.m.: Evening session.

The morning and evening sessions are for co-curricular activities. From the month of October which is the beginning of winter, the morning session is called the Winter session of GSC. On the first day, I ask the students to collect pieces of wood and paper for a fire. But I do not light the fire. I involve them in warming up exercises; then I ask them, "Is there a need for a fire?" The answer is always "No!" I then teach them various activities in physical education: warming up, aerobics, gymnastics, yoga, meditation etc. I have found out that they practice these activities at home too. The current year is the fourth year of this pattern of activity.

The purpose of the study hour is education through discussion with one's peers. All the students pose problems individually, on any subject. The group leader writes down the problem. After that, students discuss each problem and find out the solution. The students learn about various academic topics. The students are not always correct in their conclusions, and so the teacher has to be very alert and attentive to ensure that the students do not go away with misconceptions. The other important objective is to develop all the students in the class. I ensure this through a group Test. I tell the group leader that it is his or her responsibility to conduct the studies of the members in the group on the particular topic for the test; the marks of all the papers in a group will be summed up, and the average will be given to every member. This is used only to develop all the students and the marks are not counted in terminal or annual exams. This makes each group streamline its study procedures and maximise group averages.

I have observed the following development in my students:

- 1) Interest in study
- 2) Reading and writing skills
- 3) Personality development (leadership, public speaking, team work)

- 4) Knowledge about agriculture and social work
- 5) Sports and Yoga awareness
- 6) Spiritual education
- 7) Art (music, drawing, acting, dancing)

The experiment has been particularly successful in English language learning. My role as a guide has become easier and the students make their learning strong in their own circles. If any topic is not solved or is a hard topic, the group leader discusses the topics with other group leaders. If all of them find it difficult, they come to me and we discuss. I never tell them the answer directly. Discussion is our major goal. It is my experience that students can develop their own styles of leadership. My students now arrange programmes, games, picnics, competitions, visits and study tours through their Group Study Circles.



## **PRASHANT K GAWANDE**

I work as a teacher in the Galvha upper primary school of Yavatmal, Maharashtra. I have found that the attention paid to teaching English in rural areas is extremely poor. The argument is that learning reading and writing in the mother tongue is itself difficult for rural children. There is no doubt this is true, and education in one's mother tongue has some significance, but competence in English will help rural children improve their chances in life. I became interested in teaching rural children English in new ways. I obtained a postgraduate certificate in the teaching of English from the Central Institute of English and Foreign Languages. I have used this opportunity to pick up the idea of developing a laboratory for English teaching. The idea itself is not new, but usually a lab is used to teach correct pronunciation. The modification I have made is to develop a lab that is focused on the entire syllabus of Classes V-VII.

I have developed the English Language laboratory with just community support. The equipment in the lab includes a television, from which educational programmes are used as teaching material; a VCR with video cassettes specifically for the teachers, and also for the students; a tape recorder, with audiocassettes based on the syllabus; an overhead projector and a slide projector (for which transparencies and slides are prepared by the teachers themselves); about 170 carefully prepared charts that deal with the syllabus content; games (including electronic games) that can be used by the children for self-learning.

Other material includes letter strips, word strips, sentence strips, Formica white board, flannel board and blackboard. Everything is so arranged that children get a feel that they are in a laboratory. This sense of 'experimenting' helps them learn better. We have also added many books related to English language learning for Classes I-VII, handbooks and grammar books. The English classes of all classes (I to VII) are conducted only in this laboratory. Although the lab is in a village, teachers and parents from other districts have visited it. Any topic related to Classes I-VII English syllabus can be taught here, with the help of interesting supporting material. The lab has been appreciated by education officials, and since my results have been good, I have become a state resource person. I am now doing my doctoral studies on the development and use of such a laboratory for teaching English to Classes I-IV students.

## MURLIDHAR K JADHAV

Good handwriting is one of the foundations of all round development of children. Beautiful handwriting is an indication of the potential of children to develop as artists and painters. Most people who do not possess good handwriting tend to believe that “beautiful handwriting is god’s gift” or that it is a matter of bad luck. Generally, a teacher’s handwriting has an impact on students’ handwriting. But the following obstacles come in the way of developing a good hand.

- Carelessness on the part of the children and the teachers.
- Restlessness that doesn’t let the children concentrate.
- A lack of interest in developing good writing skills.
- Lack of opportunity for self-expression.
- Lack of home support and poor interaction among the parents, the teachers and the students.
- A lack of confidence.
- Failure to work on improving handwriting over a long period of time.

There are people (apart from those who believe good handwriting is god’s gift and those who believe that the quality of pen and ink are more important) who are motivated to improve their own handwriting. I felt if my children could fall into this category, the problem would be solved. So, I decided to improve handwriting of all my students. The three essential components were proper planning, use of motivational techniques and following up the implementation. I gave four steps to my experiment: aiming, planning, believing and working.

I started with 22 children (11 girls, 11 boys) of Class VII, with a time frame of three months in mind. These children were to form the initial core group of ‘child trainers’. The number appeared to be right given that I had to supervise, examine, and evaluate them by myself, during their initial training. After the training, every child had two new children attached to it, so that groups of three were formed. This way, the entire class went through the experiment of developing good handwriting. My focus during the handwriting classes was not on grammar or correct spelling. For these equally important areas, I added two extra periods everyday, one after the prayer and the other after school hours.

Given that one of the obstacles was poor parental involvement, the parents were asked to respond to the experiment’s ideas through a questionnaire which also gave information about good handwriting and the proposed method to improve handwriting. Similar tools were used with the students, so that some kind of a baseline or benchmark could be established for future evaluation.

The key to the method is ‘keep believing’. At the beginning of each session children would have to meditate and tell themselves things, following the instructions of the teacher. For instance, “Listen to me, tell myself that I want to be an artist or a painter. My handwriting has to be better. My handwriting portrays my character. My persistence is important.” The next step is teaching students the use of a pencil, and allowing them to practice simple strokes and letters. This was followed by sentences and other items. Thus, the focus on self-belief and providing students the opportunity to develop a belief that they can, were the only key interventions.

For evaluation, I chose the route of handwriting competitions. Alongside I started a magazine in the school that carried handwritten poems, essays and stories. This was followed by elocution/debate competitions to further consolidate the self-belief. By the end of the first month, the results were evident. It was possible to divide the students into four levels, based on their progress. The students

were then involved in the preparation of teaching-learning material like word-strips and sentence-strips. One key benefit was that idle students started to act. Three other benefits were apparent: order and cleanliness in the children's activities, significant improvement in the self-study habit, and greater levels of patience. More importantly, all the students made progress, irrespective of their starting points. Communication increased among the parents, the teachers and the students.

## LAXMI V KASTURE

I work in the Prathmik Vidhyalay, Sidko. One of the most common problems among the students in the many schools that I have seen is the lack of a good vocabulary. While writing essays or describing pictures, children are not able to use proper words. They themselves generally do not take the initiative to read on their own or to write. Rural parents also focus only on what is given in the textbook. A competency based syllabus was introduced in 1997 and the lists of competencies are detailed clearly. However, teachers generally do not focus on the competencies of area 9, which deals with developing vocabulary. Other competencies are achieved by following the textbook, but this area requires other approaches and so often gets neglected. I made efforts to develop the vocabulary of not only my Class IV children but also made this activity compulsory for all children in the school.

Everyday when we give homework to the children, I ask them to write one vocabulary exercise: "Write the name of the things used/seen at ... place." This way, one notebook is filled with the vocabulary exercises. The children are asked to wrap this notebook with the cover of their choice and it is called "*shabdkhajina*". The parents have appreciated this by saying, "You have come out with a good trick." Once I had asked children to write the names of the things/materials used in the *poojaghar* (a corner in the house where the idols of God/Goddess are kept) and in the kitchen. The parents later told me that the children picked up everything in the *poojaghar* and in the kitchen one by one and asked questions. Everyday I ask the children to write about 10-20 words. They started developing an interest in reading and even the slow learners improved. I told children that I would check their notebooks before the beginning of the annual exam and the one with the best handwriting would get a prize. This motivated them to pay attention to their handwriting as well. To add to this activity, I kept chits with a word written on each. I called each child one by one and asked her to pick a chit and say a few sentences based on the word/theme written on her chit. This helped the children express their thoughts without fear. I have extended these activities to the entire school, by making lists of activities for all the classes. My evaluation indicates improvement in five areas: progress in reading, the desire/motivation to find out something on one's own, developing the habit of reading material from outside the textbooks, the development of vocabulary (knowledge), skills in using the new words (application). Some of the exercises (which have also been disseminated to teachers in other schools) are:

### ***Class I competency 9.1.1, word target 1500***

1. Give one letter everyday and ask the children to write 15-20 words beginning with it. Words beginning with vowel symbols attached to the given letter are allowed.
2. Break down the bigger words and make new 2 or 3 or 4 words from it. E.g. *Ahmednagar: nagar, Ahmed*)

This exercises should be given only as homework.

### ***Class II competency 9.2.1, word target 2000***

Everyday 10 words are to be given, adding up to about 2000 words in a year.

1. Give a simple topic and ask children to write the words associated with it. Examples are: different animals, birds and flowers, villages, grains, things used in the *Poojaghar*, things at home, games, names of girls/boys, colours, names of round objects, and so on.
2. Add the relevant *pratyaya* (prefixes/suffixes) to make new words; e.g. *hajar-gairhajar* (present-absent), *lekhan-sulekhan* (writing-good writing). There are many exercises in Class II for learning of *pratyaya*, which can be used.

3. Break down the bigger words to make smaller words.

Similarly at Class III (word target 3000) and Class IV (word target 4000) levels, exercises like writing synonyms, opposites, names of herbs, religions, religious books, saints, rivers, writers, local officials etc. can be given.

### Vachan Pustika

Another relevant activity is that of making reading materials. The children are asked to cut the material (headlines) appearing in the newspapers and stick them on to paper. I give them the nature of the topics about which headlines can be cut. The compendium is called a *vachan pustika*, and is kept in a cupboard. Whenever the children feel like reading, they can take it out. This activity is done in groups. Once the children are instructed well, they are able to do it on their own. I did this for Classes III and IV. Sometimes newspapers focus on a single topic for many days and the collection makes especially good reading material. I have classified the subjects into various categories, like moral stories, sports, values, *guru-shishya*, culture, science stories, herbal plants, the problem of water shortages, and so on. The Class IV students prepare about nine files every year. I ensure that topics like crime, suicides and politics are not given. Also, I generally try to find out which newspapers children get at their homes before giving them any topic.

### Eating Habits

The parents of young children often complained that their children do not eat vegetables. So I did an activity for Classes I to IV. I declare “*Annavishyak Jagrukta*” week/ fortnight/ month, with the help of the parents. The homework is, “Tomorrow’s tiffin will have (name of vegetable).” Everybody, including the teachers, would bring the same thing the next day. Then the teachers would discuss the nutrition value of the vegetable and its other features. The parental feedback has been very positive.

### Supplementary Exercises

I feel that in schools teachers generally focus on questions-answers related to poems/prose, but there are no additional activities about the lesson. I therefore give exercises/homework to my children not just about questions related to lesson, but also about different activities that they can do. For example, after teaching the poem “*kaunachim kaunachi?*” (about self), I ask the children to write down the names by which their mothers address them, stick pictures of a child and its mother, and so on. They are told collect the pictures from advertisements; or to use pictures of animals. A similar exercise done during *Ganesh Utsav*, is the collection and pasting of *Ganesh* in his different *roops* (forms). Another example, linked to social studies, is the collection of the pictures of famous temples around Nasik. These activities involve pasting cut-outs on display paper, and the children enjoy them. To teach math, I use daily life transactions in a ‘bazaar’ which I have created in the classroom. I keep various things in small baskets. The concepts of weight, addition and subtraction, and other mathematical operations, are taught through the ‘bazaar’. I also place many games in this bazaar, so that the children can play by themselves. One example is the *Ghar-Khidki* (house-window). This is basically a card board house which has many squares with various letters written in them. Small windows with various numbers of squares, like two squares and three

squares, with different letters, are kept separately. The children have to pick these windows and try to fix them on different parts of the house to form meaningful words. This activity is usually done by groups of five or six children.

## NARENDRA B KHAIRNAR

I started my teaching career in 1996. My first appointment was in a tribal village. My current posting is also in a similar school. The major problem for the children coming to school in this Nandurbar area is that of the difference in the language spoken at home and the official language to be learned in school. The children would know only their home dialect, and use this in school. They couldn't read what was written in the textbook even after I taught them the letters several times. I used to teach the Marathi language and their dialect in sequence to make them learn the relationship, but it did not work. This problem was evident in all the grades, from I to IV. Once, while struggling to help a child read something from the "*Bal Bharti*", I noticed the child started to read a few words correctly. On probing, I came to know that the child had learnt just on the basis of the similarity in the shapes of word. Those words were read by recalling the shape and the associated sound. After realising this, I thought of using the tactic for all children.

I first read the *Bal Bharti* for Class I thoroughly and classified the words into single letter words, two letter words, three letter words, four and five letter words and words with conjoint letters, for each of the lessons in the textbook. The classification for each lesson was written down on a separate sheet of paper. With this preparation I began the language lessons in the classroom. First of all I wrote down the words of the first lesson on the blackboard and read out/pronounced each word loudly. Initially I just kept on reading each word from a list of two and three letters words, one by one, and asked children to recite after me. Repeatedly, they were to see the word and then speak it out. What I noticed happening was that the children memorised the sound of a letter and associated it with its shape. All this while I did not introduce them to specific letters. Then I prepared word strips for each of the words from the lesson being taught. I showed them the strip and pronounced the word; at that time I pointed out the similarity of shapes with the words written on the board. After reading the words written on the blackboard again and again, children could read the words by remembering the shape-sound combination. I allowed a gap of two to three days before the next lesson. The sequence of activities was repeated. This way I completed 10 lessons from the *Bal Bharti*. Then I introduced them to the letters and syllables. I found they did not face any problems in learning. The children had learned both the consonants and the vowel sounds and symbols. So it was easy to build on their knowledge of the vowel symbols. The approach was similar for joint letters. After this was done I focused on the meanings of words, but with the words drawn from the dialect. I wrote a few words and the children could read them on the basis of the shape of the letters. The meaning would be known to them; then I wrote the same word in the official language, and the words and their meanings were compared. I did this continuously for eight months, and then kept it up with breaks. The resources I used were the textbook, thick paper for the word strips, coloured papers, cut-outs of the vowel symbols, and the blackboard. I still use this method for Class I.

One outcome I did not anticipate was that children developed a fascination for looking for similar shapes in nature and tried to pick up objects which had letter-shapes. These were brought into the classroom. The work has been appreciated by the authorities and has been shared with other teachers.

**Note:** Mr. Khairnar is also an anti-superstition activist and conducts scientific experiments to show how people are fooled by tricks. He has also won awards for his social work contribution.

## RAHUL LONDHE

Irregular attendance and absenteeism of students in district *panchayat* primary schools pose severe problems for teachers. Many factors are responsible for this situation. Very young children may be afraid of the school and the teacher. Teaching aids and methods which may not create the proper environment in school, parental non-involvement, and many other hurdles may also be responsible. I realised that a teacher has to get involved with the children if good results are to be achieved in regularity of attendance. One approach that struck me was to use music, which attracts children. For a teacher to be involved with children through music related activities, the teacher should also know some music. I initially focused on songs: *kirti geet*, *badbad geet* (jingles), prayer songs, *sfurtigeet*, *desh bhaktigeet*. I found singing songs made the environment lively and also developed in children an interest in studies.

A statement by some visionary that I had read—“if you tell me which songs are there on lips of your children, I can tell you the future of your nation”—inspired me. Another source of inspiration was patriotism and the need for a reinforcement of our own culture in the face of the influence of western culture. A ‘hole’ in our culture is appearing as a result, and music is one way of filling this hole. My exposure to “Indian culture and values” at a training programme organised by our *Zilla Parishad* at K.J. Somaiya Vidya Vihar, Mumbai, and my experiences of working in an evening school for child labourers before joining the *Zilla Parishad*, have also helped.

In my school, Shindevadi Prathmik Shala, though there were 200 children studying in the year 2000, attendance was irregular and on an average was also poor—around 70% or less. Today, not only is attendance extremely regular and good (close to 100%), but an additional 47 children who were out of school have been brought in. Children from neighbouring schools also like to come to Shindevadi school and observe. The experiment, which acquired the title of “*Geet Manch*”, has now expanded to the block and district levels through the “*Bal Vadya Vrund*” (described later) and *Bal Anand Mahotsavs*.

The singing activity in my school was extended to learning how to play musical instruments. This has reinforced the attractiveness of schooling, and has had a positive influence on children’s attitude to learning. I feel that to develop regularity in children, one attractive medium should be the focus for the teacher—in my case it was music. There could be others.

The school is in a village at the meeting point of three districts, Solapur, Pune and Satara. Ninety percent of the 5000-strong population is engaged in some agricultural activity or other. The rest are labourers. Though I found that ‘education’ is clearly felt to be important by the community, economic realities at home and the responsibilities of looking after younger siblings create obstacles to regular attendance (and to enrolment in some cases). I studied this situation carefully in 2000-2001 and then started my music activity with a simple goal—incorporate fun, singing and dancing in teaching-learning activities. I decided music would be my medium, and I decided to use my own collection of musical instruments (some of which I had collected during my teacher’s training course).

Apart from songs and group singing, the instruments which I used initially were the mouth organ and harmonium. The *tabla* (along with some folk dances) also attracted children. In my “*Geet*



*Manch*” activity I have also used other musical instruments like the triple set, bongo, flute and synthesizer. These instruments have been bought with small amounts received from the people as gifts and donations.

The children of my school have played an important role in the *Bal Anand Mahotsav* organised at the district level in Solapur. I taught children Sanskrit rhymes (*subhashit*) and prayers. The fact that young children in Classes I to IV can sing and play music is the speciality of our school. They have a natural instinct for singing and playing music, and I have just encouraged and guided them. The children learnt the “*taal*” and started playing instruments with ease. The outcome is that they now think that it is not difficult for them to organise a two-hour programme independently.

All the 247 children of the school can sing our national anthem harmoniously, despite the variation in their ages and training. This has been praised by the parents, who on the occasions of Independence and Republic Day, hear them. People have donated money to the school on these occasions. Now, all the children, their parents, and their siblings, come to our school to celebrate national festivals.

My school’s environment has changed completely. Children’s attendance has regularized and they now like to come to school everyday. We have set aside 10.00 to 10.30 in the morning and 4.30 to 5.00 in the evening, every day, for training all the children in the school in singing, dancing and playing musical instruments. This training follows group training methods. The better children have been selected to form a group named “*Sur Taal Bal Vadya Vrund*”. About 20 children comprise this group, 10 singers and 10 musicians. In a short period of time, this group has become fairly well known in Solapur district. This group receives special training after 5 in the evening. The group has been appreciated by the Education Department.

## SIDDHARAM R MASHALE

I have been working in the *Zilla Prathamik Parishad Marathi Pathshala*, Mirajgi, Akkalkot, Solapur, since 1993. I am associated with various organizations related to rural development, superstition removal and mobile libraries, and this has helped me in achieving my educational goals. I also write articles about education in newspapers and magazines. I have also written and presented street plays on various social problems. These activities give me a new angle to my work. My articles on the environment and value education have been especially appreciated, and an activity called "*janiv jagruti matru prabodhan*" has been taken up at various places in the state. My developmental activities have included organising free physical check up camps in villages, blood donation camps, *balmahotsav* involving 400 children and a '*hitgul sammelan*' for 2000 girls on the occasion of '*Savitribai Phule Jayanti*'. I have received some awards, including the "*Dr. Babasaheb Ambedkar Adhyapak Puskar*" by *Maharashtra Dalit Sahitya Academy*.

Educating children belonging to families which migrate to obtain labour employment during particular seasons is an acute need. The government has made it a rule to start schools at sugarcane factories for the children of labourers who arrive at the factories every year. Most of the labourers belong to nomadic tribes. They have acquired skills in sugarcane cutting, but generally are not in a position to pay any attention to their children's education. They usually migrate in search of a livelihood for about six months during the year. Hence, the effectiveness of such schools always remains in doubt. In 2000, in Dahitane, the Indira Sahakari Sugar factory was started. I was asked whether I could take charge, and I readily agreed to take it up as a challenge.

We started a two-room *kaccha* school near the people's huts. The school looked no different from the huts. I wanted to do the work systematically and so I began with a survey of the children of school going age. I identified 63 children, out of whom I could enrol 61. But when I started to teach only 15 to 20 children used to turn up. I realised that the parents were not particularly concerned about education. This led to discussions with them. As they themselves had never gone to school, they were not interested at all. I decided to start various activities in the school, so that the children would take a direct interest, bypassing the constraints of parental non-involvement. I started a series of activities in the school like games and cultural programmes, and also in my teaching methods I focused on poems, catchy rhymes and jingles, and story telling. Dramatisation was particularly useful in teaching language and history. I also arranged for educational material for the children. I used the nearby regular schools' resources for teaching. But I also started organising entertainment programmes, dance programmes and lectures for parents, which are reported below.

Everyday, one period was allotted for all the children of Classes I to IV for sports. All the children had to play together. I did this considering the fact that these children are habituated to playing for most of the time together. However, during this activity, I observed that some students were really good at *kabaddi*. I made a team of such children and we participated in formal competitions. Our team won a second prize at the block level. Two students won prizes for wrestling as well. All these activities were carried out over a four-month period of migration (January-April) and led to a lot of excitement.

### **On Parental Motivation**

As noted earlier, the attitude of the parents who spent half the year migrating was one of indifference. When I started to talk to them, I used a questionnaire for myself, so that the parents' views on their children's education could be systematically recorded. Apart from the commonly heard complaint that parents do not value education, what I realised as I gathered the information was that there was no enjoyment in their lives. So I began with just this theme—enjoyment. I organised small plays based on the themes of their daily life. Some of these dealt with illiteracy, the disadvantages of being illiterate, the behaviour of the factory supervisors, indebtedness and dealing with those who lent money to the people. The plays for the parents had a magical effect. My goal was to make schooling an interesting experience for children and also to attract parents so that their apathy could be removed. The plays served to present the theme of enjoyment with some value, and possibly the idea that the same thing could happen in school was conveyed. I also focused on mothers, by organising Mothers' gatherings. I took the help of two local NGOs for this: *Shantai Mahila Mandal* and the Superstition Removal Committee. Their inputs were helpful. The focus on sports within the school and the results of the sports competitions, at the same time, created curiosity among the parents.

I assessed the level of the involvement of the parents, and the interest generated, by the gradual increase in participation in the meetings organised for them. The numbers attending over four meetings increased from 15 in the first, to 29 in the second and 42 in the third, and to 53 in the fourth meeting. The first mothers' gathering in January attracted only 13 women, but after 25 days, in a second gathering the attendance was 47. More importantly, from an average daily attendance in school of 23 children initially, the figure went up to 58.

What I have realised is that involving oneself in the development activities of severely disadvantaged communities is necessary for a teacher to talk about education. Apart from in-class activities, humorous thematic plays on daily life provide what parents lack—enjoyment. This will lead to enrolment and better attendance of their children.

## **SULOCHANA SALGAR**

Education has to result in the all round development of children. Simply reading, listening and explaining will not help in internalizing learning. Teachers need to create supplementary incidents or activities so that the lessons children learn stay with them for a long time. This kind of learning is what leads to confidence in children. With this kind of understanding, I have focused on a number of activities to explain the formal content of subjects.

### **Presentation of Lessons by Children**

This is designed as an activity for learning science in Class VII. Many students fear the subject. Every child wants to do well in science but even the brighter students carry a fear that they may not be able to cope with the demands of the subject. To make science easy to learn and interesting, I use the following principles: scientific terminology is based on natural principles/laws; scientific information/knowledge can be linked to events happening in nature. Students often find it difficult to establish links between what is happening around us and textbook content, and hence the difficulty in learning. The application of these principles is in the form of presentation of the learning by groups of students.

First, the students go through the classroom session in which the lesson is taught focusing on the linkages. Then students are divided into groups of four; each group is given one unit of the lesson. The group members then have to think and discuss the learning from the lesson and plan how best to convert this into a presentation. Usually roles are divided by the children—one might take the lead, one child may concentrate on figures and another on black board writing. However, one condition is that questions on the lesson have to be framed, asked and answered; these questions have to be other than those given in the textbook. While the presentation is going on, the members of the group have the option of contributing and correcting any mistake. If an experiment is involved, the group members have to collect all the needed material and build it into their presentation, without making mistakes. At the end of the presentations, there is a discussion on the various presentations, and the one which is judged the best (and to have had the least number of mistakes) is declared an ideal presentation.

Since all units of the lesson are presented, the teacher has a chance to put together the learning that should result from the lesson as a whole. Every group wants its lesson presentation to be the ideal. This helps in developing a competitive spirit, confidence, creativity, and most importantly, revision of the taught lesson in a better way as the children have to focus on the learning and also bring in additional material. A secondary benefit is the improvement in their ability to express themselves.

One more activity which is related to the above is called 'Introduction to well known scientists and their work'. This is organised once a year; the children are asked to prepare notes about scientists and their work using reference books. On February 28, that is National Science day, experiments and models prepared by the children are exhibited.

### **Teaching English in Classes V-VII to Developing Confidence**

Since English is generally the medium of instruction in higher education, getting opportunities to speak (apart from reading and listening) early enough is important. I use a variety of games, and ask the children to dramatize lessons (generally done through group work on anniversaries of well known people), present the work of popular people, prepare notes from available reference books—all in English, so that some confidence is developed.

One of the methods I use effectively is 'Visits'. Confidence in English can be gained only by speaking in unfamiliar environments, outside the classroom. I give the children a few questions which they can use to start conversations with people who know English outside the school. The children are then required to keep a file which has records of the conversations and their own opinions. This helps in improving handwriting and spelling as well. This activity is combined with preparation of 'Handwritten booklets', which are compilations of poems, dialogues, jokes, information about animals, from outside the textbook. The activity forces the children to search for information, read it and then write it out. The booklets are displayed in a competition, so that the most interesting one can be selected.

#### **Ancillary Activity: Links with Grandparents**

Today's nuclear family system discourages learning from grandparents or the older generation in general. In Class VII there is a lesson titled 'Old people's homes'. The children used to ask many questions about what it means to be in such a home, why don't people stay in their own homes, and so on. Such questions used to disturb me, but inspired me to take the children on visits to an old people's home. The children entertain the inmates. This led to a "welcome your grandparents" programme in the school, which is organised once a year. Grandparents are invited to school, thus promoting interaction between two widely spaced generations.

## NILESH P SHELKE

I am a teacher in a rural part of the country. The pathetic condition of education in rural India is a matter of great concern to teachers like us who have to impart education in schools located on distant farm lands, settlements and on unfriendly terrain. People living in small settlements outside the mainstream villages usually get left out. Even today one will find small kids of the sugar cutter labourers happily helping their parents in their labour as the doors of education are still too far away. Some incidents shatter you internally. One example: A labourer and his son watch a government-sponsored message about education on television—a boy running towards the school. The father asks the son whether he would like to go to school. Both laugh and that's it. Nothing is gained. The boy goes to play. The teacher observes the whole incident and is disturbed deeply.

I work in a famine-prone area. The major problem is that of bringing children to school and keeping them there. The community migrates to the neighbouring state during Diwali in search of labour (cutting sugar cane). Also, for a short time after the school reopens, the children go for labour work. After all this, even when the people are present in their *taada* (habitats), they ignore the school. Alcoholism is another problem. It was difficult for me to bring children to school. The parents were totally uninterested. They said that this teacher on a bicycle who has come to take the kids to school should not come to these far out locations, so distant from the school. They also used to say, "The boys don't want to go." I used to talk about girls' education. They would ask me to go away. I have digested such insults.

I was very bothered by this problem and thought that a different approach was needed. My father writes songs related to children. One day when I saw my father writing something an idea clicked. I tried to write songs about the importance of education. I could write two songs: one described love towards the child and his talk about school, the other one was about the impact of education on the social life of the family. These songs written in Marathi were translated into the *Banjara* dialect; this is a mixture of Marwari and Hindi and slightly difficult. I had many difficulties in translating them and putting them into proper rhythm. After some days of translation I started singing songs in Marathi to the villagers' great amusement. I started moving from *taada* to *taada* and tried encouraging people. Initially I thought of doing it myself but then I thought of changing the strategy by involving the children of my class who used to come to school, as my ambassadors. I started training them in enacting the songs. Gradually the children started reciting them again and again. I was happy to hear these songs from them and so I was more enthusiastic. Some days later, I took two kids who had learnt those songs by heart on my bicycle. I sat aside and let my students recite the folk songs to the people. The people over there were asked to sit under a tree. The boys from their group started singing songs in the *Banjara* language. The people were happy to some extent. After the songs were over only a few people remained. They did not discuss their sons'/daughters' education. Next day again I went with the boys on my bicycle. They sang the songs and at the end four or five guardians came to me and requested me to enrol their sons in school. Gradually the other nomadic families who heard these songs started believing that their sons and daughters would also benefit. More people started coming forward to enrol their children. I used to go there in the morning with my register and write down the names of the children in their parents' presence.

I was satisfied when the folk songs inspired mothers. Once, after our performance, two women came with a request to admit their daughters to school. They requested me to take care of their daughters and one woman could not control her tears. Her request must have come from the depth of her heart. She said that she had had to drop out of school, nobody acknowledges her worth even though she works day and night, but she wants her daughter to live with dignity and so wished to enrol her in school, whatever the odds.

Having realised that the sugar cane cutters had understood the importance of education through songs in their dialect, I narrated the whole situation to my colleagues. They were very encouraging. This breakthrough made it easier for me to move to many more habitats in far flung areas, with children singing songs about the importance, value and utility of education, in their own dialect. The atmosphere changed. The people started cooperating. The same people who had insulted me and told me to go back started treating me well. I went from habitat to habitat, adding songs about the education of the girl child. The attendance of girls started to increase. These same girls would go home, sit with their mothers in their makeshift huts near the stove made from three stones, and sing these songs. Seeing this changed situation my joy knew no bounds, I was satisfied that my efforts in the scorching heat with the children on my bicycle for kilometre after kilometre had contributed to strengthening the foundation of education among the nomadic communities. The attendance increased and their love, respect and affection towards me also increased. The illiterate kids started to learn to write and read. I was really happy. The other teachers appreciated my efforts and volunteered to take part in the experiment. This success prompted me to continue my efforts.

The experiment described above has proved to be successful and satisfying. Small children, happy children, give the clearest messages.

## RAMZAN RASUL TADVI

At present I am working as a teacher in the primary school of Chinchati village of Raver Block in Jalgaon, Maharashtra. On the basis of 15 years of experience in tribal areas (out of about 30 years of service), I have realised that comprehensive efforts are needed to achieve results in tribal areas. I achieved my enrolment and retention aims by combining schooling with social activities, like tree plantation, medical check ups, “*geet manch*”, forming youth associations and *Mahila Mandals*, school cleanliness, village cleanliness and gardening.

To give an example of an outcome: Enrolling children, who would have otherwise left the village to go for labour work, in an Ashram School. Varyoda village of Chalisgaon block has people belonging to the (Nandivaun) Tirmani community, a nomadic tribe. In the name of the school there was one privately owned building. None of the teachers belonged to the village, and they used to commute from nearby villages. Attendance was very poor. I first contacted the people, formed a *Panchayat Samiti*, and mobilised some resources for getting pencils, slates and cloth. The children started to come to school. Then came Diwali time. During this time people migrated to sugarcane factories/farms in other districts and along with them went about 75% of the village’s children. This was a bad experience and I explored the alternative of admitting children to a nearby ashram school till the parents returned. From the following year I made arrangements for the younger children of my school to stay with the older children at the Ashram school. I arranged with the parents to employ an elderly lady to cook for the children—stay would be at the Ashram school. I worked with the *Panchayat Samiti* to obtain the benefits that government provides for tribes. There was also a problem of alcoholism in the village and registering police cases was very common. My mediation in these matters also helped. All this led to better relationships with the people and to better attendance. The older children at the Ashram school were also positively influenced and they helped me in my village development activities. I also decided to tackle belief in black magic, since this was another block to education, and so invited the *Andhshradhha Nirmulan Samiti* to my village. The overall development focus, and genuine concern for the daily lives of the people, ultimately resulted in good schooling and educational performance. In particular, one parent, Sri Rambhau Nirmani, and his son, played a critical role in helping me retain children in school.

In my own village (Janori) of Tadvi Bhil tribals, I took the initiative of starting a public bus service to the nearest village which had a high school. This enabled girls to study further. These girls, in turn, over the years, have focused attention on the issue of female illiteracy. The adult education programme then was able to make an impact. In yet another village where I worked (Lohare), my development focus led me to help *anganwadi* workers to study and appear for the Class VII examination as external candidates. This model was extended to older children as well. Many of them studied up to Class XII and managed to get some job or other. Some of those who appeared as external candidates in Class VII are now police patils, drivers, and *anganwadi* workers. In this work, the help of one of my colleagues and a few educated people in the village was crucial.

### **Improving Attendance through Cleanliness: Pathrana, Yawan**

Cleanliness and attendance were both problems here in 1974. My overall developmental focus enabled me to get closer to the community. Door to door visits and persuasion helped achieve an average of 95% attendance. Usually, 31 to 32, out of a total of 33 children, used to be present. Regular attendance is a neglected issue in educational management, and there is no way of improving performance if attendance is irregular. In particular, my work influenced the *mukhi*, Laxman Patil, who then helped me in my ventures. The advantage of my staying in the village was



that parents hesitated to take children along with them for labour, ignoring my presence. The environment that was created in the village as a result, helped other teachers who joined after I left.

In Chinchati, Block Raver, the school building was in pathetic shape. I decided to make a garden like the ones generally seen in good schools. People used to dump waste in the area surrounding the school. I started a village cleanliness mission. All the streets were cleaned. The school building was painted and repaired. Then we planted flower shrubs. We started cleaning the school everyday. A broom was kept in each classroom and the children had to clean the rooms everyday. This activity became a point of discussion and the flower plants idea was replicated in many homes.

In brief, the developmental focus that I adopted helped me achieve my educational goals.

## GYANESHVAR DUBEY

I joined as a teacher in Primary School, Ghonsala, Madhya Pradesh, in 1971. I was inspired by my father, who was a teacher and a freedom fighter. However my basic interest has always been in the field of arts, and I have completed my post-graduation in Fine Arts. I was very fond of acting also and have a Diploma in Drama. I have worked with some famous directors like K. Narayan, Shanta Gandhi, Prabhatkumar Bhattacharya, Banshi Kaul, V. Karanth, Vijaya Mehta, and Dhirendra Parmar. I also worked in a telefilm "*Jag Hansa Khood Roye*" and have participated in programmes on Akashvani and Doordarshan. All this experience has been useful in my educational practice, especially while designing puppets for particular lessons, stories and poems. Mimicry is another passion. A turning point in my life was a stage performance by Janab Mohammad Khan, a well known artiste. The audience loved him, and his performance left a permanent mark on me. Making someone smile is the best service one can render. I made this my motive in life. I became a teacher, and even if I have not done anything else, I have made my students happy by using my talent.

### Girls' Enrolment

In 1974 I went to Ambolia, a village 17 kms from Ujjain. Here I had a colleague who used to be very unkind to children. I also noticed that the number of girls in the school was very low. I realised that the parents were reluctant to send their daughters due to the behaviour of my colleague. It was a great challenge to regain their trust. I wanted to make up for the behaviour of this teacher. I took the students out of the classroom, and taught them under a tree, without a blackboard, but using a lot of mimicry and fun. With this approach, using very little resources, I started my work. Simultaneously, I started meeting the villagers frequently. Over time, the parents accepted me, and the result was an increase in the number of girls who went to school. I still enjoy very good relations with the students and the villagers of Ambolia. In 1983, I was transferred to another village, and in 1984 I was sent to Mansa Darwaja, where I continue to work.

### Restoring Historical Glory

When I came to this school I got involved with a local religious *mandal*, the Harsiddhi Bhakt Mandal, which was associated with the activities of the temple of goddess Harsiddhi. I realised that though Ujjain is historically well known, the local people had little knowledge about the history of the town. Mythology talks about Lord Krishna and Sudama studying here at the Ashram of Guru Rishi Sandipani; the place is also known for King Vikramaditya. I wanted to involve students in their own local history. I collected donations of Rs.50,000, and identified sketches and drawings of legendary characters from old books. I converted the drawings into paintings and placed them in an Art Gallery, which was open to all. This was the first collection of its kind. People and students were curious to know more about the history and heritage of their own area. I also noticed that in Ujjain information about historical places was displayed on old cloth. Some of these information sheets are very old, but they do not last. I thought of carving the same information on stone slabs, and started with the Harsiddhi temple. This temple now has information on the place's history in three languages, Hindi, Gujarati and English. All these activities helped me get resources for my school as well. I motivated the Lions' Club and the Mahakal Club to contribute to the betterment of the school.

### TLMs

The students who drop out due to lack of interest and motivation have been my greatest concern. I help them rejoin school, but to maintain the interest of those in school, I try to teach with fun. I am fond of making new things out of waste material. I have created teaching aids of various kinds. I associate our conventional games with studying. In games like ludo and snakes and ladders, I place figures, alphabets and words, so that children can learn while playing. I often use dice as an important teaching aid. Figures, words or alphabets are written on all the sides of the dice. I have found a very easy way of making dice. I cut two pieces out of an empty box (toothpaste carton which has a square cross section, for instance), open them up and fixed the two halves into each other. One can use larger boxes as well. Sometimes in games like ludo and snakes and ladders, I make children use cards instead of dices. These cards have numbers or letters written on them. Similarly there are two boards for any game, one with figures and the other with vowels and consonant signs. When the children move their cards, they have to speak out the combination of what is written on the card and on the board. This way, I teach language, and mathematical concepts including addition, subtraction, division and multiplication.

### **Co-curricular Activities and Joyful Methods**

A teacher should also try to develop the hidden abilities of his students. Often I try to give the cultural activities that children undertake an educational shape. Often *mehandi* and *rangoli* competitions are arranged and students participate in such competitions with amazing enthusiasm. These are opportunities to teach about colours, flowers, trees, nature, shapes and many other things. One practical limitation is that, in government schools, there is always a shortage of space. So we try to take the help of associations in the town; for instance, during *Navaratri* (religious festival celebrated for nine days mainly through folk dance), we use the premises of some of the associations that have some sympathy for the school.

My classroom is a stage, with the poems and the stories from the syllabus as the script. I involve all the students in these performances. Teaching and learning is a performance. I equip my students with skills in drama and puppetry, painting and sketching. I have come to know the nature of each child in my school. Then, very importantly for me, I use a child's painting or sketch as a teaching aid. I personally believe that if children are asked to draw anything they like, it gives us an idea of their likes and dislikes. The teacher can then work on these. This method of mine which identifies a student's mental make up first, and then builds a teaching process around it, has been effective. Children remember such experiences. I am indeed thankful to God that he has given me the ability to make my students laugh with open hearts.

## **BASHIR MOHAMMED KHAN**

I lost my parents when I was just one year old, but my grandfather put me through schooling. I had good teachers, and participated actively in the cultural activities of the school. With the motivation provided by my teachers, I managed to study while working as a gate-keeper in a theatre. I also learnt how to operate a movie projector. The movies of those days strengthened my moral and ethical values. I passed my higher secondary examination in 1961 and got an opportunity to work as a teacher for four months. I enjoyed this stint, and my teachers once again guided me in my teachers' training course. I became a teacher soon after and served in my first school for nine years. I was then transferred to a village in Dhar block. I worked hard and built a very good relationship with the people. I also completed my B.A. In 1975 I joined the Chilur school. This school gave me an extended period of uninterrupted time for my activities. Initially my time was spent in struggling for the basic rights of children and fighting problems like non-enrolment, drop out and poor infrastructure. Nowadays, these problems do not exist in my school. I always believed in showing performance first and then asking for the rights of children. The first time I achieved 100 percent results in the board exams of Class V was a happy and moving experience for the village. That one achievement (recognition in an outside exam) woke up the village and then there was no looking back.

### **Teachings Methods and the Use of TLM**

In my teaching I believe in maintaining the role of a friend and guide for my students. I create an atmosphere in which the students can express themselves without any hesitation. This creates a sense of confidence and when they begin to express themselves freely, it is quite easy to shape their minds in whatever way you like. It is this positive impact that develops citizens.

In order to make learning interesting, I usually translate the lessons, poems and other topics into play or drama form. I train my students in drama and encourage them to act out the lessons. Students watch the performances carefully and are able to verbalize what they have understood (in contrast to 'mugging up'). Sometimes I invite the senior villagers to tell stories to the students. The lessons and topics that involve drama, poems, stories are classified on the basis of the kinds of teaching aids that they would require for reinforcing learning. Some of the teaching aids I have developed are:

- Moving model of solar and lunar eclipses.
- Moving model of the planets.
- Moving model of the seasons.
- Model of the breathing system. The model demonstrates how lungs expand and contract in the process of breathing
- Model of the heart. This model shows how the heart functions, and how the pumping of blood increases when a person runs.
- A 'math strip' for teaching numbers, models of ascending and descending figures, weights from 50 grams to 20 kg, and other such articles.

Along with these, I have used other materials like clay vessels, paintings, artificial flowers. Such articles are prepared by the students and are kept on display. This also motivates them.

Multi-grade teaching is a harsh reality, but I have always relied on my students. I appoint monitors, committee members and unit leaders to help me in my work. There are certain functions of the monitor:

- *Samuh Vibhajan* (forming groups)

- Teaching through units
- Marking the presence
- Work division among student committees
- Arranging teaching aids
- Calendar maintenance
- Following the teacher's instructions and assisting him in the academic work.

Moreover, we have formed 10 committees of students to take care of the school and activities like sports. Our way of working out the functions of monitors in multi-grade teaching has been appreciated, and Doordarshan has made a documentary on the multi-grade teaching practised in Chilur.

When it comes to evaluating the activities of the school, there can be no better judges than the students. I have taught my students to maintain a diary called 'My Own Diary'. They are allowed to write whatever they feel about the school, the teachers, the education that is imparted, the activities going on in the school and any other matter. They write what they like and what they do not, the games that they enjoy. They also write about what they expect from the teachers, their parents, friends and others, and they also mention the subjects and topics that they like. These diaries have helped me provide individual treatment to the students and also to identify their hidden abilities. Their ideas about what they would like to become in the life, their goals and ambitions, the ways in which they would like to spend their time—sitting in the classroom or in the ground or under a tree, have given me a number of insights. The diary exercise is limited to the students of Classes IV and V.

I also implemented the idea of learning corners which we were exposed to through in-service training. They were very interesting. There is a corner where students gather, write poems and stories, jokes and songs and these activities are done under the guidance of the Cultural Committee. These collections are exhibited periodically. The educational games are inspired to increase student participation in educational activities. There is a corner for language and literature. It contains a rich collection of words, sentences, proverbs and sayings; there are also antonyms and synonyms, essays, storybooks etc. It is accompanied by many models and charts made of clay and paper such as the models of fruits and vegetables, charts of the cycle of seasons, the cycle of rain, solar and lunar eclipse, nine planets etc. Similarly, in the mathematics corner there are models and aids to explain the concepts of litre, kilogram, meter, number cards, coins etc. Models of the breathing system, the circulation system, the heart, the human body etc. are kept in the Science corner. The art corner consists of pictures and photographs of different cultures and their festivals, attire, traditions etc. There is one more corner called 'My Own Corner' where children sit and make charts, clay models, and handbooks. In short, these corners are made in such a way that it appears as if there is a separate school for a specific subject. There is also *Bal Panchayat* in the school, which meets every Saturday to listen to and solve the problems of the students. This meeting is attended by all the students and the teachers; the parents are also present in good number.

## KAILASH C PANDEY

I am working as HM of Sindpan, a small village of Mandsaur district, in the Malva belt of Madhya Pradesh. The population of the village is 1327 (169 families). Most of them belong to the backward classes and Scheduled Castes. There are a few households of the Rajput and tribal communities. The village is divided into two parts by a railway track. There are two buildings. The old one has two rooms, a small store room and a *verandah*. The second, built in 1992, has three rooms and one *pakka verandah*. The school has a playground and a fence. The school had started in 1950. For years the school worked in a temple with a teacher called Pt. Shankarlal Sharma. I took over in 1995 and for four years worked in the primary section. Prior to 1995 I had worked in the upper primary and secondary sections elsewhere. My father and both my grandfathers had also worked as teachers, and so I was comfortable teaching different sections.

I first came to the village during the summer vacation, with my writer friend, Mr. Rajmal Dangi. We cooked ourselves. I spent time with the *Sarpanch* of the village. I was told that the people were addicted to alcohol and were very aggressive towards teachers. No teacher wanted to talk to them. Even when there was a small disagreement, the villagers fought with teachers and got them transferred. Theft was another problem. There have been nine recorded instances of theft. The teachers were often asked by the officials to do some other work for a few days, but they would not be relieved for a month. Students had to pay a very small amount as a fee; many times teachers had to pay from their own pocket. There was no tradition of giving a receipt for the fees taken, since there was no receipt book. The villagers thought that the teachers were corrupt.

Though there were two buildings, the infrastructure was in very poor shape. There was no water supply, and after each hour, students had to be given a water break. Many used to run away during such breaks. The new building was so poorly constructed that it leaked very badly. During the monsoon, very often there was no place to conduct classes and holidays used to be declared. The store room was a dump. One teacher had planted some trees. Grass grew well on the playground. The villagers' took these resources as their property and used to leave their animals in the school compound. The school also did not have a tradition of cultural activities, picnics or extra curricular activities. I anticipated opposition and resistance. So I tried to take my colleagues into my confidence and I succeeded. A few ideas were opposed, but I did not worry. Those who opposed did not know me or my capabilities well. A few antisocial alcoholics harassed me. I tolerated them to some extent, but when it became unbearable, I reported them to the police and got them punished.

### **Solution of the Drinking Water Problem**

I did not find it proper to give a recess for water. In some parts of the village, bore-wells had been tried, but they had been unsuccessful. The school used to have an old well, which had now filled up with stones and mud. I knew there would be water at that location and so decided to revive the well. With a grant of Rs.250 from the Red Cross, and the help of four former students, the well was revived and in the monsoon, the first filling up happened. I was the first to drink the well water. I got a rope and a bucket for the students. For many days teachers did not drink this water, they used to send students to bring water from a hand pump. Later on, we added disinfectants to the water and everybody began to drink it. Then, with the help of the *panchayat*, I recovered the school's hand pump which the villagers had taken away. I installed it at the well. I covered the well with a roof. My water effort was crucial in making the villagers take notice of me.

## **Increase in the Income of the School**

The solution of the water problem intrigued the VEC. I decided to take advantage of this interest to increase the school income.

### *Hike in the fee*

The fee per annum was Rs.5 in the primary section and Rs.15 in the middle level. No date or month was fixed for fee collection. Many students left their studies around January and they did not pay. I requested the parents to pay Rs.25 at the primary level and for the middle level Rs.72. These fees would have to be paid at the time of admission, but definitely before 15<sup>th</sup> August. The first year we had some problems, but our persistence made fee contribution a regular feature.

### *Arrangement of receipt*

In order to remove the doubts about the proper accounting of the fee income, I arranged for receipt books for the school fees and another book for the VEC. This helped us in collecting small donations and other charges regularly.

### *Charges on every facility*

All the facilities in the school were free of cost. The villagers used to ask us to remove a student's name from the registers, but did not collect the certificate; they often lost the progress card and then came to collect duplicates. I started to charge small sums for such facilities. With the money, we got admission forms printed so that all the required information could be collected in one go. The messages given were: "Deposit one rupee if you have lost the card of the examination. If you want to leave the school to join at your uncle's home, take the school progress card and pay Rs.30. If you do not like your uncle's home and want to come back, then pay the fee again." Because of this, the villagers got into the habit of taking care of school-related documents. Leaving the school was now considered to be a matter that one should consider carefully. And at least something called "the school's money" was gathered.

## **From the School Motto to the Progress Card**

When I took charge of the school, I found parents giving pet names or fictitious names at random to their children—names like *Gopya*, *Babu*, *Kari*, *Ajodiya*. Birth dates were a matter of deep speculation and the teachers had to decide on what date the child could have been born. I decided to create an identity for the school and prepared systematic documents and got them printed.

### ***School motto and letter pad***

I wrote a sentence in Sanskrit that meant “we will never alter from our path.” I kept this motto on all the documents so that slowly people came to know what it meant. Sindpan had its own identity. I also got a letter pad for the correspondence.

#### ***Monthly evaluation card***

We got evaluation cards printed so that the parents could be informed about the results of monthly examinations and the presence of their children. This was important for monitoring attendance.

#### ***Result card (mark sheet/progress report)***

We got cards of various colours for different classes. These cards were used for the annual and 6-monthly results.

#### ***Admission form***

Previously there had been no tradition of admission forms. I got admission forms printed and from the registration of names to the scholar register, all responsibilities were distributed among the teachers.

### ***Certification***

I started a tradition of giving certificates to the creative students in the school. These certificates are printed in two colours.

### **Facilities for Students**

Facilities for students often take second place to concerns about enrolment. This is one reason for migration to private schools. I decided to make sitting on the floor more comfortable by buying some cloth rugs. We then collected empty bags of fertilizers from the village and children made sheets out of them. We also requested some shopkeepers of the town to donate mats. Blackboards were a problem. I got blackboards of cement made in all the classes. In the winter, students used to sit outside the building, but here again we had no blackboards. I got three boards made on the wall of the school and the problem was solved. As the new cement blackboards were made, the old wooden boards were of no use. We thought of alternative uses for these boards:

Employees' Record Board: We started to display student attendance and details about the teachers on this board.

Teaching Aid: One board was painted on both sides, and with numbers and the alphabet painted on the two sides, was used as a teaching aid.

List of Good Students: Many students of the primary section had been selected for the district's Navodaya Vidyalaya, a residential school which spots and encourages rural talented children. We put up their names to encourage other students to work hard.

### **Examination pattern: *Swadhyayi Vidyalayas***

Efforts made to improve the achievement level of students included giving them writing practice, copy writing, in addition to the regular teaching. We started monthly and quarterly examinations in order to evaluate these efforts.

Monthly examinations: There are no monthly tests in government schools. I discussed the idea with my colleagues with the idea of monitoring the progress of the children. These exams were started in 1995. They are held towards the end of the month, and parents are informed about the results by a special card. Here is the schedule followed.



No	Month	Kind	Subject Matter
1	July	Written	Testing of the things taught in the previous standard.
2	August	Oral	Reading skills, style of answering, pronunciation, memory, ability to express oneself.
3	September	Written	Quarterly.
4	October	Activity based	The child is expected to answer questions on the board on the basis of charts, principles, experiments, sketches and formulas.
5	November	By copying	The students are asked to solve questions by referring to their books. New questions are made for the examinations every year.
6	December	Written	Usual test.
7	January	Oral	How the students have absorbed what was taught in the last six months.
8	February	Written	Pre-final paper. Forecast of the final results is made.

#### ***Printed answer sheets***

Previously simple plain paper was used for monthly examinations. I found that students were not quite enthusiastic because of this. We got formal answer sheets printed and supplied them on payment. Students started showing interest. Prices are printed on these sheets and then they are given to students. However, it is not compulsory for students to buy the printed answer sheets.

#### ***Prizes in quarterly and biannual examination***

In order to encourage hard work, we began the tradition of giving cash prize of Rs.50 to the students who pass in the quarterly and biannual examinations. This prize is given to those students who are involved in the annual tour of the school. This amount is given by the HM.

#### ***Prizes for Secondary and other higher classes***

The student who stands first in the Middle Board is given a Rs.100 prize by the HM. Similarly, every student who passes in the board examinations of Classes X and XII is given a cash prize of Rs.125 by a senior teacher, Sri Nandlal Rathod, on Independence Day.

#### ***Combining Class V with the Middle School***

The students easily reached Class V, as promotion in the early years is not an issue. When they are prepared for the examination, they are often at Class III or IV levels. I found that if these students are made to sit with the students of the middle school, they try to follow the senior students. I gained good results by practicing this experiment from 1995 to 1999.

## **Auction of the Grass, Protection of the Plants and School Improvements**

Within the school premises very good grass grew and some villagers believed that they had a right over it. Talking to them did not work. I discussed the problem with the *Sarpanch* and declared an auction of the grass on August 15. This has become an annual tradition. Given the difficult environment, I concentrated on the plants that grew naturally without any care. Today, the school has babool, *neem*, *chirol* and *khajur*. We bought clay pots from the money that we got from the grass auctions. Beautiful plants were nurtured and the school was decorated. During the summer, when there is a vacation, we distribute these pots to the students. They take care of these plants and bring them back when the school restarts. This way our young plants are kept going for the whole year. In the school's nursery, we have *neem*, *banyan* and *peepal* in the pots. Village people are free to take these pots from the school.

Very often HMs do not use the school money for fear of adverse audit remarks and the consequent troubles with their pension. I believe that money should be collected from the students only for definite reasons and that the same money should be spent within one term. I have applied this policy for school improvement like whitewashing and repairs. The road to the school was in bad condition. I organised a ten day N.S.S camp in my school in 1996. The 45 workers of the N.S.S. spread ten trolleys of soil in the playground, built the road and whitewashed the building. Another ten day camp of 50 N.S.S. girls in 1997 took care of the remaining repair problems. The villagers then reconstructed the poorly constructed ceiling with the money they mobilised. I got new urinals and toilets with doors constructed in 1999. I started Gandhi Dharma to take care of the maintenance. I myself clean the toilets and urinals. The students of Class VIII have now joined me; my first disciple was the grandson of the then *Sarpanch*, who had helped me.

Some of the other activities which have been of particular usefulness are a 'monsoon swing' for the girls—most of whom are labourers and do not have time to play at home, a special week (November 14-19) for making clay toys with clay brought from outside, a *Bal Sabha* every Saturday, during which the students are divided into two groups that compete with each other in academic competitions, celebrations of national festivals, and a competition on October 2, in which 100 questions on the life of Mahatma Gandhi are asked.

### **Note:**

Mr. Kailash Pandey has also been involved in an interesting museum initiative that derives from his interest in archaeology and history. Mr. Pandey had started his doctoral studies in Indian history, but had to discontinue. His guide made him promise that he would continue to be involved in history. His involvement in the 'Samrat Yashodharman Sangrahalay' and 'Daspur Prachya Shodh Sansthan' is described in his own words. "When I joined as a teacher in 1982, I found that the District Collector shared my interests. We set up an open air museum of the broken statues that we could collect from the area. After school hours I used to fulfill my duties as In-charge, Open Air Museum, to which position I had been appointed by the Collector. One of my former students took over the job in 1988. I used to take children of my school to visit this place and often children recounted instances when similar statues had been found when digging a well. I encouraged them to collect information systematically. Gradually with their help, other people who came to know of the idea contributed coins, inscriptions, sculptures and weapons (some of them dating back to the early 16<sup>th</sup> Century). We reached many corners of the district. In 1997, the Government built, at a cost of Rs.45 lakhs, a museum in Mandsaur called the Samrat Yashodharman Sangrahalay. I am

proud to say that more than 90 % of the museum's collection is an outcome of our efforts. I also started the *Daspur Prachya Shodh Sansthan* with some award money I received. It has a library and a study room. So far I have motivated many students to do their post-graduation in history and archaeology. I also informally guide a few doctoral students. Our facilities have also been used by some foreign students of Indian history and archaeology."

## **SARDARSINH RATHOD**

I was a young child when I lost my father. It was my mother who gave me the courage to fight the troubles of life and inspired me to do something extraordinary. I was also helped and guided by my teachers during my early years in school. These two emotional motivations led me to become a teacher. I started my career as a school teacher in 1955 at Bakhatgadh. Due to the higher qualifications which I acquired later on (BCom 1961, BEd 1965, MA 1971), I got opportunities to serve in inspectorial posts. I served as ADEI for one year but that did not give me satisfaction. I met the then Education Minister and requested him to revert me to teaching. He was surprised but agreed. As a teacher my concern had been especially for the children of the so-called lower castes. I tried to create an atmosphere that would help them gain self-confidence. I had realised that these children needed a 'friend' in the teacher who could help them gain self-respect, not an instructor. Many privileged people, other teachers and government officials despised my sympathy for the poor and disadvantaged. But the children of oppressed, exploited and disadvantaged families have remained my focal point throughout.

While doing this, one has to see that the child does not feel that he is being placed under an obligation. The moment he feels a sense of obligation, the doors of his heart will shut on you forever. He shares his feelings only when you share his joys and sorrows as a friend. When you unite with the child's family in the same way, you automatically find solutions to all the problems. If a teacher has this devotion, there is no need to make any extra effort for enrolment and retention, nor will any shortage of resources exist.

I have noticed that the parents of the oppressed castes, about 20% of the population wherever I have worked, do want to educate their children. But their socio-economic limitations do not allow them to do so. When a student said that the HM was his friend, I felt that I had been repaid in full. I have always believed that it is not the child who is examined in school, he never passes or fails. It is the teacher who is examined, and it is he who fails or succeeds. This has motivated me to put in lot of effort into the academic achievement of children wherever I have worked.

### **Improving Academic Achievement in Poor Areas**

This has been my major area of work, but my years in Dhar from 1977 to 1980 as HM were my best years. Previous results at this town school had been quite discouraging: pass percentage had never crossed 10 in 22 years. Those who passed did so with difficulty. All the students belonged to the so-called 'lower' classes of society and almost all of them worked to earn their bread. If they attended school in the morning shift, they worked in the evening, and if they attended the evening shift, they worked in the morning. Some worked as shoe polishers. I provided them ethical support, not financial or any other. Without going by the routines of a government school job I became part of their lives and saw to it that the children learned the required things, regardless of routine school timings. As a result all the students passed, most with a first or second class, and only two students got third class.

The principle of maintaining warm and friendly relations worked with teachers also. My relationship with colleagues has been my strength. There was a lady teacher in my school. Her father-in-law was a well-known politician. Once he asked this lady quite casually, "Your HM is a leader of the teachers' federation. He must be like other teachers. What kind of man is he?" The opinion that the lady gave is an award to me. She said, "Father, previously I used to go to school and

return to my husband's house. Now I go to my father's house and return to my husband's house." That gentleman discussed this conversation with the then Education Secretary. The District Education Officer told me this story. I realised that day that relationships are the only reason for someone's success. Whether it is a student or a teacher, when you learn to share both joys and sorrows like a family member or true friend, no problems can bother you for long.

### **Games/Songs for Learning**

I read somewhere, "The best teacher is the one who knows only as much as his students know." This appealed to me and I made it my *Gurumantra* (principle). I leave all my degrees and qualifications behind when I enter the classroom. I also pass through the difficulties that a child has while learning something new. It was thus that I created some games to make the learning process interesting. There is a popular game called *langdi* (hopscotch); I make the children play it to reinforce the learning of tables. Squares (which are drawn on floor and the child has to skip through the squares according to some rules) were made in the classroom and the tables were written in those squares in irregular manner. I allowed the children to play *langdi* according to the table. Here the modification is that the player is supposed to skip in a square that contains the next step of the table. Sometimes I used to play along with the students; sometimes I stepped into a wrong square deliberately. Then all children cried out joyfully, "Sir you are out." Then some child would come up and show the right way and make the correct table. If a teacher always does the table correctly, the child feels that the teacher can do and he cannot. Such efforts always fill children with joy and enthusiasm.

Along with games, we also wrote a number of songs that taught various things. Even in these songs I followed the same principles. They were spontaneously made jingles rather than songs. Some situation arises and you make a line, and then you go on making a rhyme. There is no need to look for logic and reason. Children like it and it also teaches some topic, that is enough. What could be the reason that a child loves his grand parent more than his parent? We need to understand that the textbook is a means and not the goal. If there is no other method to teach some topic, the textbook can suggest one. But considering the textbook as a goal may prove fatal. If the author of the textbook is from another area, his concepts may not match with those of rural children. I tried to explain the same thing to my colleagues also. We used to meet once a week. I never agreed if somebody said that he taught five lessons in this week. No matter what method one follows, if the lessons are meant to teach mathematical figures or names of fruits and vegetables, one should see whether the students have indeed learned them or not. This should be the only criterion to judge a teacher's performance.

### **Gardens to Nurture Creativity**

I also felt that play way methods like games/songs alone are not enough for quality education. If we want to achieve the total development of our students, we must provide them with a congenial atmosphere so that their creativity may bloom. Drawing may be a way, but it is not possible to gather the required equipment for that in such rural areas. As a solution I decided to develop a garden for the children and I implemented this idea successfully in Khachroda (1966-1971). At least for one period, I allowed the students to play in the garden. Teaching materials were developed in the garden. We made maps on the land and mountains, oceans and other important

places were displayed. Students absorbed these things very easily. After this wherever I served, the first thing that I did was to make a beautiful garden. I achieved the best result in Nagada (1971-1976, 1980-1997). All this was done without any kind of aid from the government. Many visitors have visited the school and have praised the garden.

### **Experiences with Shikshak Samkhya**

Nagada vidyalaya became well known during the Shikshak Samakhya, a UNICEF sponsored project that started in 1993. Our idea of low cost and no cost teaching aids was appreciated by this project, and some ideas were taken for adoption elsewhere. I believe that two provisions, building and teacher wages, would be enough. Generating the others should not be a problem. Under the same project, my efforts in children centred methods were published, along with those of other teachers, in the form of 'Shikshakpothi' that contained a large variety of activities. This was based on the Minimum Levels of Learning for classes I to V. For each topic, at least five methods were suggested.

### **Welfare of the Teacher Community**

I began by helping senior teachers to prepare for the Middle exam which was necessary for them to get their increments. At that time I realised how much a school teacher is exploited in our system since he is economically weaker. I thought of doing something that makes a teacher economically stronger. I started a Teachers' Society. Teachers deposit small amounts every month and that money is lent to those teachers who need it. That idea became very popular in the entire district and the society has developed noticeably. Wherever I worked, I formed this kind of Society so that teachers need not borrow from the lenders. This gave teachers some monetary support.

Wherever I have worked, from 1961, I have been involved in developing infrastructure for my schools with local resources. There came a time when people used to ask us, "What can we do for you?", or, "I want to give this much money to the school." We always asked them where they wanted us to spend their money. Was there something that they found needed improvement? If they gave money for the classroom, furniture or garden, that money was spent for that purpose only. Sometimes we had to refuse donations since we had given our best performance.

At the same time we teachers also performed our duty earnestly. The Nagada was a school that had eight standards. Each teacher accepted responsibility for five students in each class. Then that particular teacher was supposed to look after those students, meet the parents regularly, get familiar with the socioeconomic conditions of the children and guide them if there was some problem. The teacher was responsible for seeing that every activity of the school became interesting for that child. Whether that teacher taught that child in class or not, he would personally pay attention to the students in this way. This has been the reason for good academic achievement of children.

We also realised that one has to give also if one takes. If the villagers gave water facilities, or donated to the school's cause, we stood by them. Once Nagada suffered from water scarcity. The villagers wanted a tube well to be dug and for this some money was to be mobilised from the well-

to-do families. They requested me to talk to such families and ask for donations. We talked to several people. We mobilised enough money and bought a motor that supplied water to the whole village. This incident proved to be a landmark. At present there are six bore wells in the village, made with money donated by the people. The village *Panchayat* pays the electricity bill and water problems do not exist at all in this village. In 1993 a group from the DIET visited our school. After they saw everything they asked me, "Sir, why have you not put a board displaying the name of the school?" I said, "Why? There is no need. Why should I spend a thousand rupees on the board? With that money I could buy carpets or some toys for my students." They said again, "If not for your sake, get a board for our sake. If we show a photograph of this school to somebody and say that this is a government school, people will not believe us." I asked, "Why not? Here whatever you see is given by the villagers. The villagers own this. This is a government school only because the government pays the wages of the teacher." When a Lions' Club came to know about this incident they donated two boards.

Whether it be the problem of water, sanitation or any other, we always helped villagers. In fact, we took the first step and then community joined us. It was then that the community helped to build rooms, a big hall, cultivate a beautiful garden and add water and electricity facilities. Obviously there was no better place than the school hall for occasions like marriages. We allowed people to use the school premises on such occasions and they gave something to the school as a reward. Once a teacher had received a good deal of money of his insurance and he donated all the money to the school. We made a beautiful temple and placed a beautiful idol of Goddess *Saraswati*, made in Rajasthan, in that temple. All these donations were spent on buying swings and other things for the garden.

Sometimes people came to me and said that they wanted to donate some clothes to poor children. Though I always welcomed such offers, I did not want the child to feel helpless. I always believe in maintaining children's self-respect. Therefore, I would request them to give me the cloth for the uniform. Whenever I found some students who needed help with uniforms, I called them, gave them the cloth and said, "Here is the cloth. Go and get it stitched." When the child pays for stitching, he does not feel that he is dependent on somebody. I always had 10-12 sets of material for the uniform in my box.

The community participation that resulted was appreciated by the District officials. The Collector, after a visit to the school, told the people of Nagada that to cut down on the screening work associated with the problems they took to the Collector's office, the HM's recommendation would do. The next Collector went a step further, and opened a register for that village alone; any query had to be responded to in one week. I think that the trust a teacher earns is her or his best award.

## **SUBHASH S YADAV**

My primary schooling began in Nalchha, my birth place. My father was a teacher in a nearby school. During my school days he was transferred to another village. We stayed in a hired room about 4 km from the school, and used to walk to school together. During that time I noticed that many village people came to meet my father with great love, respect and affection. I liked it and thought of becoming a teacher. My father's devotion to his work has been a great source of inspiration throughout my life. One day I was very tired and so I asked my father to stay back at home with me. My father scolded me with these words, "My son, you won't be able to digest even one day's payment of my leave, the money will be wasted with interest." I'll never forget these words. One day my father received a letter that my mother was seriously ill. My father and I went to the Collector to request a transfer. He could understand the seriousness of the matter and transferred my father to Nalchha. But my father requested a transfer to Gugali, a small village near Nalchha. When he came home, my mother asked him the reason. He said he wanted to teach those who were neglected.

I started to teach in 1989. I came to know that there were many schools in that area from which no one had ever passed Class V. I decided to change the situation in my school and persistently monitored the children's progress. As a result, 15 children passed Class V within my first year in the school. Because of my mother's ill health I requested a transfer to a neglected village near my home village.

### **Increasing Presence by Changing the Community's Perspective**

According to the school register, there were 65 students enrolled, but I was pained to see only 15 children attending. I started with the minimum: open the school at 10 a.m. sharp and run it till 5 p.m. sharp. This caught the attention of the people and the children. One day one or two village people showed up. I took the opportunity and discussed with them the problem of low attendance. Thus I got two more minds which shared my problem. I told them to do whatever they could. Gradually their influence on people compelled parents to send their children to school. I believed that the community's educational situation could be improved if education could be seen as '*vidhya*', something valuable in itself. On Independence Day 1993 I expressed a desire to build a temple to '*Goddess Saraswati*'. This idea was welcomed wholeheartedly and I got the people's support to celebrate the Independence Day by making a temple.

Once I noticed that the children were not doing their homework properly. I thought I should correct everyone's notebook, but if I did that myself, it would take a long time. I made pairs of students who checked each other's work. Students who were making mistakes were punished mildly till they improved. This pair system worked well.

I realised during my teaching that the children did not understand how to write essays on simple topics like animals and birds. So I changed my way of marking attendance. I made each student verbalize a sentence while answering attendance calls. For instance, if I want to teach an essay on the cow, I would ask the first student, say Mohan, to stand up and speak a line about the cow, such as the "cow is a useful animal because it gives us milk." The next student would be asked to add one more statement about a cow. These sentences were written on the board and later on I helped the students arrange these statements into a coherent passage.



To encourage them further, I started arranging competitions which are rather rare in small places. I also started giving prizes using my own money; once I gave a wristwatch to a student who stood first in a state level competition. At that time I did not have any family responsibilities and so could spend a lot of money on the children.

The school building was in a very bad condition. Official help was not forthcoming, and the building was positively dangerous. Since there was not much the villagers could do either, I hired a room. We then resorted to direct action. The villagers blocked the highway and I met the Collector. He intervened with a sanction of Rs.2,25,000, and I was put in charge. I made some changes in the design to save on costs. I was pulled up, but we had a better school for Rs.2,00,000.

With improved physical conditions, I arranged a fair for the girls. I wanted to encourage girls from all the surrounding villages so that they would feel motivated towards studies. I involved the same Collector who asked Principals of the schools in the block to bring at least 8 to 10 girls to my village. We put up a number of stalls. People helped me in making all the preparations. Other villages put up their own stalls. The Collector himself came down.

Another activity I introduced in order to help children learn to speak about themselves and also to help parents know their children better was that of diary writing. Students themselves made their 'own diary' in which they wrote about what they wanted to eat, wear, read, play etc. They also wrote out their complaints against the teacher and parents. Every Saturday we read out these diaries and then we called the parents to tell them about the findings. Other teachers in the district also do this activity in their own ways.

While teaching, I first ask questions related to the lesson and then afterwards I teach the lesson. I want students to read the lesson and get the answers on their own first. This interactive session at the beginning is a matter of excitement. Now the students have developed the habit of reading. To help children develop the habit of studying regularly, I make a questionnaire for six days at a time, so that they don't forget what they learnt during the week. I make groups and put questions to the group. I give prizes to the winning group.

During my career one thing I have realised is that you should win the hearts of children. I sit with my students, there is no chair or table where I teach. Any student has the right to point out my mistakes. Developing courage in children is the main task of a teacher.

## **K C BABYKUTTY**

At present I am working as the HM of the primary section in the Labour India Gurukulam Public School, Marangatupilly, Kottayam, Kerala. I have been working as a teacher in the same school for ten years. I am also an artist and have an interest in drawing, painting with water colours and oil, and drama composing and directing.

I think it is very important to let children learn by involving them in various activities. This idea of involvement in activities is very common these days but what I feel important is to give children a chance to manage the activities on their own wherever possible. My hobbies have been very useful in trying out my ideas related to teaching methods. Some of the methods I have devised for my class children are described below.

### **Dramatisation of Lessons**

Part A: for this first of all I allow the students to read the lessons in the textbook. The students are given time to read the lesson very carefully and then I ask them to prepare dialogues relating to the lesson. Thus the lesson would be converted into a drama including common familiar funny words and phrases.

Part B: Then students are given direction and guidance to prepare the Finger Puppets representing the characters in the drama they have already written.

Part C: The students are then directed to colour the puppets and to dress them. The students are generally very enthusiastic about this part and very careful in selecting apt colours and dresses for the puppets they make.

Part D: The students are then asked to demonstrate the drama using the puppets in the class as well as in the school Assembly.

These activities help the students to understand the lesson better. They remember even the minute points in the lesson. I have found dramatisation and demonstration a successful method for imparting knowledge and understanding.

### **Preparation of Teaching Learning Material**

I have a habit of using teaching aids and toys which I make from easily available waste materials like empty bottles, coconut shells, match boxes etc. Most importantly I involve students in making these things. They are very interested in this activity and so participate enthusiastically. For example, to teach the students fundamentals of geography, I introduced globe making. Using balloons, paper, gum and colours almost all students made globes. On this globe the students mark the altitude, latitude and continents. With the help of lighted candles, the fundamental principles of rotation, revolution, day and night, can be understood easily.

### **Environment Studies**

For environment studies my class children are involved in collecting things like leaves and feathers and arranging them to make the shapes of animals and birds. A related activity was an exhibition of medicinal plants. The students were given two weeks time. Some of them made an album using the dried leaves of the plants. They were able to say the names and uses of the plants.

I encourage the habit of collecting information from various sources through my 'wall magazine' activity. Children in each class take responsibility for wall magazine in their class by collecting various information/material from newspapers and magazines.

We have developed a Botanical garden in our school premises. In order to understand the observation skill of the students we send them to our Botanical garden occasionally. There the students have the opportunity to observe butterflies, birds, plants, fruits, leaves and flowers. The students then have to write and submit very detailed notes regarding their observations.

### **Motivational Tactics**

I have arranged to have a 'Roll of Honour' for each class wherein a board is placed outside the class. According to the assessment/evaluation of an activity a coloured token is placed against the names of the students. At the end of the month the children have to find out the total points (as indicated by the colours) secured by each student. The good students are appreciated in the Assembly; the scores are recorded in the students' diaries for the information of parents.

Another tactic is the use of stamp sized stickers with words like Good, Congratulations, Smart, and Excellent, as remarks on the children's work. I have noticed that the students become very happy and thrilled when they get such a sticker. At the end of the month certificates are given on the basis of the number of stickers each receives.

## PO CHACKO

I have been working as a primary school teacher for the last 21 years. My interest has been in improvement of Mathematics teaching. Mathematics is often a matter of fear for children because they find difficulty in grasping the basics, and as they progress through the ladder of school education, the conceptual difficulties become cumulative. I am interested in presenting math to children in non-traditional ways.

I have invented several techniques and written plays which are very useful in the effective presentation of basic mathematics. I have produced an audiocassette which contains many of the songs which I composed to make learning of mathematics easy at the primary level. I have also prepared a videocassette which presents many complex mathematical concepts through the play-way method. I also use self-made TLMs in my daily practice.

To encourage other teachers of mathematics to use non-traditional ways, I have written a book titled *Ganithabodhanathilakam*, a guide to teachers of Mathematics at the primary level. The book deals with, among other things, how Mathematics can be taught through several games that children play in an open-air stadium. Now, I am also associated with the SCERT in conducting training programmes for its resource persons as well as teachers.

Here is a sample activity from the book.

### Introducing the Concept of Multiples

The teacher leads the student to the playground. He classifies them into groups of ten. All of them are given three pieces of chalk each. Suppose there are thirty students in the class. That means there are three groups. We shall give the game to the first group. Let the second and third group watch the game.

#### *First step*

We should have a leader in each group. The leader of the first group who is standing in the circle puts his three pieces of chalk on the ground. The student who is standing left to him does the same, and he counts them and finds that three plus three equals six. The third one does the same and finds out that three plus three equal nine. Thus we continue the game until the tenth student finds out that  $3+3+3+3+3+3+3+3+3+3=30$ . They understand that repeated addition is going on. The members of the other groups who were watching the game till now are given the same game. Thus they understand that repeated addition is going on. The leader can be changed.

#### *Second step*

The leader of the first group puts down his three pieces of chalk at the centre and says three ones are three. The second student puts down his pieces and says "two threes are six". It goes on till the tenth one takes his chance and says that 'ten threes are thirty'. Now, the leader is changed. All the students pick up three chalk pieces each from the centre of the circle which they have formed. They repeat the game with new leader till each student gets the chance to say the multiplication table of three.

#### *Third step*

Now each student is given a card each. The teacher asks them to write down the figure three on it. The game is repeated using the card instead of pieces of chalk. This step is designed to lead the

student from the concrete to the abstract. All students are now able to say the multiplication table as was done in the second step.

#### *Fourth step*

When the teacher is confident that the students have understood the multiplication table of three he can ask them to write it down on a sheet of paper. The teacher's help and supervision are necessary.

This method is useful for introducing all multiplication tables (2 to 10). The game is helpful especially for slow learners. The students get pleasure out of learning because they think that they are only playing.

#### *Reinforcement play*

Lead the students to the ground and ask them to form a circle by placing one's right palm on the other's left palm. Let any one start the multiplication table of three. Let that student say three ones are three and give a clap on the right palm of the student on his left side. The second student says two threes are six and gives a clap on the right palm of the student on his left side. This continues till the fifth one says that five threes are fifteen. This is a very important part of the game. If the fifth boy gives the clap saying five threes are fifteen and if the sixth receives the clap he will be out but if he withdraws the hand fifth will be out. The game continues till three tens are thirty. At this point again the student who is receiving the clap is out unless he withdraws his hand. Otherwise the boy who gave the clap is out of the group.

We can start the game all over again for any number of times till only one is left in the group. Remember that a student leaves the group only at multiples of 5 and 10. While this game is going on, the students who come out of the group will form groups of their own and will repeat the game.

This play will help the student to study and learn the multiplication table in an interesting way. It is useful for all the multiplication tables and increases the student's power of concentration and confidence.

### **Other Activities**

It is also very important that teachers consciously use methods to attract the children to school as schooling is often not attractive to children. I use approaches which are a little different.

*Taking attendance:* I have been using an attendance chart which is kept within the reach of children. Children of my class (Class I) themselves find out who all are present and mark the attendance by putting an 'X' mark in the Chart using a sketch pen.

*Informal participation of children:* Children generally exhibit a habit of collecting things. To involve them in the discussions, all the new articles that the children bring to the classroom are made topics for discussion and children are encouraged to talk about them.

*Action songs:* This is a very common feature in primary education. The novel thing in my activity is that in my class, lessons and action songs specially programmed on a computer are displayed to the students.

*Daily practice of letters:* Picture charts in which each letter of the alphabet is reshaped into a picture, are used to reinforce the alphabet.

*Parents' meeting:* Every week I call a parents meeting. Parents are invited to assemble at some particular place every week near the school and the problems of the children are discussed with them.

**(Note:** Mr. Chacko won the Commonwealth's CASTME award for Mathematics Teachers in 1997. He has also received the BOLT Award (Broad-Outlook-Learner-Teacher Award) instituted by Air India and Malayalam Manorama in 2003, and was the winner in a music writing competition held by the Sree Chithirathirunal Seva Sangham in 1994.)

## LAIZAMMA V KORAH

In Kerala, there is no separate syllabus for teaching deaf children the Malayalam language. The regular syllabus prepared by the State Council of Educational Research and Training is followed. The language class is over in 45 minutes in which generally questions and answers given in the textbook are written in notebooks and given. Deaf students copy these just as they draw pictures—drawing, and joining the letters. But they may be unable to speak, write or understand what is read, because they do not hear the spoken language and so are unable to talk. In the absence of understanding, control of the language is lost. But along with writing names of the pictures of the objects, if they are made to repeat the names orally many times, with the help of a hearing aid, they will remember. But still, they will not know any verb. They cannot write or speak by adding the appropriate tense. So, if a special syllabus is made systematically, stage by stage, for each class, and taught by making the students do the verbs/actions, making them speak and write, with repetition at frequent intervals, the verbs can be remembered.

### **Background for Writing the Book, “A Malayalam Language Guide for the Deaf”**

Children study in my school (for the deaf) from nursery class onwards. In my school the main method is that of giving importance to speech, that is development is sought through the method of speech and children learn by understanding the movement of the lips. The children of the school have been divided into four houses. For these children, periodically, drawing and copy-writing competitions are conducted. Once, it was decided to conduct a story writing competition. Children of Classes VIII-X were seated for the competition. The name of the story was written on the board – “Rat and Lion”, a picture of the story was also shown. Children wrote the story. When the time was over, the papers were collected. While marking the papers, our eyes were full of tears. It was painful to see that even the most brilliant student of Class X had just written the words – “*Vala*” (net), “*Eli*” (Rat), “*Simham*” (Lion); only these words, that is all.

From that day onwards, I was determined to teach the students how to write and speak the Malayalam language without mistakes, and on how such training could be imparted continuously. The next year I taught Class I. In keeping with their age and speech ability, short words and small sentences were taught continuously in an interesting action mode. I wrote these exercises in a book and preserved it. I had to preserve the material as the sentences need to be repeated intermittently since the children cannot hear. Along with these children I then taught Classes II-IV in the same manner. Today, those children speak and write without grammatical mistakes.

During this time, I could also innovate, e.g. when we ask “*Aru*” (“Who?”), the answer comes easily—the name of the person. But when asked “*Arodu*” (“to whom?”) the “*odu*” answer has to be given—“to” is added to the name or person, and spoken, with particular endings that depend on the subject who is being acted upon. For those who can hear, this change need not be specially taught. They say/speak even without special effort at pointing out the endings. As deaf children do not have the hearing sense, they cannot learn on their own by listening to the spoken form. To teach how the changes have to be made, I developed rules for writing, by representing the type of question being asked with symbols of vowels or ‘*chandrakala*’—crescent on the top of a letter. The child has to recognise this and write down the appropriate answer. This principle has been extended to combining two words. For example, milk is ‘*paal*’ in Malayalam and fruit is ‘*pazham*’; ‘milk and’ is ‘*paalum*’. If the ending is represented by a symbol in the question which the teacher asks, the child can reply correctly.

Compiling the things I wrote and used, the handbook "A Malayalam Language Guide for the Deaf" was made. I told the other teachers also about the changes in the children of my class. They also experimented with my book. In the next teachers' meeting, there was a discussion on the subject. Thus, in my school "this book can be followed" was a resolution that was passed and minuted. From this year, in all classes, this book is being used.

Today, in Kerala's 45 deaf schools, about 9000 deaf students are studying. Their major problem is their inability to handle the language. But there is no Malayalam language guide or way-finder. It is this gap that I have filled, motivated by my own experiences with deaf children.

Some sample lessons are presented below in brief:

#### LESSON – 1

<u>Malayalam</u>	<u>English</u>
"Enikku* Mithai+ Tha@"	(Give@ Me* Sweet+)
"Tha: - "Tharika"	(Give – Give)
"Book Tha"	(Give Book)
"Pencil Tha"	(Give Pencil)
"Chalk Tha"	(Give Chalk)
"PoovuTha"	(Give Flower*)
"Vadi*Tha"	(Give Stick*)
"Vellam* Tha"	(Give Water*)

After making two students stand up, place the book in one student's hand. The other student extends the hand and says "Tha" (give). (Repeat using different articles.)

#### LESSON – 2

<u>Malayalam</u>	<u>English</u>
"Enikku* Apple+Thannu@"	(Gave@ Me* Apple+)
"Thannu"	(Gave)
"Poovu* Thannu"	(Gave Flower*)
"Book* Thannu"	(Gave Book)
"Chalk Thannu"	(Gave Chalk)
"Vadi* Thannu"	(Gave Vadi*)
"Thoppi* Thannu"	(Gave Cap*)
"Vellam* Thannu"	(Gave Water*)
"Slate* Thannu"	(Gave Slate*)
"Padam* Thannu"	(Gave Photo*)

(After placing a flower in a child's hand, the teacher says "Tha" (give) and at the same time also extends her hand. When the flower is given, she has to say "Thannu" (gave). Repeat this with other students.)

#### LESSON – 3

<u>Malayalam</u>	<u>English</u>
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"Amma* Va+"	(Mother* Come+)
"Va* Varika+"	(Come* Come+)
"Bindu* Va+"	(Bindu* Come+)
"Rahul Va+"	(Rahul* Come+)
"Kannan Va+"	(Kannan Come+)
"Sita Va+"	(Sita Come+)
"Sharan Va+"	(Sharan Come+)
"Bibin Va+"	(Bibin Come+)

(Saying Come) Va, each child is called near the teacher.

#### LESSON – 4

##### Malayalam

##### English

"Ente*Amma+ Vannu@"	(My* Mother+ Came@)
"Bindu Vannu+"	(Bindu Came+)
"Rahul Vannu+"	(Rahul Came+)
"Kannan Vannu+"	(Kannan Came+)
"Sita Vannu+"	(Sita Came+)
"Sharan Vannu+"	(Sharan Came+)
"Bibin Vannu+"	(Bibin Came+)
"Amma* Vannu+"	(Amma* Came+)
"Acchhan* Vannu+"	(Father* Came+)
"Poccha* Vannu+"	(Cat* Came+)
"Mazha* Vannu+"	(Rain* Came+)
"Katu* Vannu+"	(Wind* Came+)
"Eli* Vannu+"	(Rat* Came+)

When each child comes, she is asked to say "Vannu" (Came).

#### LESSON – 6

##### Malayalam

##### English

Bindu* muttathhu@poyi+	(Bindu went to+ Courtyard@)
"Poyi"*	(Went*)
Bindu* Poyi+	(Bindu* Went+)
Rahul Poyi	(Rahul went)
Kannan Poyi	(Kannan went)
Sita Poyi	(Sita went)
Sharan Poyi	(Sharan went)
Bibin Poyi	(Bibin went)
Amma* Poyi	(Mother* went)
Kakka* Poyi	(Crow* went)
Mazha* Poyi	(Rain* went)
Car Poyi	(Car went)

(After each student ("Poyi") goes, the teacher says "Poyi" (Went) to other students. Add words known repeated.)

LESSON – 7

Malayalam

1. "Ente\* Peru+ Vinu@  
"Enthu\*"  
"Ninte\* Peru+ Enthu@  
"Vinu"  
Ninte Peru enthu?  
"Sita"
2. Itu\* enthu+?  
Poovu\*  
Itu Enthu?  
"Vadi"  
Itu enthu?  
Chalk  
Itu enthu?  
"Book"
3. "Atu\* Enthu+?  
Pencil  
Atu Enthu?  
Rubber  
Atu Enthu?  
"Bow" (Girl's hair clip)  
"Atu enthu?"

English

- (My\* name+ is Vinu)  
(What\*?)  
(What@ is your\* name+?)  
(What is your name?)  
(What+ is this\*?)  
(Flower\*)  
(What is this?)  
(Stick)  
(What is this?)  
(Chalk)  
(What is this?)  
(Book)  
(What+ is that\*?)  
(Pencil)  
(What is that?)  
(Rubber)  
(What is that?)  
(Bow)  
(What is that?)

(**Note:** Dr. Aranmula Hariharaputhran, Executive editor (Retired), Sansthana Sarva Vijnana Kosa Institute, Thiruvananthapuram, has examined the book for its content and relevance, and has placed it in the context of the greater importance assigned nowadays to the speech method of learning, in contrast to the silent method—finger movement method.)

## K GANESH

My main objective in teaching science is to inculcate a scientific temper among my students, by communicating concepts in science in a congenial environment. I work in a rural school, 30 km from the town, and all my students are from socio-economically backward families. I have indigenously developed many teaching-learning aids for science. I describe below one multi-purpose tool which can be used to teach five concepts at the primary level and three at the upper primary level. I started the tool with only one concept in mind, but after looking at the enthusiasm of my students, I was forced to look at multiple uses of the same tool.

The concepts I teach are:

Metal expands with heat (I use the examples of the automatic iron and geyser with a thermostat).

Conductors and non-conductors (examples are drawn from metals and graphite, non-metals like paper, plastics, wood, glass, rubber, charcoal and stone).

Rectilinear propagation of light.

Burglar alarm/automatic street light: I explain the principle of Light-Dependent Resistance (LDR), when, depending on the intensity of light, the resistance offered by the LDR to the flow of current in the circuit is more or less.

Multiple reflection: I draw on the example of the kaleidoscope, and use four mirrors to explain this concept.

Electromagnet: There are some metals which can be made to acquire magnetic properties by passing electric current through a coil of wire wound on the metal.

Linear motion and circular motion.

Law of conservation of energy: (chemical energy to heat energy, as when we strike a match; electric energy to light, sound, mechanical, and magnetic energy; light energy to electric energy, as in the solar cell).

Materials Required:

1. One big size card board box (like Horlicks case box)
2. One shoe box
3. One small card board box (fan box)
4. Worn out tube light starter.
5. Eliminator
6. IC 555
7. Worn out relay (for making electro magnet)
8. Solar cell
9. Metallic rectangular sheets of some size cut off from waste tin: five. (For proving rectilinear propagation of light)
10. One separate rectangular card board of size as much as the top of the bigger box.
11. Toy train runs on circular rail
12. 4 mirrors of same size that may fit into the fan box.
13. Transformer (12-0-12v) 2no.
14. Relay 12v two pole single contact:1
15. Relay 12v single pole:1
16. Push to off switch:1
17. Bulb holders: 6
18. Zero watt bulbs:5
19. 100 watt bulb: 1
20. wire as required
21. waste deflection meter (to prove energy conservation in the solar cell )

22. Screen made by paper or taken from lab
23. Match box
24. Varieties of metals and non-metals
25. Gift paper for decoration.

Initially I tried to explain one concept (metal expands due to heat), by borrowing from a book called "Novel Experiments" by R.G.Lagu & S.B.Mhetre, Homi Bhabha Centre for Science Education, Tata Institute of Fundamental Research, published by Oxford University Press, Bombay, in 1985. When a burning match stick is held under the bimetallic strip that is taken from waste starter, it unfolds, expanding due to heat. Thus the circuit is completed and the lamp glows. As the match stick is withdrawn, the strip will cool off and therefore curl back. Thus the strip loses contact and the lamp will go out. When we use the above circuit, we are unable to demonstrate other concepts, because, as the strip cools off, the light does not glow for the other concepts. To overcome this, and to avoid shock (while testing conductors / non-conductors), I planned (a) to make a 100w bulb glow continuously till the other concepts are performed and in the meantime (b) to show the strip getting back to its original position when it cools. Using transformers relays and IC 555 in the circuit, I succeeded. When the metal cools off, only the five zero watt bulbs go out and the 100w bulb glows continuously. Moreover, the bimetallic strip receives DC current; so we can perform the conductors experiment using various metals and non-metals easily without fear of shocks.

**Rectilinear Propagation of Light:** The metallic rectangular sheets of same size must be fixed on separate cardboards in such a way that holes made on it should coincide (for long lasting stiffness metallic sheets are used). On one side of the 100w bulb one of the sheet with rectangular hole or any other shape is fixed to explain the concept. (A screen may be fixed to receive the image.)

**Electro Magnet:** A bolt with a coil of wire wound on it is taken from a waste relay and is kept on the front side of the bigger box. The coil is connected to the control circuit. The bolt will become magnet as soon as the current passes through the coil.

**Photo Electric Effect:** A solar cell connected with a deflection meter is kept on thermocole. When it is shown on the path of the light, there is a deflection in the meter depends upon the intensity of light, due to the conversion of light energy in to electrical energy.

**Burglar Alarm / Automatic Street Light:** Prepare the circuit board and keep it on the cardboard shoe box. The LDR must be kept out of the small hole in the box and the set up should be kept on the path of the light rays. When we disturb the path of the light, the LDR allows the buzzer to make a sound.

**Multiple Reflection:** Four mirrors of the same size are kept at right angles to each other till multiple reflections is viewed. The edges are fixed with sellotape to keep the positions fixed. Scrape off 25p. coin size on any one of the mirror to view the reflection. The set up must be kept inside the fan box whose inner sides are made white. The smaller box with mirrors is kept inside the bigger box and a hole of same 25p coin is made in the smaller box as well as in the bigger one in such a way that the multiple reflection is viewed. A small bulb inside the mirrors is connected in the circuit for lighting and also for serving as an object.

**Fun Filled Activity to teach linear and circular motion:** Take a card board of 20x20 cm. size. Waste gel pen refill may be fixed on the centre of the board. Two thin aluminium or copper sheets are rolled on the refill and made to hold firmly. In between the rolled metal sheet, a bush (non-conductor) must be kept to avoid contact. Bring two terminals of wire and connect to the aluminium sheets separately through the bottom hollow space of the refill. Now two thickest

copper strings is made to act as “Slip Rings” (i.e. contact on movement) and are connected to a telephone wire. In the toy train, the batteries are removed and then the terminals are connected to the telephone wire. This set up is permanent. In another cardboard of required size, an inclined plane is made. At the bottom of the plane, fix a metallic barrier in such a way that it makes the rolling metallic marble rest and made the ball to act as key. When it acts as key, the train runs on the circular path. When the ball is taken, the train does not run. The slip rings and the metallic barrier are connected to an eliminator through series connection.

This teaching aid has been extremely well received. The cost is not very high. It has created an enthusiasm among students to know more about the principles they are learning. It has also promoted observation skills among the students.

## S SRIRAM

I have been working in Classes III to VI since 1997. My aim has been to carry out innovative practices for quality education so as to “market” education to the rural masses. Students in my school invariably belong to socially, economically and educationally backward families and lack self-confidence. The concern for education among the parents is poor, but they depend to a great extent on government scholarships, noon-meals, free books, notebooks and uniforms. The village is about 25 kms from Pondicherry town, and the school (Classes I-VIII) caters to four other villages as well. Till 2001, there was only bare flooring and a thatched roof. The school has always had a shortage of teachers. After competency-based teaching was introduced, we found it easier to develop an activity for each competency, seen as a goal of education. I kept the following objectives in mind:

Promoting a teacher as a change agent and a social engineer;

To acquire self confidence through self-achievement;

To make teaching learning more interesting;

To develop a good character and all round personality;

To prevent drop out;

To prevent the transition from “student worker” to “child labourer” and

To make children take care of the environment.

**Activity I** To realise that human life is precious and valuable. Helping others without any expectation of reward.

In 1998, Class VI children were being taught a lesson called “The little Adventurer”. When the meaning of ‘Adventure’ was being explained, one student interrupted and cited an event in which she had been rescued in an accident. Once she was playing along the banks of river Sankaraparani, with two school mates. Due to sudden flooding, all three girls had been swept away and were almost drowned in an eight feet deep quarry pit. Only one girl knew how to swim, that too only partially. She tried to save the other two girls but she couldn’t as the other two girls dragged her into the pit. They screamed, and one of their school mates, who had brought his cattle to the river, rushed to their help. He pulled them out one by one. The boy (Class VII) was immediately called. He was a poor boy with a widowed mother, and spent his spare time grazing cattle and making bricks. When he was brought to the class, he narrated the incident and assured us that he wouldn’t do it in future! He was afraid that the teacher would punish him and the three survivors for having gone to play in the river. However, the boy’s actions were appreciated, and the authorities informed about what had happened. A complete review of the incident, and documentation, were made by the school. NGOs made their own assessments. The boy, Kuppuraman, was awarded the National Bravery Award in January 2000 and the Jeevan Raksha Award of the President of India in August 2000. The entire incident was converted into a learning opportunity, and was taken up as a part of value education.

**Activity II** One can live even after death, if he donates his eyes and other organs.

Two lessons, one in Class V and one in Class VII dealt with issues like blood donation. As part of teaching these lessons, a blood donation camp was organised so that students became aware of the importance of helping people in medical need and of the ‘Red Cross Society’. Students brought their siblings and parents and made them donate blood. Since the organization was done with the help of doctors, students learnt names of different blood groups, how blood was tested and how blood pressure was measured. The concept of a Blood Bank was also discussed. Similarly, an incident when an aged man (agricultural labourer) carried his 19-year old physically handicapped daughter

to the school, collapsed, and then requested guidance in getting a tricycle, was used to organise facilities through a well known trader who was concerned about physical disability. Such acts sensitize the students, and also project the teacher as a role model for community action. Getting footwear for the children through an NGO was another such activity which conveyed the need to avoid skin diseases. These were major problems in the rainy season, since the children were usually barefoot and after coming to school had to sit on a mud floor. (Since 2003-04, all students at the Primary and Upper Primary levels in government schools are given free *chappals*.)

Each activity has an objective, and is linked to teaching or discussion inside the classroom. Some have been taken up by official agencies. One objective I had was: To develop self-study/ self-learning, and referencing skills, through the use of a dictionary. Most students couldn't afford to buy dictionaries. With the help of the HM, an engineer who was also associated with an NGO, was contacted. Each student got a dictionary, and the same donor has been giving a dictionary to every Class VI student for the last six years. Another donor was requested to contribute the ancient Tamil work, Thirukkural, for Class VI students. Fifty two copies were obtained by the school, and these are now used by the children regularly. The state now gives free dictionaries to all students in Upper Primary and Secondary government schools.

One day the students of Class V were asked to narrate one joyful event and one sorrowful event from their lives. They were given one minute. One boy had earned Rs.20 at a brick kiln during his school holidays. This money was used to buy rice and vegetables one day when there was no food for his family consisting of his mother, grandmother and himself. That day was the most joyful for him. This triggered off a study, for which the help of an NGO called RACE was taken. The Government has also taken note of the study. The main focus was on how to prevent a student-worker from becoming a child labourer. Most children belonging to the socio-economic groups to which the school catered, worked for some time during their holidays to supplement their family incomes. This meant that they could not undertake educational activities, like revisions and reading extra material. Such students should be worked on only during the school time, and efforts should be made to promote them to the next class. Detaining them in the same class most often would lead to their becoming child-labourers.

This work has extended to building a Parent Teacher Association for the first time in the history of the school, and other school-parent interaction activity. The PTA has played a very constructive role in ensuring that all children are enrolled in school. When the school did not have a cook (for the noon meals) for seven months, it was the members of the PTA who came to our rescue by cooking food for about 370 students every working day. The objective we had in mind was that if the teachers and the parents worked together, the identity of the school could move towards that of a "Community Welfare Centre". Many NGOs have been invited to the school to motivate rural illiterate women and youth towards children's education.

There are many other innovative activities, each with an objective, and each inspired by some condition in the school or schooling, which are not reported here. However, while doing all these activities the teacher must remember the following statement which I believe in strongly: "The teacher is also a second parent and the school is also a home." One day a student was bitten by a poisonous insect. The boy was taken on a motorcycle to the government hospital, which was 8 km away. When the parents came to know about this, I was thanked profusely, but the impression that the teacher is a second parent was reinforced.

## Motor Skills and Improving Handwriting

Good writing is an indicator of good character. No one doubts the use of good handwriting. It helps not only in examinations, but can serve as a motivation to read. In 1995, when I started to teach, I found that children write by scribbling. It was difficult for them (or they did not bother) to maintain discipline as far as the shapes of letters, the use of lines for writing on, or the proper spacing between words, lines and paragraphs, were concerned. Often legibility became a problem. I started with the methods I had been taught—dictation and copy writing exercises. But they did not yield positive results. The lessons I learned were the following.

1. Instead of imposing good handwriting on students, something should be done to make them aware of bad handwriting.
2. No student should feel tired while writing. This implied that the muscles used in writing should be properly trained.
3. Writing should not be seen as a boring exercise. It should be interesting.

I reviewed the letters of the alphabet and identified three elemental shapes. All letters can be broken down into horizontal or vertical lines, a circle or its parts, or a leaf shape. An unconscious familiarity with these three shapes would help learning and writing the alphabet. I planned a three-step programme. The first stage was a preparation for the writing exercise, the second was the actual writing exercise and the third was work on the style of writing.

### ***First stage: Preparation for writing***

- The first step was motivating students by emphasising the importance of good handwriting, and the need to get involved in exercises for handwriting improvement.
- The second step was developing skills in holding the pen properly—especially the use of the middle finger and the thumb, with the index finger being used to vary the pressure.
- The importance of correct seating position and posture was a third element.
- The final step was using appropriate games for motor development (development of the writing muscles).

### ***Second step: Writing exercises***

- Writing in the air
- Writing on the slate with a finger
- Writing on the sand with a finger
- Writing on the slate or board with a pen or chalk
- Writing on paper with a pencil
- Writing on paper with a pen
  - Except Urdu, all the major Indian languages are written from left to right. The students were given exercises in the same direction—for the letters, words, sentences, and *matras*.

### ***Third step: Writing style***



- The importance of 'mature writing' is emphasised. Mature writing incorporates both good handwriting and correct writing.
- Speed in writing is a second element that is stressed.
- Certain rules regarding the left margin and spacing between paragraphs, letters and sentences, are then taken up.

### **Objectives**

The objectives that were derived and communicated were the following.

- Children should feel motivated for good handwriting.
- They should be able to use the correct shapes of letters.
- The writing should be legible.
- The letters and the lines should be straight.
- Spacing between the words, the sentences and the paragraphs should be proper.
- Proper punctuation marks should be used.

### **Using the Devnagri script**

First the letters of the alphabet were classified according to their shapes (as noted earlier). Then the children were given practice in calling out these, and then writing in the air, writing with their fingers on their slates, writing on sand, writing with a chalk or a pen on their slates, and finally writing with a pencil and pen on paper.

Letters built around straight lines: *ga, ma, bha, na, tra*

Letters built with slanting lines: *ra, sa, kha, ae, sha*

Letters made with circle, half circle and leaf shapes: *a, aa, i, u, (all vowels) da, ha, jha, dha, gha, chh, cha, za, ta, la, va, ba, ka, fa, pa, sha, ya, tha, ta, tha, da, dha.*

### **Evaluation**

Before starting the activity, all the children were made to write a paragraph on paper. It was ensured that all the letters and *matra* symbols appeared in this writing exercise. Then the experiment was started. At the end, the same paragraph was given again for writing. To my, and the children's, surprise, the results were amazing. The children could see for themselves the improvement. I informed my educational officers about my work. It was then taken up in other schools of the region.

### **Motor Development Games**

Proper coordination between one's thinking and the physical organs that respond to the brain is important. An expert who plays the sitar is different from a non-player in that the sitar player's thinking mind and fingers are properly coordinated to produce music. Likewise, a child's thinking about writing and proper coordination among the fingers, eyes and the brain, result in good handwriting. But encouragement in this direction has to be given early enough. The games devised for developing such coordination are described below.

#### **Game 1**

One boy lies on his back on the ground, and folds his legs towards his belly. Another boy stands in front of the feet. The boy on the ground tries to push his legs outward and the standing boy does not allow this. Children enjoy this game very much because they experience better control over their leg and hand muscles, and realise the potential of the muscles. I also assess which child gets tired in how much time.

### ***Game 2***

In this game, a child has to walk on his two hands and two legs and at the same time, he has to describe his activity. For example, I am taking my right hand forward, or my right hand and right leg shall go further now. The child is encouraged to get more and more into detailed narration about his or her activities. This encourages thinking about the activity and its different aspects, while also pushing for coordination with the motor movements. Some variations which have been introduced are the following. Zigzag roads are made in the classroom and a child has to reach a designated place by walking on that road only. Or pieces of chalks are strewn about in the classroom and a child has to avoid them while walking.

### ***Game 3***

This game is meant to make children aware of the qualities of their hands and legs. Every child is given a piece of paper and asked to write with the hand other than the one with which he normally writes. Most of the children write with their right hands. When they write with the unused hand, at first they are unable to hold the pen properly, and when they hold it and try to write, the writing is so untidy and uneven that one feels like laughing. A lot of interest and excitement are provoked. The children realise the difference. The lesson that is taught is that the unused hand has not been trained, or does not have the necessary exercise, to undertake writing. This difference is not realised while driving a bicycle (since both hands are used). When sweeping, often girls use both the hands, but each hand is used for a specific purpose. These examples are used to bring out the difference between these activities and writing. The person who is unable to write with his left hand would find it very interesting to see how beautifully a left-handed person writes with his left hand.

A variation of this game is asking a child to write with closed eyes or with a blindfold over the eyes. When the child opens his eyes, he is very surprised to see how untidy the writing is. But when the exercise is repeated, the untidiness comes down and the legibility goes up. The lessons derived are the importance of eyes in good writing habits, and the value of practice.

### ***Game 4***

Two children stand facing each other. They are told what they are supposed to do. The first child touches a part of the body of the second child. The second one is also supposed to touch the same part of the first child. Usually the second child uses the hand that is directly in front of the hand used by the first child. Repeated playing of this game gives children a good understanding of left and right.

### ***Game 5***

The entire class can participate at a time. Only two students stand aside to point out the mistakes of the players. All the children stand in lines. The teacher gives some commands like raise your left leg, right leg, right hand, touch left hand to the right leg. The commands are given rapidly so that children get just the minimum time to think. The observers keep on pointing out the mistakes. This ensures control over muscles and reflexes.

### ***Game 6***

In this game, a child lies on a rug and moves as if he is swimming. Usually, the use of the body parts is uncoordinated and a lot of strength and energy are used—so much so that children laugh. Children are asked to play this game at home also. The lesson that is finally brought out is that so much strength and energy are not required—with practice, coordination streamlines effort. Exercise is also a benefit.

### ***Game 7***

A boy goes to the blackboard with two pieces of chalk, one in each hand. He draws a vertical line in the middle of the board. Then he extends his hands in opposite directions and makes two marks with the chalk pieces. His effort should be to make the marks at equal distances from the middle line. Now he is expected to draw a circle connecting the marks and the line—both the hands should move at the same time. Usually, a child will pause at many places while drawing a circle. It is very difficult to move both hands at the same time, while paying attention to both halves of the circle. But my intention is to help the child understand the limits of the muscles and their function.

### ***Game 8***

In this game, two children stand opposite each other, at a distance of about two feet. If both the participants are of the same height, it is better. They have to extend their hands and bring their palms together. Then, without entwining their fingers, they are supposed to push each other back. Each player has a line drawn three feet behind him, and the objective is to push a child to that line.

### ***Game 9***

In this game, all the children stand in a circle and follow the commands given by the teacher. The commands are meant for the movement of the eyes only. Like left, right, up, down. Initially the teacher gives the commands slowly, and then increases the speed. The teacher can change the sequence of the commands. This leads to mistakes from the children. The children also face difficulty in following certain commands. These mistakes and difficulties are then pointed out and appropriate lessons drawn.

### ***Game 10***

In this game, the child has to employ only his eyes and his powers of imagination. The teacher draws eight to ten points on the board, which, when connected, would make some shape or picture. The teacher should ensure that the children are familiar with the shape or picture, and would be able to recognise it. The children are then told to hold their hands behind their backs, and using just the eyes, the eye muscles and imagination, to visualize and recognise the shape. The hands are held behind the backs, as some children use their fingers to draw the shape on the slate in order to identify it. Once the use of hands is prohibited, they are forced to use their eyes and imagination. The children who recognise the shape write the name of the shape and their names on pieces of paper.

### ***Game 11***

In this game, the flour is used. The child is told to make use of the proper amount of water and flour and process it in such a manner that no flour sticks to the hands. Then the job of making toys from the dough starts. The hands, the brain and the eyes have to create something which can be called a proper toy. For instance, while making a doll, what should be the width and the length of the body parts, and how much time will it take? Such questions are to be verbalised and answered.

With a little thought and experimentation, it is possible for a teacher to devise simple exercises that help achieve the motor skills-related educational goals.

## RAMCHANDRA SHARMA

I have retired as a teacher but believe that good teaching must have three characteristics: minimum labour on the part of teachers and students, maximum knowledge for the students in the minimum of time and the sustainability of this knowledge.

### Pronunciation

Initially, there were few students in my class who studied or spoke anything. The other teachers used to say about them, "They will remain like that. They come, play and go back." Learning among such students remained weak. They were unable to answer any questions put to them. Many of these children could not identify a letter of the alphabet written on the board. After some study, I found that the reason was the children spoke the letters in a series, for example, the Hindi *Da* would be part of *ta, tha, da, dha, na*). They were able to call out the entire set. Older children, after they have struggled through this, end up pronouncing words wrongly. The written form, which follows the spoken, thus results in errors. I did not want to introduce the children directly to words and pronunciations. I thought I should show pictures and motivate the children to tell stories from the pictures, thus helping them develop their oral expression ability first. This also helps in reducing the distance between the teacher and the taught. Put a finger on a picture of a mango and ask a child what it is. The child will first see the picture. The second action would be to understand it. The third action would be to verbalize whatever he or she has understood. Alphabet learning is nothing but bringing children from the known pictures to unknown pictures.

The method: Place your finger on the picture that has the letter you want to teach. The word is written below. The child sees the picture and calls its name. Help the child to pronounce the word correctly. When the child pronounces the word, stop him on the very first sound and tell him that this is the same letter he is speaking. Here the teacher must not pronounce any letter. Children themselves will pronounce the word using pictures. Knowledge of letter and pronunciation given thus establishes the correct form in the very first instance.

Further, the knowledge of consonants and vowels should not be serialized (the usual traditional method). They should be taught in an irregular sequence. For teaching *Matra* of different kinds (*o, aa, e, ee*), the students should be asked to open their mouths appropriately when this particular vowel is pronounced and then asked to pronounce the consonant. That automatically produces the Hindi letter correctly. Giving such exercises for a couple of minutes helps the students to learn the sound.

### Dictation

It has been a long tradition to give dictation to students. The teacher introduced five new words in the dictation exercise. But has anybody ever thought how teachers should select five new words from the numerous words in Hindi? The second tradition is that of making a child write the same word several times when he makes a mistake in writing it for the first time. Can any teacher guarantee that after making the child write the word a certain number of times, he will not make the mistake again? "*Shruti lekhan*", the Hindi for dictation, means hear and write. Hear the sound and write. It is obvious here that if the sound is not correct, the writing will be faulty. No word should be involved in dictation with which the students are not familiar. General mistakes should not be corrected after the dictation. Instead of mute reading by children and ideal reading by the teacher, those words to be taught to students should be written on the board, and the students

given knowledge of the correct pronunciation. This should be followed up by pronunciation and writing exercises.

The second strategy is to teach not many words from a group having similar formation, but to teach just one word from that group and facilitate learning on the part of the students. If a child makes a mistake in writing that one word, the mistake must be corrected at that very moment. He must not be asked to write it again and again, but drawn to the particular place where he made the mistake. He is helped to correct the mistake. This way the child learns all the words of that kind and the chances of making mistakes are eliminated. Suppose a teacher wants to teach forms of simple words. He wants to teach all the consonants and 11 *matras* of Hindi.

Rule 1: every letter is pronounced from a particular place in the mouth. Ask child to remain in that position and pronounce the vowel *A* (as in *Amar*). This automatically produces the complete sound, a combination of consonant and vowel. (In Hindi, every consonant is an incomplete sound until one of the *matra*, basically a vowel, is united with it to make a complete sound. This is the difference between pronouncing a complete sound and trying to call out an incomplete consonant.)

Rule 2: In a given word, whatever *matra* is used, the sound should be produced in the same manner in which the *matra* is spoken. This automatically produces the correct sound.

### **Teaching Anuswar with its Variations**

In Hindi, *anuswar* is produced in five sounds. However, while writing, instead of writing any of these five consonants, just placing an *anuswar* makes it correct writing. However, in dictation, it should be written the way it is spoken.

### **Chandra Bindu**

This is half of the *anuswar*. While speaking it, the breath comes out from the nasal cavity. In this situation, it should be understood that the air is exhaled from the nasal cavity and there is a *chandra bindu* on the word. For e.g. *Aankh, kanta, chanta, fansa*.

### **Visarg**

In *visarg* two dots similar to a colon are placed after the word, which produces *ha*, like *pratah, punah*. Here the students are told that at the end of the word, a half *ha* is never written. If needed, two dots like a colon are placed against it.

**Teaching only six points for difficult words.** The following table may be of help to teachers.

1	2	3	4	5	6
Bandar	<i>Anyay</i>	<i>Chatte</i>	<i>Bachhiyan</i>	<i>Karma</i>	<i>Kram</i>
<i>Pakka</i>	<i>Abhyas</i>	<i>Laddu</i>	<i>Pattiyān</i>	<i>Dharma</i>	<i>Bhram</i>
<i>Rasta</i>	<i>Kalyan</i>	<i>Vidya</i>	<i>Makhiyan</i>	<i>Charma</i>	<i>Prem</i>
<i>Bachche</i>	<i>Pratyek</i>	<i>Mitti</i>	<i>Chakkiyan</i>	<i>Farma</i>	<i>Frem(frame)</i>
<i>Achchha</i>	<i>Lagya</i>	<i>Lattha</i>	<i>Paschim</i>	<i>Surya</i>	<i>Chakra</i>

### **Column 1**

Rule: in the middle of the word, the half letter should be pronounced with the previous letter to produce the correct pronunciation. For e.g. *ban/dar, pak/ka, ach/chhe* and so on.

### **Column 2**

Rule: if the incomplete sound is followed by *ya*, it should be pronounced with the following sound, instead of the previous sound. E.g. *a/nyā/ya, a/bhya/s, ka/lyā/n*.

Column 3

Rule: for whichever letter use of half form is not available, that particular letter is used with a *halant*. The half form of a letter is never written at the end of the word. If needed, the last letter's leg is broken (making it *halant*) and it becomes correct writing.

Column 4

Rule: children often put the *matra* in such words between the half letter and the complete letter with which the half letter is originally supposed to unite. In order to overcome this mistake, we just need to explain that by doing so, we make the incomplete letter a complete one and it is a mistake. This explains the concept to students very well and such a mistake is not repeated.

Column 5

Rule: Here while pronouncing the word, our tongue rises upward with a stir. The teacher needs to explain that when the tongue stirs like this and moves upward, the sound *ra* falls on the next letter.

Column 6

Rule: here *Ra* is spoken along with the letter. Hence, it should be used in the same letter. E.g. *kram*, *chakra*, *parlay*.

### **What is a Language?**

We give every sound a specific symbol and thus recognise it. When we read something, in fact, we are decoding the sounds that we have memorized with the help of that picture. If a person is not familiar with the pictures of a language, he will not be able to understand it or speak it. In short, what we call a language is only an arrangement of sounds. Anyone who has decided to teach or learn has to have a knowledge of the sounds of the language. Every sound of Hindi has its own form and no two sounds are alike. There is a "way" in which the sound is created in the mouth. Providing knowledge of such formation of sounds is the key challenge. Some of what I have used in my work is presented below so that teachers can use it or adapt it for their purposes. From this, I have produced a table which can relate the work of two organs working together and the sound that is produced.

### **Consonants of Hindi**

*Ka, kha, ga, gha, anga*

When we speak *ka, kha, ga, gha*, the back portion of the tongue rises upward. The nasal cavity is blocked so that the air does not pass through it. The sound is produced in the larynx. Therefore, these sounds are called *kanthya* sounds. They are collectively called *Ka* group sounds also. When we speak *anga*, the uvula hangs downward and the mouth will open for the air to pass. Both the mouth and nose will open.

*Cha, chha, ja, za, jha*

When we speak these sounds, the tip of the tongue touches the hard palate and when the air passes through it, it creates some friction. This produces such sounds. In the same situation, when the uvula hangs downward, the last sound *jha* is produced. The tongue will go towards the hard palate, but will not produce friction and remain away from the palate.

*Ta, tha, da, dha, na*

When we speak such sounds, the tongue rises. But instead of the palate, it touches the ridges of the upper teeth. Therefore, these sounds are called *Dantya* sounds, also collectively known as *Ta* sounds. While speaking these sounds, the nasal cavity is blocked. However, while speaking *na* both ways are open.

*Ta, tha, da, dha, na* (this is not a repeat, but is a second series of consonants. The earlier one is illustrated by words like *tapeli, thali, dado, dhaja* while this one—harder sounds—is illustrated by *tapali, thaliyo, damaru, dhagalo* and so on).

When we speak these sounds, the front part of the tongue touches the soft palate. The tip of the tongue also rises upward. Here also the uvula blocks the nasal passage. When the *na* sound is produced, it opens up the passage.

*Pa, fā, ba, bha, ma*

When we produce these sounds, both upper and lower lips move in each other's directions. The lips meet first and then separate. Due to this, the air is released with a pressure or push. The uvula moves upward and blocks the nasal passage. When the uvula hangs down, both the passages of the mouth and the nose will fall open for the air to pass through, and the sound is produced.

*Sa, la, sha, sha* (first *sha* is that of *sharan* and the second is that of *shatkon*)

When the front part of the tongue rises and touches the hard palate and remains engaged till the air passes through side passages, sounds like *sa, la* are produced. When the front of the tongues touches the hard palate and *a* is produced with a whistle, the sound *sha* is produced.

## SUKLESWAR DEKA

I have been teaching in primary schools since 1987. For the first eight years, I taught in many schools, where I focused on community development and building relationships with the community, school beautification, and improving children's writing. Here I describe two of my activities, which I consider to be innovative.

### **Friend School**

When I was promoted as a CRC Coordinator, I had to visit each and every school of our centre. It was during such visits that I realised that in the same centre, one school was not aware of what the other school was doing. The teachers of different schools did meet one another, but they never had the inclination to share their views and activities. Two VECs or Mothers' Groups (MG), with the same problem, never met. This lack of communication made me uncomfortable. I felt that if friendship between two nearby schools could be developed, it would cultivate relationships between two VECs, Mother Groups and the *Panchayats* as well. The teachers and students would also benefit through exchange of educational views and activities. Thus, the stage for implementing the idea of a "Friend School" was born. The idea came to me suddenly while I was working on another activity called *Gramyaman Pathdan*, in which I found teachers worked together with a friendly and caring approach.

The primary objective of this innovation is to establish sound relationships between two or more nearby schools, their VECs, Mothers' Groups and teachers and students. The Student Government is an important aspect of our schools. The idea was also to share with other Student Governments how school affairs are being governed, what role the governments play in academic improvement, and how they can create and maintain a network with the community members. When a particular school is known to be a good or a successful school, what are the factors that contribute to its making? What is the exact role of the community in achieving this grace? When such aspects are shared with the other (friend) school, the latter can have a benchmark to work towards. After presenting my idea to the people, I decided to implement it. Two criteria were important: the two schools should be near each other; the Student Government members should be supported by the VEC and MG.

For the pilot testing, we chose two schools, Tengabari Primary School and Chaudharypara Primary School. The representatives of the first school wrote a letter to the representatives of the other school. The Cultural Minister took the letter and met his counterpart and some representatives from the community. In order to mark this meeting with a special gift, a compilation of educationally useful items like stories, songs, quiz, stories of great personalities, jokes, was made and presented to the village. A gathering was then held at the host school. Here the student representatives of the Tengabari school informed the students of Chaudharypara school about the idea of Friend School and formally offered their friendship by handing over the letter and the gift prepared for the host school. The VEC members and teachers also gave brief talks on the idea of the Friend School. While leaving, the visiting students invited the hosts to their school.

Now the Chaudharypara School came for a visit to Tengabari School on a pre-determined date. The group included the students, the teachers, and members of the VEC, the MG and the SMC. The representatives of the host school welcomed them. Both the partners jointly participated in the gathering that followed. The students and the community members of both the schools declared their friendship according to the Assamese tradition. This was merely the beginning of the friendship.



Then I followed it up—once the formality of offering and accepting the friendship was accomplished, documentation of the happenings began. Exchange of stories, games and other educationally important items became a regular feature.

The major outcomes of this innovation are:

- The bond between the schools became strong. The communication between the students of both the schools happens on its own and exchanges of educational activities are common.
- The members of the VECs, the MGs and the SMCs also meet to share their views. Their scope has widened in the sense that their concern now extends to the friend school. They now think as one group and work as one group.
- Different kinds of competitions are organised between the two schools.
- During the visit, the host children take the guest children for a walk in the village. Thus, the guest children come to know about the history, geography and culture of the other village.
- Remarkably, both schools have initiated exchange of TLMs. This is important because with meagre resources, better results are possible.
- The teachers of one school are motivated to teach in the other school.

Every month a meeting is held for the students of both the schools. The schools take turns to host. During such meetings, if it is found that students of one school are facing some problem in a particular subject or a particular unit, a teacher from the other school comes and teaches the problem item to the students of the friend school. The same spirit has helped in attaining 100% attendance, and both the schools are now eligible for an 'A' rank. Besides this, both the schools indulge in healthy competition.

With the passage of time, some need-based changes had to be made. If one of the friend schools is significantly weaker, the stronger school is motivated to help the weaker one by asking its teachers to take additional classes. The community agencies participating in the 'friend schools' have expanded their activity scope from just handling academic problems to resolving social and economic problems. DPEP and SSA have played a crucial role in helping me spread the idea. As a result, many centres in Assam have adopted the idea. The first replication was done by Mrs. Parmesh Das, the HM of Goaljihare Primary School, Goalpara district.

### **“Mobile Teaching Abhijan” for Weak Multi-grade Schools**

In single or two-teacher schools (multi-grade schools) there are many well known problems. These made me implement the process of mobile teaching by resourceful teachers. We first discussed the idea in one of my monthly teachers' meetings. With the permission of the authorities, I identified the weak teachers and the resourceful teachers as well as the multi-grade weak schools and the nearest good mono-grade schools. Accordingly, an action plan was prepared for the implementation of the mobile teaching *abhijan* in which the resourceful teachers of the mono grade schools had to take classes in the nearest multi-grade weak school twice a week.

Eighteen resourceful teachers were selected and they started to take classes using their own action plan scheme books, lesson notes and TLMs. However, it was decided to give more emphasis to the following points:

- Joyful, child centric and activity based learning.
- Competency based learning.
- Active participation of all the students during classroom transaction.

- Effective use of TLM.
- Classroom decoration and use of monitor students.
- Attendance of the students.
- Infrastructure of the classroom.
- Guardians' / parents' awareness regarding nursing of their child.

After completion of the class, the teachers of the weaker school had to submit their observation notes. The resourceful teachers also submitted their own reports. These notes were the basis for discussion, and remedial teaching action plans, during the monthly teachers' meetings.

The mobile teaching *abhijan* has had the following specific achievements.

- Weak schools like those in tea gardens and in remote areas benefited.
- All the teachers and parents had to collectively prepare and forward an action plan.
- Friendship between the schools becomes more effective.
- More responsibility has been devolved to the local society and social organizations.
- Rationalization of teachers has become more effective.
- Weak teachers have themselves become resourceful.
- Student and teacher attendance has become regular.

## RAM KUMAR S. VERMA

### Wall Paper for Improving Writing

The background for my work is provided by the emphasis on child-centred education, and the need to make the process of teaching and learning 'joyful' for the child. During interaction with children, teachers identify many obstacles to learning. As a result they try to change the way in which education takes place—changes in the medium, the environment, the place or the process help. But trying to bring about some change in oneself is more important, and this marks the beginning of innovation.

One problem I faced was the genuine lack of an ability to write among my students. There is a clear mismatch between the competencies specified for the primary level and the actual writing abilities of children. Apart from the basic competencies of recognising and writing vowels, consonants and conjoint letters, writing simple descriptive sentences, writing to dictation using proper punctuation marks, composing brief essays with proper paragraphs and punctuation, and writing letters, are some of the more advanced skills that children are expected to demonstrate. Many children do not exhibit satisfactory levels of these competencies. However, I have found that sometimes children know the answers but are unable to express themselves correctly and adequately. Their writing abilities clearly need to be developed at an early stage; otherwise, the quality of education suffers and the difficulties get pushed upwards towards teachers at the higher stages of education.

The checklist I have used to understand the problem of poor writing ability has the following criteria:

- Examination of study books of students for clarity of answers.
- Students writing only those letters and sentences which the teacher has written on the blackboard.
- Children being unable to write as much as they speak.
- Inability to write dialogues which are developed by the teacher out of oral stories.
- An inability to write simple things that are seen or heard.
- A reliance on blackboard material for the exercises given in the lessons of Language textbooks.
- Lack of interest in trying to write unknown words or sentences, or about incidents they have seen or heard.

The above observations inspired me to innovate in the area of writing.

### ***Diwar Akhbar* (Wallpaper): Developing Language Skills and Creativity**

The idea of a "wallpaper", simply called *Diwar Akhbar*, was designed as a tool for developing the four inter-related skills of listening, speaking, reading and writing. Some of the basics were: making the wallpaper look like any daily, but only in its outward form; a focus on all the above four skills had to be maintained; the activity had to be a totally child-centred activity and joy-giving; children should not be conscious about what competencies they are developing while being engaged in the activity; the entire work had to be a group activity, so that no child felt the burden of the activity.

Previously the children used to casually note the incidents taking place around them. They never discussed them with anyone. But when they were involved in the writing of wallpaper, they started

to discuss these incidents with the editorial team and began to write as well. Given the drawback noted earlier of inability to write unfamiliar words, some began to make pictures or cartoons related to the incidents. This activity started automatically, once the medium was made available. With some guidance from the teacher at this point, students started to attempt to write on their own. This was the first step in developing language competencies. Apart from the objectives of the teacher, the wallpaper may have just played the role of nourishing and nurturing the creativity of children.

### ***What is a wallpaper?***

The simplest meaning of a wallpaper is a newspaper put on the wall. The usual newspaper is far removed from the world of children. Some do have space for very young children, but assume a certain level of language skills. The experiment under discussion helped to take care of the 'news' of the children's immediate (and relevant) world. With whom will they share the things they have witnessed? Where will they write their feelings? Where will they display their pictures and cartoons? The 'wallpaper' fortunately provided an answer to these questions.

Children first bring 'news' items. Then they discuss these items amongst themselves. The editors (some of the children) then write an editorial. Others add stories, songs, jokes, puzzles, pictures, cartoons and quotations. The children then check each other's writings, and if they spot mistakes, correct them.

A variety of material is used in the wallpaper—ranging from recycled old newspaper to drawing sheets. Pictures may be drawn or collected from elsewhere and pasted. All these add up to the identity of an 'independent' newspaper.

The wallpaper is hung on the wall or pasted at a height and at a place that are convenient for children. The height is such that children are able to read easily by following the words with their index fingers. The writing is also large sized.

### ***A learning experience for the teacher***

The wallpaper is a source of learning for a teacher also. When a teacher is trying, through the wallpaper, to inspire children to enhance their language skills on their own, he himself enters a new world of knowledge. When a teacher sees the children fully active in the process of making the wallpaper, the teacher tries to add something new to it. He is forced to bring something new from his own resources, but his knowledge base also increases. It is a source of satisfaction for him. And above all, the learning process becomes interesting for both the teacher and the taught.

### ***The gradual development of the innovation***

Before implementing this innovation, I discussed the idea with many educational experts. The gradual development of the innovation is described below.

First, before showing or telling other teachers and children about the concept of a wallpaper, I myself published a wallpaper. This was a trial, which helped clarify the concept and identify all the requirements for a regular venture. Then one day, I asked children to bring any news around them, songs and pictures they liked, or cartoons drawn by them.

The next day, in the very first period, many children deposited their writings, pictures and articles. With the help of four children, I pasted them up, wrote an editorial and asked children to give the wallpaper a name. Immediately they said "Children's Times". I agreed. The wallpaper was now ready and I kept it at the place where the school gathered for prayers. Children began to read it with attention.

### ***Formation of the Editorial Team***

An editorial team of 10 students was formed. One of the students was called editor, and the others were called reporters. Their roles were worked out. It took them two publications to gain the necessary confidence. I did provide guidance during this period. Later on it took the team about 15 days to put together one edition. The innovation developed along with the confidence of the children. From the initial active involvement of only ten students, many more children now are actively involved so that all the children in the school participate in some way or other.

### ***Exhibition for Teachers***

The wallpapers prepared by students were then presented as an exhibition to which the teachers were invited. This meeting served to evaluate the results of the activity in the light of the original objective of developing language skills. All the teachers were impressed with the writing skills that the children were able to exhibit; the teachers especially noted that those students who were unable to answer questions in the classroom were writing "very responsibly". This was not an anticipated result, since the wallpaper was specifically expected to help those children identified as unable to write what they could answer well orally. Everyone assessed the wallpaper as an entertaining way of developing language skills.

### ***Exhibitions in other Schools***

Once I saw improvement in the language skills, I spoke to teachers of other schools and exhibited the wallpapers in their schools. It provoked a lot of interest, and made children read the wallpapers for long periods of time. Some of the teachers communicated to me that their children had shown extraordinary interest. In these schools, we formed editorial teams of children, and they began to publish the wallpaper regularly.

### ***Workshop for Children***

Seeing the continuous involvement of children over time, I thought of organising a workshop at the town level for children. I took the help of Janshala, a programme run for quality improvement in primary education. The State Coordinator Shri D.N.Sharma helped in calling 200 children from the town of Bhilai to the workshop. The workshop was organised in February 2002 and over a two-day period, the enthusiastic participation of the children resulted in the production of about 40 wallpapers. These were displayed towards the end of the workshop.

### ***Workshop for Teachers***

This workshop then led to a district-level workshop for teachers. The focus of the workshop was on sharing information about the processes involved in wallpaper production, techniques to maintain the children's participation, and observing and tracking the outcomes of the activity. The workshop seemed to be successful, since many teachers tried out this idea to develop language skills on their return to their own schools.

### ***Special Workshop***

After the feedback of this workshop was analyzed, I decided to organise a special workshop for eight schools located in the habitations of labourers. The problem here was that the children in the same locality spoke a variety of languages, but the medium of teaching was Hindi. Teachers in these schools faced very special difficulties for which they were not well equipped. In the heterogeneous language environment in which the children found themselves, the wallpaper offered a medium to combine home languages with speaking and writing skills in the standard language. The workshop, held in February 2003, focussed on the teachers and 320 children. This initiative is still developing, and the initial results have been positive.

In summary, the following steps are now taken, keeping in view the objectives noted earlier.

- Discussion of the wallpaper idea with teachers and head teachers (if present) as a tool to develop language skills.
- Formation of an editorial team in the school.
- Training for the wallpaper in a special workshop.
- Discussion on methods of writing suitable for a wallpaper.
- Discussion among the teachers on the utility and the benefits.
- One teacher is made a *Prabhari* and another a *Prerak* in each school.
- Constant contact with the trained teachers and the children.
- The children of Class III, IV and V, on the basis of their interest, are constituted into wallpaper teams (to handle the responsibility for production).
- The wallpaper has to be published at least every 15 days, and it should be kept in a convenient place so that readability is ensured.
- The wallpapers are to be preserved, and the compilation taken to a district level competition for selecting the best wallpaper.
- Finally, an assessment of the improvement in the language skills of children, to be carried out by the teachers.

### ***Assessment of the Success of the Innovation***

The participating children have been observed to be willing to learn under any circumstances; the only conditions my initiative imposed were that collective efforts should be visible, and the efforts should lead to learning activities. Of course, the children have to be given sketch pens, drawing sheets, old newspapers and other material, and sufficient time for writing. My preliminary objective has been achieved. The other criteria on which an assessment was made are the following.

- Degree of original writing by the children and the exposure of the other children to it.
- Levels of discussion among the children.
- Extension of group work habits to learning in general.
- Development of a sense of responsibility and coordination skills.
- Reduction of errors in classroom writing.
- Movement towards the standard form of the language (wherever applicable).
- Reflection of the sensitization of students about the happenings around them.
- Retention of children in school (even though not directly attributable to the wallpaper).
- Creation of groups of active children.
- Development of an ability to express oneself.
  - Developing the willingness and ability to write unfamiliar words and sentences.

### **Present Status of the Innovation**

- a) The teachers meet at training sessions to discuss the progress of the wallpaper activity.
- b) In some schools, a blackboard has been made on the outer wall of the building, and children use this as a medium.
- c) Wallpaper production is also done in *Bal Melas*.
- d) The editorial teams are contacted regularly for motivation and guidance.
- e) In many schools of the district, the wallpapers have evolved into handwritten magazines.
- f) The creativity shown as a result of the wallpaper now gets reflected in other activities in the school.

### **What should form the content of a Wallpaper?**

For making the wallpaper multipurpose, it should include interesting material: Interesting news, editorials, news of the school/ street/ village, cartoons/ satire or comic poems, jokes/ puzzles and quotations, stories and folklore, original writings of the children, word puzzles/ crosswords, weekly or monthly songs, news about the planning or celebration of festivals in that particular month, pictures, news of problems and their solutions, brief information on the talents of specific children, news based on science

### **What should be kept in mind while writing?**

- The handwriting should be good
- Spacing between words and sentences should be generous, but appropriate
- The news should be presented in simple sentences
- The content should be aimed at developing writing skills
- Proper punctuation marks should be used
- Writing should be done in spaces specified for the writing
- Names of writers/ reporters should be mentioned.

### **Some of the 'news' items about which children have written**

- (a) *A video show was going on near our house. A boy came there, saw a piece of iron and tried to take it. It had a live electricity connection. The boy died of electrocution.*
- (b) *Last week, near my house, a man fought with his family members and left his home. He then never came back. Why?*
- (c) *A boy went to a girl's house and he put sindoor on the girl's head. When the girl's brother came to know about this, he beat up the boy severely. The girl's parents filed a police report. Police came and arrested the boys.*

### **Child-editors write:**

- *It was fun to draw and write news. It felt very good to write with my classmates.*
- *I like the wallpaper very much. When we grow up, those of us who draw well can become painters and those who write well can become writers.*
- *We were told to write about the incidents around our house. First I thought about what I wanted to write. Then, when I started writing a letter, I wrote a complete letter.*

Educational experiments like these have serious aims, but they do involve a lot of fun and give joy to the children and the teachers. Ultimately, children have to learn somehow, and anything that is novel and well designed is an appropriate tool.



## ROSHANI DEVI

Girls are often made to stay back at home for domestic duties like sweeping, mopping, cooking, looking after young siblings, grazing animals, or for collecting papers and plastic bags from the streets. Pained by this, I was inspired to do something.

### Development of an Idea

1. With the help of maternity homes, midwives of the village, officers issuing birth certificates, girls studying in *Anganwadis* and schools, I maintained details of all the girls born in the village.
2. I sent personal birthday greetings and good wishes on their birthdays.
3. Birthday cards were made and these cards and gifts were given on behalf of the school children. This improved my relationships with the parents and the community.

The enrolment process begins with a survey of the girls not going to the school conducted in the months of April, July and August. Then an 'enrolment fair' is organised, where discussions with the villagers are held. Every girl beyond four years of age is enrolled in the nursery. Then contacts are maintained with the *Anganwadi*. When a girl attains five years age, I visit her at her home and enroll her in the school. Thus no girl remains out of school. Every month, the second Saturday is set aside for a meeting of the guardians. As a parallel activity, the school going children are asked to bring names of girls not studying anywhere. Children who do so are given prizes and certificates. The result of these efforts has been 100%.

### Measures Taken for Preventing Dropout at Class V

The first thing to be done is to make parents aware that a new enrolment in the upper primary school has to be done. Some parents do not know about this. We also tell them how to do it in a new village, since many of the girls migrate. We bring the HM of the upper primary into the picture. In the last week of February, a list of girls studying in Class V in the lower primary school is sent to the HM of the upper primary school. This gives him an idea of how many girls should be enrolled in the school the following year. The HM then organises a meeting with the guardians of the Class V students in March. The objective of this meeting is to make sure through dialogue with the guardians that none of the Class V girls is deprived of enrolment in the upper primary section. After the entire process is over, the HM reviews the records to make sure that all the girls who have passed Class V are accounted for.

### Handwriting

From the autobiography of Mahatma Gandhi, I came to know that he regretted his bad handwriting. I felt that the students studying with me should not have such regrets. For teaching the entire *Varnmala* (alphabet), I have relied on the traditional method of practice makes perfect. Children are given coloured chalk sticks, broken into pieces, for practice. Then the vowel sound writing is taught. Finally using ruled paper, practice in adhering to the lines is given.

Competitions for good handwriting at the school level are organised on festivals like the Republic Day, the Independence Day, *Gandhi Jayanti*. The parents, retired teachers and the HM are involved in the evaluation process and the winners are given prizes in the presence of respected people. Some social workers began to give prizes to the winners of the good handwriting competitions. Such prizes took the form of stationery or cash. Between 1998 and 2003, on an average, an amount of Rs.3500 has been distributed to about 20 students every year. This competition has had a

particularly good impact on girls. Such activities contribute to keeping the children, especially the girls, in school.

## RAMESH P PATRI

I describe here only one of my activities, a project titled "My India" which is a play way method for teaching Class IV of my school. The objective was to illustrate national integration. To learn about each other, to know the neighbouring states, their culture, languages and traditions, children should develop interest in knowing about the variety in our country. The activity also helps in the cognitive and motor development of the children. The several play activities can be carried out on a playground. The teacher can draw the map of India on the ground. He can point out the boundaries of the States. Groups of students participate in this activity. The Social study book of Class IV was the base for this experiment. The number of students in my class was 32. Of them six students were regularly absent. I ignored them initially. The rest of the students were divided into two groups of 13 each. I exposed only one group to the new activity, and let the other group function as a control group.

The teacher first directs the students to stand on the boundary of the map of India. The teacher then gives sufficient information about the states of India. The teacher says "Ham sab" (all of us), students say "Bhai Bhai" (Brother Brother), the teacher says "Anek Bhasa Anek Besh" (Many languages, Many costumes), the students say "Phir Bhi Hamara Ek Desh" (Still our country is one), the teacher says "Delhi Ho ya Guwahati", the students say "Apana Desh, Apana Mati" (Our Country, Our soil). Finally, the teacher says "Bande" and the students respond with "Mataram".

Then the teacher calls out the name of a state; the students have to break their lines, and come within the boundary of that state. While running, they have to recite patriotic slogans. Those who get inside the particular state first are winners and are able to participate in the play further. Those who are not able to come inside the state are not eligible to play. The last child who is able to stand inside a specific state is announced the "Best Child of India". In this way the children can remember the names of all the states of India.

The teacher then gives information about places worth seeing in various states, state capitals and names of rivers in the states, the sources and destinations of the rivers and places through which they flow. Students then once again run and stand anywhere on the boundary of India. When the teacher names a place in a particular state, the students run to that particular state. When the teacher says the name of a river and where it flows, the students go to those states through which the river flows. The number of states could be more than one. Finally, the winner is the one who remains.

The teacher tells the students to stand on the boundary of India. The teacher gives them information about poets, philosophers, scientists, and patriots from a particular state. The play continues according to the same rules. Then the teacher gives information to the students about different dances of India like Kuchipudi, Bharatnatyam, Kathak, Odissi, Kathakali, Manipuri through this play activity, and the game is repeated.

The same pattern is repeated for important festivals (national or regional like the *Jagannath car festival* of Orissa), airports, industry, ports, mines etc. I found that the students who undertook this activity learned with much interest, and did better in a social studies test. The pattern of the test included naming the states in which some monuments were situated, matching dances or people with their states, and drawing the shapes of states.



## VIRENDRA KUMAR AGARWAL

I am an assistant teacher in the Government Primary School, Yusufpur, Block Morna, Muzaffarnagar, Uttar Pradesh. I was teaching classes 1 and 2 in 2002-03. I noticed that when I gave students work to be put into their notebooks, some of them did it immediately, while others did not do it at all or tore off the pages from their notebooks. So it was difficult to make out whether they had done the work or not. I kept on thinking about how to make the children get rid of this bad habit of tearing out the pages. I also asked my colleagues but got no help.

Then I began to watch the activities of the students and found that they kept the colourful pages of their books safe and never tore those. Keeping in mind this habit, I tried to draw pictures in their notebooks but I was not an artist.

So I contacted a stamp-maker and asked him to make rubber stamps of different pictures. I got the prototypes of pictures related with the English alphabet prepared. These were scanned and the stamps were made. Thus I had 26 rubber stamps with pictures on them.

Using four different coloured inks I used the stamps to create exercises in the children's notebooks. I used them to teach Hindi, Math and EVS in classes 1 and 2 in the following way.

### Hindi (language)

1. Who is related to whom?
2. Join similar things with an arrow.
3. Identify and write.
4. See and write.

### EVS

1. Draw a circle around the eatables.
2. Draw a square around the living things.
3. Draw a triangle around the lifeless things.
4. Draw a circle around the manmade things.

### Math:

Which is smaller, which is greater?

What is ahead, which is behind?

Which is less, which is more, which is equal?

See and count.

Count and write.

Add.

Subtract.

These are basically exercises created in the notebooks with the help of stamp prints. The children are asked to indicate their answers by drawing circles around the pictures or putting some mark or writing the answers (e.g. in the case of the addition exercises).

After the regular use of stamps, I found that the page-tearing habit gradually disappeared. Some figures of my evaluation are given below:

Class	The number of students tearing pages or not doing their homework	Number tearing pages or not doing their homework
1	20	3
2	23	2
	Number of students not bringing their notebooks before	Number of students not bringing their notebooks after
1	6	0

2	8	0
	<i>Total enrolled children</i>	Average weekly attendance before
1	33	18
2	48	35

Thus the habit of tearing pages out of notebooks was controlled by using the stamps on the notebooks. In addition, all the children began to bring their notebooks. Attendance also improved. Children, who had earlier remained absent without any reason began to come to school and started taking an interest in their work.

At present, these stamps are also being used in classes 3, 4 and 5. The students of these classes use these stamps in their notebooks and write 5 to 10 lines about each picture. These stamps are also used to make ballot papers in lessons on elections in civics for classes 6, 7 and 8.

## ANANDHI K

The main problems I have encountered have been irregular attendance and, as a consequence, the drop in interest in studies among children. The first approach I tried was a system of rewards for regular attendance. From my salary, I gave small but tangible rewards like pencils, rubbers, pencil boxes, to all those who attended classes without break. I also invested in square-ruled paper notebooks, and told children that this was an added incentive to improve their handwriting. Thus, while giving them a notebook, I expected them to motivate themselves through another competency, good handwriting. My brother appreciated my work, and after seeing that I was spending from my salary, gave me some money. His friends have now joined him, and once I gave them details about the positive impact on the attendance, more financial help followed.

I also tapped into the children's love for singing songs. So, I transformed all the textbook-based learning items and competencies into songs. I taught the children how to sing the songs and made them learn without getting conscious about the learning process. I have shared this experience with other teachers, and have had to photocopy my competency-related songs for Classes I and II. These songs have been circulated widely within Thanjavur district of Tamil Nadu. I have used the fellowship offered by the Sir Ratan Tata Trust to augment this particular work. The printed copies turn out to be cheaper. I have added to this stock by composing songs on certain values that are part of the curriculum: nationalism, respect for elders, religious tolerance, good manners and environmental protection.

Both my goals of reducing absenteeism and making children interested in their learning have been achieved. In fact, absenteeism is close to zero. I have got some rough evaluations of the learning made, and these show that at least there is better retention of the competencies acquired through songs in the minds of children. I am proud to be a teacher.

## RAJANI J APSUNDE

I was born in 1955. There were many teachers in my family. My village did not have even one girl who was a matriculate, but my father decided to educate me. I have since completed my BA and BEd. In 1981 I was sent to a village in Ozarkhed Tehsil, Dindori. It was so small that there was no school building. We seated all the students of classes 1 to 4 near the Hanuman temple. Absenteeism was a problem, and we used to go around every morning rounding up the children. I decided to build on my interest in participating successfully in various competitions like essay writing and science fairs. I first tried a hot food box with class four children. This was presented in a science exhibition in 1984. The simple principle was generate heat energy from a bulb and get it reflected through shining silver paper on to a wooden box with food. We received an appreciation certificate. Improving the quality of students' learning has been my concern. I have extended this interest to a variety of activities like superstition removal, pulse polio drive, good handwriting, Math learning, nurturing medicinal plants and trees, and drawing competitions. Here I describe one experiment which I think is worth sharing.

I realized that students often skip some words while reading, are unable to read fluently, and often do not listen to the instructions. I felt that the lack of listening skills was the cause. I believe listening skills are very important, since the development of the other language skills depend on listening. I decided to carry out an innovation with audio-tapes.

I first introduced the children to the well-known exercise of telling something quietly to one child and then asking her/him to convey what he or she has been told into the ear of the child next in the row. I augmented the learning by discussing aural instruction and dictation. The lesson was that children get distracted easily and do not listen carefully. To begin with I used the cassettes prepared by NCERT.

- 1) 'Bolti' (talking) Balbharti
- 2) Prayer
- 3) Group songs
- 4) *Geet gunjan*
- 5) Stories of Birbal
- 6) English - My first book I
- 7) " My English book-II
- 8) Study of surroundings - environment.
- 9) Maths - let us do addition.
- 10) Akashwani - educational program
- 11) Swing towards sky and other cassettes.

By playing these cassettes again and again I was trying to draw the attention of students towards their studies. Still, I felt that my involvement was usually greater than that of the students. So I decided to record the discussions, lectures, poems, songs, drama dialogue in the children's own voices. I involved all 63 (34 boys and 29 girls) students of class 4. First, I collected story books, children's magazines, language books, Balbharti books, two new tapes and a tape recorder. My focus was on collecting good stories, drama, prose, paragraphs, songs, poems. Then I trained the children in story telling, rhythmic singing of poems and delivering dialogue. One hour, after school, was set aside for the recording.



Sometimes the students pronounced words wrongly. Sometimes they skipped certain words, but we were quick to add their own words. A few students were physically present and not mentally, so the recording was not done properly. Some students were in the habit of using filler words which hindered their presentation skills. I corrected all these mistakes and repeated the recording. We recorded two to three stories a day.

In spite of the problems, there were several advantages. For example, while telling a story, the order of events should be presented clearly. If animals and birds are present in the story, their sounds had to be imitated. The students' interest went up dramatically and they used to come prepared with stories. This increased their self-confidence. They also started listening to my lessons carefully. Gradually, the quality of the recording went up.

Another problem faced while recording was that the students were able to read printed matter well but not the handwritten notes of their classmates. So, during the regular class, I introduced letter writing as an activity. Students were made to write letters on various subjects. Other students had to read out these letters. I noticed that some students corrected or changed words and sentences. This helped the others focus on handwriting improvement. The indirect benefit was that everybody wanted to take active part in the recording exercise. Now, my students are able to listen to my instructions carefully, tell stories coherently, give lectures, read efficiently, express their thoughts and feelings with confidence, and take part in talent competitions.

## REKHA K BARI

Since 1990, I have been working as a teacher with the Dhule Education Society. My father was an auditor in a co-operative society, and our circumstances were ordinary. I did well in my teacher training course. I was married by then. When I lost my child, I was encouraged to take up teaching. I completed my BA as an external student. As a teacher, I got ample opportunity to experiment. My first appointment was at a high school, where I worked for eight years. Then I was transferred to a secondary school which had students from very poor families and non-literate parents. I faced a lot of difficulties in teaching. I have focused on dramatization of lessons, helping children recite scriptures like the Bhagawad Gita, making them undergo some experiments in reading and writing, and a number of other activities. I will present only one activity, which is about the **education of disabled children**. This one is closest to my heart, probably, because my child who died was also disabled.

It is not correct to say that only the government should make efforts for rehabilitation. Every person has a moral responsibility to pay attention to these problems, if we are to develop as a sensitive society. Unfortunately, we only learn to laugh at such people. Once I saw some boys of my school standing near a shop. They were laughing loudly. I saw that they were teasing two deaf and dumb boys who had come to buy something from that shop. Those two boys panicked. But the school boys saw me. I made them run away. They went away laughing but my heart was shaken. I decided to change the attitude of my students. My head teacher, Mr. Vyavharji, was very supportive. I went to an Area Service Center at a town called Dhule, and there I met Mr. Hemant Dane and Dr. Date. I explained to them the problem with my school students. With their advice I developed an action plan. I also found the books written by Ms Supriya Kale on teacher training for deaf and dumb children very useful.

I went to a nearby school for deaf and dumb children. I explained my position to the school principal, Ms. Oak, who was very pleased that I had come to her school. The next day at 10 am, I took 55 students along with their lunch boxes to the school. Mr. Palve of our school was with us. First we went to the hostel. Our students took lunch with them. The school was to start at 11.30 am, and our purpose was to have an interaction between both the groups before that. My students learned a lot that day. They understood how the disabled children assembled, recited prayers, how such a school came to be set up, how the disabled children learn, how their teachers teach them, the educational literature that is suitable for such children, and so on. They also came to know about the special arrangements of the classrooms. Every class had 10-15 students and they used microphones. Our children understood that the shape of their school building was different from that of the other schools, that they use mirror and a special aid in order to learn to pronounce. They could see that such children are taught to make various articles which are then sold in the markets. Both groups of children became friends. My school's children wanted to do something concrete. While returning from that school I asked students, "What can we do?" One boy said, "Love them." Another said, "Let us give them chocolates;" someone else said, "Help them study." On hearing the last suggestion I was very happy. I asked, "How?" He replied, "We can teach them." I again asked, "How?" Someone said, "By giving reading materials." I liked these ideas of the children. I told, "Yes, we can help by giving study material."

Our children had observed the teaching learning methods. So we prepared a list of teaching aids that could be used to aid the teaching. After completing our unit tests, we started our work. When I met the principal again, she asked me to prepare materials from books of 1<sup>st</sup> to 4<sup>th</sup> standard. So we

brought textbooks of standard 1 to 4. And we started a workshop to prepare materials. After school, we sat for 90 minutes for 15 days. We worked in groups. Work was allotted by specifying each group member's work. The parents also came to know and got interested, since some of the students, who were taking work home, took their parents' help. The parents encouraged their children. We made 175 items. Then I asked the principal of the Deaf and Dumb school about the number of such schools in Dhule district. She gave me the addresses and telephone numbers of five such schools. I telephoned four schools and told them that I would like to involve my children in preparing some material for their children. They were very happy.

Then we made a list of material to be given to each school. We first exhibited the material. When other students saw this, they wanted to know why only the class seven students were included. "We could have helped." Then I was requested to exhibit the items in an Education College, so we exhibited them. On the same day, we gave those items to the school that we had visited. The five schools covered were at Dhule, Junner, Kusumba, Shindkheda and Shirpur.

The outcome of my work is that the community appreciated my students and me. Some students learnt Braille; five boys actually wrote stories in Braille and showed them to me. We gave these stories to a school for the visually handicapped. Today many students of my school go to the Deaf and Dumb school to meet children regularly. They play and study together. I am very happy to see that some students have started teaching the younger kids poems and stories. On seeing this I feel that I have achieved something in life.

## MANJULABEN R BHATT

If the language spoken by the teacher is very different from that of a child, there is a problem. Here I am going to present a problem peculiar to Kutch in Gujarat. The mother tongue of more than 50 percent of the children in the region is Kutchi. Hence there is a need to teach young children in Kutchi. I lost my parents when I was very young but my sisters and my school teacher supported and motivated me. On completion of my training I was posted to a school where my husband was already working. Since then we have been working together. I continued with my studies and obtained a doctorate. I was put in charge of class one. This was the start of my teaching with pictures, drawing and music.

I can sing well. My husband and I bought a harmonium so that we can use it on occasions that people organized. Together we created a good environment in the school. Drawing and music were two tools I used from day one to teach the children. Every evening I played the tambourine and made children sing for half an hour. The blackboard in my classroom is never without a drawing on it. This way the children simultaneously learn the curves of drawing and alphabets. I explain the shape of each letter with an action song; for example,

<b>Alphabet</b>	<b>Content of action</b>	<b>Figure on black board</b>
K (k as in Keen)	Writing on hand / palm with pen (Kalam) and calling out K.	K
Kh (kh as in Khalifa)	'Kh' for Khatara (Truck) with action of driving with two hands on steering wheel.	Kh
G (G as in guide)	G for Ganpati with action of Aarti (i.e. wave small lamp/s before an idol by way of worship) in clockwise direction, with palms open.	G

Thus, I have learnt by heart all the customary actions for all the 32 consonants and 12 vowels. I present them before children and they can never forget the alphabet. The education has become interesting; I am never fed up of teaching. I can see the joy and satisfaction in the eyes of children at the end of the period and I feel happy. I like teaching language in this way. They are active and vigilant too, for example, if I say G for "Gaya", they would instantly retaliate by saying that 'G' stands for Ganapati.

I teach environment with the same method. I present pictures of neat and clean, tidy and healthy children before them and teach them hygiene through songs. I have introduced a program of nail cutting on every Saturday. One older child looks after the neatness of a young one. I have only to

guide them. The slogan of the subject 'environment' in my class is 'neat child and clean school'. The neat and tidy child is applauded and welcomed in the prayer gathering, so that other children can learn good habits. I believe it is the work of the teachers to correct the untidy child.

Developing a liking for art and craft in the child is also one goal of EVS. So I give lots of practice in soil work and making paper toys. I build on the family's occupation. The children from families which are familiar with particular crafts take more interest in their family crafts. For teaching math also, I use drawings and poems. I have a variety of number cards and flannel board and songs which include the names of all the children in the class.

I or the children have prepared the drawings and pictures related to the syllabus items. For example, to teach the unit 'Ran' (the desert) I try to explain the concept of unit by poem related to 'ran', then drawing /picture of desert and sand and then asking about the subject unit. To teach about flowers, I ask the children to draw zero first and then make flowers. This innovation took a considerable time and labour but it simultaneously developed my creativity as well. The prescribed poem and pictures were not sufficient for me. I needed more songs and pictures. So I created different types of children's songs which have been published in book form ('De tali', Let us clap). Moreover I searched the magazines that our school receives: 'Adhyayan Adhyapan' 'Maru Ramakadoo' 'Phoolvadi' 'Samprat Shiksha' 'Bal Sristi' 'Jeevan Shikshan'. I also got some of the pictures scanned with the help of the older children and got printouts. I have also used the children's song cassettes released by GCERT, NCERT, DIET and Navneet Publications and others.

I have successfully used songs and music in cultural programs, celebration of national festivals and developing messages for education of girls. I am now a resource person for training non-Kutchi teachers in the Kutchi language.

## RAMESHCHANDRA K BHATT

The main language of people in Kutch is Kutchi, but their educational curriculum is in the Gujarati Language. Kutchi Language is spoken in all the Blocks of Kutch, but Abadasa, Lakhpat, Nakhatrana, Mundra and Mandvi talukas have 90 to 95% Kutchi speaking population. In Bhuj, Anjar, Rapar, Bhachau and the newly formed taluka of Gandhidham, about 60-70% are Kutchi speakers. About ten thousand or more teachers are working in about a thousand or more schools of Kutch district. About 70 percent of teachers in Kutch do not belong to Kutch; most of them do not speak Gujarati in its pure form, rather their speech is heavily loaded with the typical accent of the region to which they belong. This is like depriving children of their right to learn in mother tongue.

In former days the Kutchi teacher taught children using the Kutchi language and the community members respected and rewarded them well. Students too respected them; but with Gujarati being emphasized, students are finding learning difficult. I was a Gujarati-speaking student in Kutch, and my friends used to share their difficulties with me. I often thought that if I became a teacher, I would teach in Kutchi to the extent possible. My Kutchi teachers developed in me a great attachment for the language. I put my ideals of 'teaching in the mother tongue' into practice in 1982, when I joined as a teacher in Motavalka. This school had half the children speaking Gujarati and the rest speaking Kutchi. On my first day, I introduced myself in Kutchi during the prayer gathering. The entire school responded with clapping. The head master asked me to teach class one. Class four also used to sit in the same room. The welcome I received on my first day still inspires me.

I had to teach using two languages, with explanations being in Kutchi and questions and answers being in Gujarati. Girls belonging to lower-ranked castes, who had dropped out of school, re-joined school since they were comfortable with their home language. I used to explain the grammatical rules of Gujarati, Hindi and English language, and the details of Science, Maths and History, in Kutchi. As a result, attendance improved and new students were enrolled. My wife was also posted in the same school. She, being Kutchi, taught through the Kutchi language. Together we brought variety into the daily curriculum. We planned and presented *ras*, *garba* and *plays* in Kutchi-Gujarati on various occasions like National festival days. This brought respect and honour. People sent their daughters to our home after school to learn. We planned and arranged Navarati mahotsava for five years in the front yard of our house, which made our social relations stronger. We are religious by nature, hence we used to study the scriptures and read them in public. Our home and front yard used to be full of children throughout the day. The women from the village used to come to my wife to learn embroidery and cookery. I taught music to the children visiting our home.

In 1987, we shifted to another school. With most of the children being Gujarati speakers, we focused on Gujarati, but still we included Kutchi songs, garba, rhymes and bhajans in our school curriculum. Here too we enjoyed good relations with the parents. We mobilized about Rs. 15,000 over ten years for basic facilities in the school. During this period, my wife and I published some Kutchi and Gujarati books; we also completed our MA and doctoral degrees.

In 1996 we sought transfer to Nakhatrana town for our daughter's education. Another advantage here was that the majority of people were Kutchi and I got chance to teach in my favourite language. Since the children were from educationally disadvantaged communities like Muslims, Kolis and Paradhi, the reduced drop out rate was a great benefit. I focused on the lower ranked-caste girls, and enrolled all of them. From 1996 to 2003, as assistant teacher, I taught classes 5, 6 and 7. I used to take my Kutchi books with me to the class. Moreover, audio-cassettes like, "Muryo Vatan Dhalaro" (My dear land, written by me, with my own music and voice, produced with the

support of the DIET) made the class lively. At present I am working as head master in the same school. I also run one examination centre for Kutchi. Everyday the last period is spared for Kutchi. Communications, IQ test, *antaxari*, find the correct word from jumbled alphabets, word game, songs are covered in this period. I read out before the children my column, which has been published for the last 23 years in newspapers and magazines, as well as articles written by other writers. I conduct weekly exams. Moreover, I have exhibited a list stating specialization of each student on the wall of classroom, so that they themselves know about their special achievements. I believe in using the two language pattern of teaching. I have changed the order of periods of subject in such a way that language periods are grouped together and Kutchi language gets more scope in language subjects. I strongly believe that the knowledge of language makes all hard subjects easy. Now I am teaching class 7, which has a wide syllabus. The children are also grown up enough to understand Gujarati. Moreover, the influence of T.V. as well as reading of newspapers / magazines and other books, enables the older students to understand the Gujarati language easily.

One problem that I always faced and solved was how to balance between two languages. Here there is a big dilemma. All the schools run by District (Panchayat) Education Committee, Kutch are Gujarati medium schools, hence the answers to question papers are to be written in Gujarati. So it was my responsibility to see that Gujarati language was not undervalued or became a subsidiary language. So I always tell children that Kutch is a region of Gujarat and we all are identified as "Garva Gujarati" (Proud to be Gujarati). Children's gatherings are organized daily between 4.30 to 5.00 afternoon, in which Kutchi and Gujarati items are presented, so that no discrimination is created between my teaching and Gujarati speaking teachers (though they all have been trained in Kutchi now) in the school. This approach has succeeded. Another advantage was that many of my non-Kutchi colleagues tried to learn Kutchi with my help.

Since 1996, GCERT has started appreciating the idea of teaching through Kutchi. Two of my books in Kutchi, my audio cassettes on different subjects, my columns in 'Kutch Mitra' run by the Janmabhoomi group, and the 70 programs related to literature and education that have been used by All India Radio, have made me realize my dream of long ago.

## KRISHNA BISWAS

I was appointed assistant teacher in 1986. Then I was transferred to Dumerpali Prathmik Shala in December 1990. I was the head teacher of the school. I had two colleagues and there were about 72 children registered at the school. As a teacher my interest has been in children's sports. So I used to plan various games for the games-period. I like to modify popular games to give them a somewhat academic look. Here I will share one example. This is about a modification of *kabaddi* which is very popular in villages. In this game two groups are formed of about 15 students each. The academic part is that I give each member an identity (name/ picture) related to lessons being taught at that time, for example, the names of rivers, flowers, numbers, numbers in words, and so on. Each member of the group has a corresponding member with the same name in the opposite group. The groups are organized in rows opposite to each other on a playground. A soft object (e.g. handkerchief) is placed exactly in the middle between the two rows. Apart from an identity, each child is also given a number to determine his/ her place in the row.

When I call out or show a specific card the child with that identity from each group must rush towards the circle in order to pick up the object and come back. Here the trick is that whichever child touches the thing first has to guard himself from the opponent who should not be able to touch him. He has to return safely, that is without giving the opponent a chance to touch him. Once the child has touched the 'object', he has no option but to pick it up. This is the condition for the one who 'touches' the thing first. If he does this, his group gets one mark, otherwise the other group gets a mark. A place of relaxation for the child is 'inside the circle'. After picking up the object if he enters the circle he is in a safe zone. However, he cannot stay there for more than half a minute. If he does, the opposing group gets a bonus score. The game is played till each child has had his turn.

In 1994-95 (while still working as a teacher in Dumerpali school), I introduced this game into the children's sports competition organized at the cluster level. It was then not exactly in the form I have described above. Earlier I used to place the object on a 'mark' exactly in the centre of the ground. The contest between two children (whose 'names' had been called out) used to end quite abruptly and hence was not so exciting. So I modified it by introducing the circle. In its present form the children enjoy it more. Now what happens is that once I call out/show the 'identity' card, both children (one from each group) rush towards the circle and move around the circle in order to pick up the object by tricking each other. Even when the child touches the object in a hurry he usually rushes into the circle and hence gets 30 seconds to get out by outwitting the opponent. There are fewer chances of getting hurt in this game. For the same reason, I chose a soft object so that children do not get hurt picking it up.

One thing that I noticed was the lack of participation from the physically smaller children. Since it was organized in a competition mode, most of the schools nominated such older children as had their names on the school register, but were never seen regularly in school. The problem with my school was that though the children of my school were academically good, they were rather small and weakly built and hence had no chance of winning prizes. This was demotivating for the children of my school. Two private schools located nearby faced a similar problem. To solve this problem I thought of including academic activities in the tournament. I discussed it with the teachers concerned but received no support. However, I had an opportunity in 1996, when I was made the CRC coordinator at Kudumkela. I was responsible for organizing children's sports competitions. Here is an example of one such game.



Form various groups of children. First classify the children according to their sections (primary and middle school). Separate the girls and the boys. Finally, make smaller groups for each class/grade. We select about 5-6 small questions requiring very short answers, for each grade (based on the grade's syllabus). We write down these questions on small chits of paper. For this particular game we need a ground about 100 metres in length. We draw a line in the middle of the ground. On this line we keep (according to the number of participants) slates and pens for very young children, and paper-pencil for older children. Then we make them stand in a row near the line. Then one of the children is asked to pick a chit randomly from the collection prepared for the grade. Once the question is read out the children are required to write the answer on the slate/paper and run towards the target line which is on the other side of the ground. They are told to leave the pen/pencil behind and run carrying the slate/paper. They are told that just running ahead and reaching the target line is of no value unless they write the correct answer. At the other end, teachers first collect the children according to the sequence in which they reach, and then check the answers to give the final ranks. Children with wrong answers do not get ranks. One round takes about 5 to 7 minutes.

A crowd of about 600 to 800 children from 18-20 schools used to give the event a festive look. So in 2000 I changed the name of the show and called it the children's festival. For this activity I got financial support from the community, especially from well to do families. Every year we were able to raise about Rs. 10,000 for the event. We made 3-day stay arrangements for the children. On the last day we used to arrange for food for all the children and the viewers. We also provided about 400 prizes.

School educational games became very popular among the children who were academically good. In fact those teachers who had worked hard for the academic improvement of the children, but had never been able to help them win sports competitions, were happier than the children themselves.

I would like to share with you one more activity that I carried out as CRC coordinator at Kudumkela. Here, I noted the problem of retention of the children of a particular tribe. About two thirds of the population covered under this centre are tribal—of whom about 50% belong to the Majhi tribe in Kudumkela, Navadih, HOLAIKITRA, Singmauja, Fitingpara, Mudatikra, Puri, Baraud villages (some of them could be better described as habitats). Attendance and retention were problems in Kudumkela. Though about 100 children were enrolled on paper, hardly 10 came to school regularly. I discussed this problem during meetings held at the Block and District offices. I realized that both the primary schools (one for boys and one for girls) of Kudumkela are located on the main road and hence many children from other communities, which are economically better off, come to school. The Majhi children's dress is very different from the other children's. The boys of this community wear either a *gamchha* or a *dhoti* or shorts; they do not wear shirts. Girls wear a small *sari*. With this kind of dress, these children do not feel at ease with the other children (who are in the majority) and hence shy away from school. In the other schools of the cluster Majhi children were in the majority and did not feel awkward in school. The District Project Coordinator of Raygadh told me to continue with my efforts and promised to support me by contacting NGOs for the children's clothes.

I called a parents' meeting. I invited the Sarpanch and also the members of an NGO to this meeting. Together we talked to the parents about the value/importance of education, we listened to their problems and promised to help them solve problems related to clothes. The workers of Lok Shakti, the NGO, suggested that we start an Alternative Education centre in the village. This idea was accepted. I too liked the idea of educating the children in an alternative education centre first and then gradually mainstreaming them. We started a centre in July 2001. We obtained clothes. My CRC

arranged for textbooks, uniforms for girls, some TLM and cloth mats for the children. Teaching was taken up by three members of Lok Shakti. I requested the Sarpanch to provide mid-day meals to these children, since originally they were enrolled in a regular primary school. He agreed, and some parents used to bring lunch for the children from the main school. I visited the centre about three times a week. Once teaching became regular we took the children to the main school for a visit. Twice we took them to the CRC and showed them educational CDs on computer (infrastructure obtained as part of the Head Start program of the state). The children found such activities interesting. As a result, 34 children out of the 121 Majhi children switched to the main school in 2001-02. Thus, I was partially successful in my efforts. The NGO closed the centre, but I continued with my efforts and by 2004 had made about half of the child population regular school goers. Meanwhile an additional primary school was started by the government in the same maholla in 2004-05 and 19 children were enrolled in it. All of them appeared for the annual examination and passed. I can claim that enrollment has been achieved, but the goal of achieving 100% retention of all these children for at least five years is still some way off.

## TAPAN CHANDRA BORA

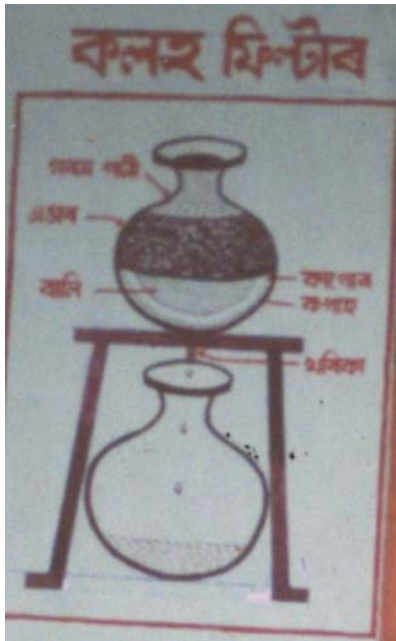
As a CRC Co-coordinator in Mayong Block Resource Centre of Morigaon district, Assam, I had to visit my schools regularly. I observed that in the months of May, June, August and September the attendance of the students was very low. In some schools it was almost zero. I found that during this period villagers invariably suffered from diseases like Malaria, Cholera, Diarrhea, Viral Fever and Dysentery. This was the main cause of irregularity in the students' attendance. I observed that diseases were more severe among the Scheduled Tribes and the minority community. As a result, the irregular students could not compete with the regular ones. This scenario bothered me. I organized free medical camps in many villages in my CRC area. I then discussed the problem with my senior officials, friends and doctors. They helped me with many books and magazines. I am particularly thankful to Mr. Prabin Bora (Lecturer DIET) in Morigaon for his valuable advice. After reading the material I concluded that impure water is the root cause of many of the diseases that were affecting my schools' performance. In 1999, as part of community awareness programs under the DPEP, many prevalent diseases had been identified. Using this as a base, I involved the community, students, teachers and VECs in a 7-day 'whole-school-approach training' program.

I then involved students in a project to collect data about the various diseases from which people of their villages suffered, the possible reasons and the time periods during which they suffered. Once the data was compiled in a tabular form I was convinced that impure water was the root cause of the problem. I decided to devise an 'earthen pot water filter' for water purification. I am proud of this innovation because it is a low cost system for schools and poor people to obtain safe drinking water and water for domestic uses like bathing and washing hands. The following materials are required for the Earthen-Pot Water-Filter.

	<b>Item</b>	<b>Quantity</b>	<b>Cost</b>
1.	Wooden/Bamboo/Branch of trees of four feet length	3	N/A
2	Small Bamboos to hold the posts	3	N/A
3	Wire/ Plastic Rope	2 Metres	N/A
4	Earthen Pot with 10 Litres. Capacity	1	Rs.10 to15
5	Plastic Net of 25cm.x 25cm.	1 piece	Rs. 5
6	Sand	2 kg	N/A
7	Charcoal	1 kg	N/A

\* Cotton was also used initially, but it needed to be changed at regular intervals. Cotton is now not used.

The three posts are fixed in the earth and tied with the small bamboo pieces with wire or plastic ropes. The pot is placed on the posts. The net is then positioned inside the pot. Sand is first poured in, and then the charcoal is put into the pot. Pour water into the Earthen-Pot. Check the colour of the water coming out of the filter. Check the odour of the water and then check the taste of the water. When the water is colourless, odourless and tasteless then it can be used for drinking.



I formed a committee of teachers at the CRC level to give an institutional base to the project. This committee discussed the issue of drinking and producing safe water. The members were trained in setting up the filters, and visited the villages to spread this initiative. The people's response was good, and in most places, they collected the materials immediately and took the help of the teachers in making the filter. Slowly, other block level functionaries and non-formal educators got involved. I visited the villagers at frequent intervals to monitor disease patterns and student attendance.

As the people began to use purified drinking water the incidence of disease decreased. The attendance went up, and discussions revealed that the better health of children was a major factor. This initiative triggered off discussions on wider developmental issues. More and more people have got involved and a range of meetings, awareness programs and training camps have been organized by the cluster and block resource group members. A local registered NGO was then established in 2003. It was named "The Society for Social Development". Its mission is to work for safe drinking water at the family level. Every year about 1000 families are covered. The World Water day (March 22) provides a focus for the society's activities.

## SACHIN D CHOUGULE

I belong to a family of teachers. From a young age I have been interested in culture and drama and debate. I generally like to use new methods of teaching. The students of my school come from families with poor language skills. But I have trained them in speeches and stage present. We have won a variety of awards at the taluka and the district levels (27 prizes in essays writing, 23 in debate competitions, and several prizes in competition of hand writings, general knowledge, drawing, singing and drama). My own drama group has performed two children's dramas on the stage of Bal-gandharva Rangmandir, Pune. Writing stories and poems is my hobby. Still, many students from poor backgrounds remained subdued in the class. To increase their involvement I carried out an activity titled "clean and beautiful school". We spent Rs. 3,000 on gardening and planted trees and plants. I made every child grow a certain number of trees.

Apart the well-known reasons for growing trees cooperatively, I felt making fruits available to poor children was a good idea. So my idea was to make the diet richer. Children were first made aware of the places available in our area for planting trees. With the help of drama, the importance of trees, their contribution in our life, and other benefits, were presented. Students were guided in observing trees and their growth stages, and were taught how to provide water and manure. Everyday, students were required to observe the progress of the trees, over a four year period (2001 to 2005).

Target for students included in this project was as under:

Class	Students involved	Targets	Total trees
3	21	3 trees for each student	63
4	21	4 trees for each student	84
5	21	5 trees for each student	105
Total	63		252

For planting trees and making fence July was chosen, but allowances had to be made for early mortality. The long span of time was necessary to make a reasonable impact. Students themselves selected the plants. I played the role of a guide. I explained to student the targets fixed for the plantation of trees. They collected plants from surrounding areas. They didn't have to spend for this. Since students were given a free hand, they chose areas with which they were comfortable—a compound or a field boundary. Those who collected many saplings shared the excess with their friends. However, there was an emphasis on fruit plants. Some students planted vegetables, creepers, flowers. Even those students who were not part of the activity started taking an interest. They were then asked to take care of plants. The success of tree plantation depends on proper care at the initial stages. For making monthly notes, a "note register" is maintained. Up to date information about the trees is available. The reasons for failures are also noted. For instance: Excess Rains, negligence in care taking, animals, bad fencing. Dead trees were replaced. Parents were kept informed of the trees' progress.

Boys particularly enjoyed taking care of the trees. Tree plantation has now become a hobby. Various events were also developed. Planting trees while singing poems in a group is one example.

Songs about trees were compiled, and essay competitions held. Students collected information about trees and leaves.

During the first year, 17 students of the 63 responded late on the progress. One student dropped out. Those who responded late were observed and these reasons were found: Students of class 3 are very young and they got plants late; uncertainty about availability of space for tree plantation. The total number planted was 270.

The types of trees planted are given below:

<b>Class</b>	<b>Fruit trees</b>	<b>Non-fruit trees</b>	<b>Flowers + vegetable plants</b>
3	60	3	3
4	72	12	5
5	112	11	8
<b>Total</b>	<b>244</b>	<b>26</b>	<b>16</b>

(The 16 flower plants have not been taken into account because their life-span is short.)

The “monthly noting” was a monitoring tool for the children. For instance, the monthly noting for 2001-02 is given below

<b>Class</b>	<b>Aim</b>	<b>July</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>June</b>
3	63	63	52	56	56	52	50	48	46	45	45	45	44
4	84	84	81	81	76	74	72	72	72	71	71	70	70
5	105	123	121	130	117	117	112	110	108	107	105	105	105
<b>Total</b>	<b>252</b>	<b>270</b>	<b>254</b>	<b>267</b>	<b>249</b>	<b>243</b>	<b>234</b>	<b>230</b>	<b>226</b>	<b>223</b>	<b>221</b>	<b>220</b>	<b>219</b>

As seen above, 16 plants died in July-August. So, re-plantation was done, but three died, so that in September the difference is 13.

There are two parts of this program: tree plantation and maintaining the number. Children have been helped to monitor the maintenance as well. The “annual noting” is given below. made to grow 249 trees. In this way this project went on till year 2004-2005.

How many trees survived?

<b>Class</b>	<b>Children</b>	<b>Aim</b>	<b>Year 01/02</b>	<b>Year 02/03</b>	<b>Year 03/04</b>	<b>Year 04/05</b>
3	21	63	44	40	38	38
4	21	84	70	67	65	64
5	21	105	105	103	101	101
<b>Total</b>	<b>63</b>	<b>252</b>	<b>219</b>	<b>210</b>	<b>208</b>	<b>203</b>

The mortality rate, as is to be expected, was high in year one. Then the numbers stabilized. Now there should be no problem in maintenance. The participation of just 63 students could achieve such a good outcome—in science, environment, number skills, and practical social development. We can achieve much more by involving more students in co-curricular activities.

## **MOHANSINGH K DABHI**

Shri Mohansingh K. Dabhi was born in 1945 in Kara village of Bharuch district. He joined the teaching profession in 1963, but completed his primary teacher's training course only in 1970. Before his training he worked in Baradia village of Valia taluka of the same district. After become a trained teacher, he first served for 19 years in one village, Mela. His main contributions were improving contact with parents, and increasing the school's infrastructure (form one to four rooms by mobilising money from one wealthy lady and from the District Planning Board). He was then in Dansoli for three years and now has returned to his own village, Kara. He served as General Secretary of the Bharuch District Primary Teachers' Association for 14 years, and is currently its Vice President. He is also Editor of the journal of the Teachers' Federation, *Shikshak Jyot*.

### **Introducing new methods in teaching**

Shri Dabhi has been experimenting with various teaching methods. For building up the vocabulary of students, he lists the letters of the alphabet and asks each student (from class one) to compile, for each letter, at least 30 words containing that letter. The junior students do this introductory exercise in Gujarati and the senior students do this in Hindi and English also. He also introduces an element of competition by rewarding the students with the longest and most creative lists, during the prayer meeting for five minutes. Shri Dabhi has found this exercise very useful and believes that the students enjoy finding out new words from newspapers and other sources.

### **Learning by experience**

Study tours and excursions are organised every year by the school in an effort to give environment education to the children. Shri Dabhi organises competitive games, elocution and essay competitions on environmental issues. He also believes in instilling in his students a sense of nationalism and an appreciation of the diversity within the country. For this purpose, he recites poems and songs he has composed himself and also comes to school wearing the traditional dresses of different parts of the country. Students, too, are encouraged to do likewise, once a week. National festivals are celebrated and cultural programmes are held regularly. He celebrates the birthdays of all children in the school; the student representative and teacher garland the birthday child. If the parent is rich, then the teacher asks for some contribution to the school. Students are asked to read news items in the morning assembly and are encouraged to write stories, collect folk stories and proverbs. He invites leaders of various religions to the school to talk to the children. These activities, Shri Dabhi finds, help children attain a better grasp of language and a deeper understanding of society.

### **Improving infrastructure**

Shri Dabhi believes that the school should appear attractive to students. When he was appointed as head teacher in 1992 in Kara, one of his first tasks was to improve the school's environment. The land around the school had eroded. All the students of classes one to seven had to share three rooms. The school grounds and the school itself were open to stray animals. First, Shri Dabhi got a thorn fence put up around the school grounds. Some trees were planted and Shri Dabhi appointed a part-time gardener whose costs he bore.

Shri Dabhi's credibility at the district level and his contacts with a few political personalities enabled him to mobilise resources for the school. Shri Dabhi approached the District Planning Board for a grant of Rs. 250,000 for the compound wall and repairs. He himself contributed the Rs. 10,000 out of the 10 percent (Rs. 25,000) which had to put in first, out of his own savings. The rest of the money was collected by the people. The District Panchayat appreciated this gesture and asked him to construct the wall with the grant.

Two additional rooms were also constructed with Panchayat funds. In addition, through a grant from the *Jawahar Rozgar Yojna*—an employment generation scheme—of the Panchayat, another room was constructed. Shri Dabhi then decided that a community hall was needed. He collected Rs. 25,000 from an Indian who had settled down in the United States and Rs. 30,000 from local sources. With this money he mobilised money from the government. The hall, with a seating capacity of 250, was built and the village then decided to mobilise additional money for the electricity connection and fittings, fans and a public address system.

### **Increasing enrolment**

Shri Dabhi believes that the teacher's efforts to do something for the school get noticed by the parents and they in turn reciprocate by sending their children to school. He feels, for instance, that his efforts to make the school a beautiful place where children can study and play has had the greatest impact on parents. His gardens have been particularly appreciated. A second feature of Shri Dabhi's strategy is that enrolment has to be a celebration. He holds 'enrolment day' celebrations in June to which important people are invited. For instance, in 1996, the then Director of Primary Education of the state visited the school on that day. Uniforms and slates are distributed to children of class one on that day from Shri Dabhi's own resources, others get slates, and parents are treated to a community lunch in the school. The resources for these activities are raised from the village itself. The special feeling that parents develop towards the school as a result of such efforts is what Shri Dabhi feels has helped him bring down the rate of drop out (up to the end of the primary schooling cycle) to zero.

As a special initiative for encouraging girls to attend school, he and his wife adopt one girl belonging to an economically-disadvantaged family every year. They take care of all the educational expenses of this girl, till she passes class four. The other teachers have been motivated by this example, and now each teacher adopts one girl from a poor family every year. In other words, at a time, each teacher supports four girls.

### **Maintaining attendance**

Shri Dabhi very strongly feels that the mid-day meal scheme is a very good opportunity for ensuring regular attendance. He has taken the scheme seriously and records the attendance at the meals to monitor the scheme's progress. Shri Dabhi personally deals with the staff engaged in cooking, constantly telling them that the scheme is for children. The school gets 45 paise per student in cash to meet the expenses of vegetables (15p), spices (15p), grinding and fuel charges (15p). (This amount has been increased to 70 paise now, with vegetables now getting 45p.) A budget is prepared on the last day of the month and the scheme administrator has to follow it. One copy is sent to the *mamlatdar*.

If the school has 200 students and it provides meals for 20 days, a budget is prepared for 4000 meals. The Rs. 600 meant for spices is divided among coriander, chilli, groundnut, ajmo, salt,



pepper, clove and cinnamon. The teacher checks these items and two locks are put on the store room. The keys of one lock are with Shri Dabhi.

The accounts are maintained in a transparent manner, so that people realise that corruption will not be tolerated in the programme. Similarly, the accounting of the wheat, rice, oil and pulses is done in an open manner. Shri Dabhi describes this scheme as a very important welfare measure for children, especially of the poorer families. But all the children attend the scheme. He monitors the health and the weight of the children once a month and attributes the weight gains he has achieved among the children to the proper administration of the mid-day meal scheme. The weight records are maintained by the class teacher. Shri Dabhi himself was inspired by his own example of a widowed mother labouring to get some food for her children. Dogs often used to eat up the food in his house, since there were no doors or windows. He motivates the surrounding schools to follow his mid-day meal planning.

### **Mobilising resources**

When Shri Dabhi felt that uniforms would help in motivating students to attend school regularly, he decided to begin with the supply of free uniforms. He collected money from well-to-do parents and bought good quality cloth. He then persuaded a tailor to sit in the school premises and charge the parents a reasonable amount only for the stitching. If there is a shortfall he makes the amount or from contributions. This arrangement (free cloth but stitching paid for) has worked well for many years now. The parents feel that this initiative has helped them to reciprocate by sending their children to school regularly.

### **Establishing new primary and secondary schools**

Shri Dabhi believes that children should not have to walk far to obtain education. Children from a neighbouring village, Joli, had to come to his village, Mela, for education. This was a barrier to enrolment. Shri Dabhi discussed the issue with the village leaders and started a school in Joli. Later, the Panchayat authorities regularised this school and provided two teachers. This school now has classes one to four. Similarly, another settlement, Limdi Fali which was officially only a hamlet of a village Dansoli, was not eligible for a school. A river which ran between the hamlet and the village made access to schooling difficult. Shri Dabhi, with the help of the hamlet's community, established a new school. This then became a regular school up to class four with two teachers. Shri Dabhi's own village, Kara, did not have a secondary school. So with the help of the district's political leaders with whom he was acquainted, he started a trust to establish a school. There was a requirement that 30 students were needed to start a secondary school. Five students, who were essential to meet the limit of 30, were from elsewhere and would have not studied if residential facilities had not been made available to them. Shri Dabhi offered his own house and the students stayed for two years with him. Today this secondary school has about 130 students, and seven teachers. These initiatives have helped Shri Dabhi gain the respect of not only people from his own village, but also of people in the surrounding villages.

### **Encouraging fellow teachers**

Shri Dabhi believes that he has to provide his fellow teachers with the educational aids and training opportunities that would add to their own effectiveness. Therefore, he acts as counsellor and guides them in the process of self-development. The teachers are at liberty to purchase any chart, map or educational aid they may need, within the budgets that the school can raise. However, on principle, Shri Dabhi never asks questions when the bill is presented; the amount is paid straightaway. As a

result, the teachers feel that he has confidence in them; they are careful with what they buy, and often they buy some items for the school on their own when they feel it is not proper for the school to be buying those things. Shri Dabhi feels that the village people also observe this behaviour and try to help out when there is a need for some money.

### **Involving the village community**

Shri Dabhi believes that involvement in social welfare is a must if a teacher has to meet his educational goals. He involved the youth of the village in tree planting. In 1973 he established a milk producers' society in Kara which has been functioning smoothly for the last 26 years. During the first year of the society's life, Shri Dabhi himself would collect the milk from the community and take it to the dairy, which was 8 kms away. Later, the dairy made arrangements to collect the milk. Shri Dabhi also facilitated land erosion control work and construction of a platform in the village's crematorium grounds. In 1996 when the village and the surrounding areas were flooded, Shri Dabhi organised relief work and made available the secondary school as a temporary shelter. The total cost of Rs. 6,00,000 was raised from the government.

Such efforts, according to Shri Dabhi, have brought the school and the village together, with the result that enrolling and retaining children in the school is no longer a problem.

## KISAN DIWAN

My first school (Chivarri, Dhamtari) was in a village that was located in a dense forest. The school was opened by the Tribal Welfare Department. Teachers used to appear in the school twice or thrice a month. People were busy with their lives and teachers with theirs. God knows what happened to children's education. The day the teacher appeared, the children spent their time hunting birds for the teachers. Once the children returned, the teachers cooked their meals and enjoyed their day out. When I joined, there was no school building. The classes had to be conducted in an open space and when something else had to take place there, a new spot had to be found. Child themselves used to call out the times for recess, school closing hours and other features associated with the timetable. This school was created to cater to two villages: Chivarri and Sankara. The children of three other villages also came. The registered number of children was 40. The children were very innocent and studies were burdensome; the teachers helped them by remaining absent!

To change this scenario I started with stories, songs, games, wrestling, morning races, fortnightly picnics, question and answer sessions, recording the answers on the board. Then I moved to explaining letters and words from what was written on the board. Gradually, I introduced difficult words, then the vowels and the consonants. Some of the children were more interested in talking and engaging in out-of-school activities. I made them leaders and gave them responsibilities for several things. This attracted them towards studies. Some children were very interested in singing and dancing. A nearby village (Sankara) had a rich heritage of folk dances. So I took them there and taught them folk dances and folk songs on Saturday evenings. Some of their performances were praised by the people and this further motivated the children. Whenever I went out for some work I made it a habit to visit a nearby school and talk to my children about the other school.

I also taught them how to make sculptures, draw and sing. From the fourth month of my stay, I saw some noticeable changes. The environment had improved to the liking of community and other teachers as well. I motivated the people to construct a school building. People agreed and provided their services. The entire area took a new look. By now the environment for education had been built. People who earlier thought of schooling as a useless task, started taking pride in their village school. Parents used to compel the teacher to release their children during school hours. If the teacher resisted they would say, 'your food and clothes depend on us, so you better adjust to our ways'. Gradually, such behaviour disappeared. Still there were some problems; like boys belonging to well-off families not attending the school or harassing other boys on their way to school. This scared the younger boys and they remained absent. One day I sent some well built boys of the school to the place where these notorious boys used to sit. They were told to drag the trouble makers to school. We told off these trouble makers in public. This resulted in a fight with their parents and they withdrew their children from the school. As such those kids were not studying, but now they became less of a burden for others. Next year I visited their families and persuaded them to send their children to school. They joined the school with a changed mind-set. Actually I had made it a habit to visit the problematic families regularly. This created the environment for the re-enrolment. During my career as a teacher, I have worked in many such places and helped the community build an educational environment. As a result of my experiences I have been able to write several children's books. Some of them are books of songs; some are books of plays. My present school does not have too many problems, and it is easier to teach here. But I do not get the satisfaction that I got while working in difficult contexts.

## ELANGOVAN R

My students were unable to master all the competencies, especially in English subject. I devised laminated flash cards made of cardboard containing all the content words, and plastic coins with each carrying one letter of the alphabet. I used these to help children with their learning of the letters of the English alphabet.

A sample of a laminated word card:

Ant	Arm	And	All	Ask
Aunt	After	Age	Apple	Arc
Answer	Another	Action	Around	Aloud

For every letter, word cards of the above type were produced in five sets. One card was given to a group of three children. Child learnt five words in a row. First one would internalize the first five words and the second the five words in the second row and the third one will learn the five words in the third row. Each child then tells the others what he/she has learnt. The peer group, towards the end of the period would have learnt 15 words effortlessly with mutual help. The card would be given to another group of three and the group will take another card having words, which start with another letter: 'b', or 'c' or whichever word is available. In this manner, every month students learn about 300 words a month. As the content words are already learnt and mastered, reading then does not become a problem.

After the children master the words, the following TLM is used to retain the learnt words and to apply them to everyday activity. Plastic letter coins (a total number of 416) were prepared and students had to fix them to form the words they had learnt, on a Velcro strip on a Flannel Board. When one group fixes the plastic letter coins on the flannel board, another group has to verify and evaluate it with the help of the laminated card in its custody.

Using this method almost all the content words are learnt and reinforced in all the students. Except a few students, all the students could learn to read after building their vocabulary base using this technique. In a multi-grade situation, learning can go on uninterrupted, even in the absence of the teacher by using this method. Students' reading skills have developed substantially, and the method has become popular at the Cluster Level. The feedback from the teachers is heartening.

## **ETHURAJU K**

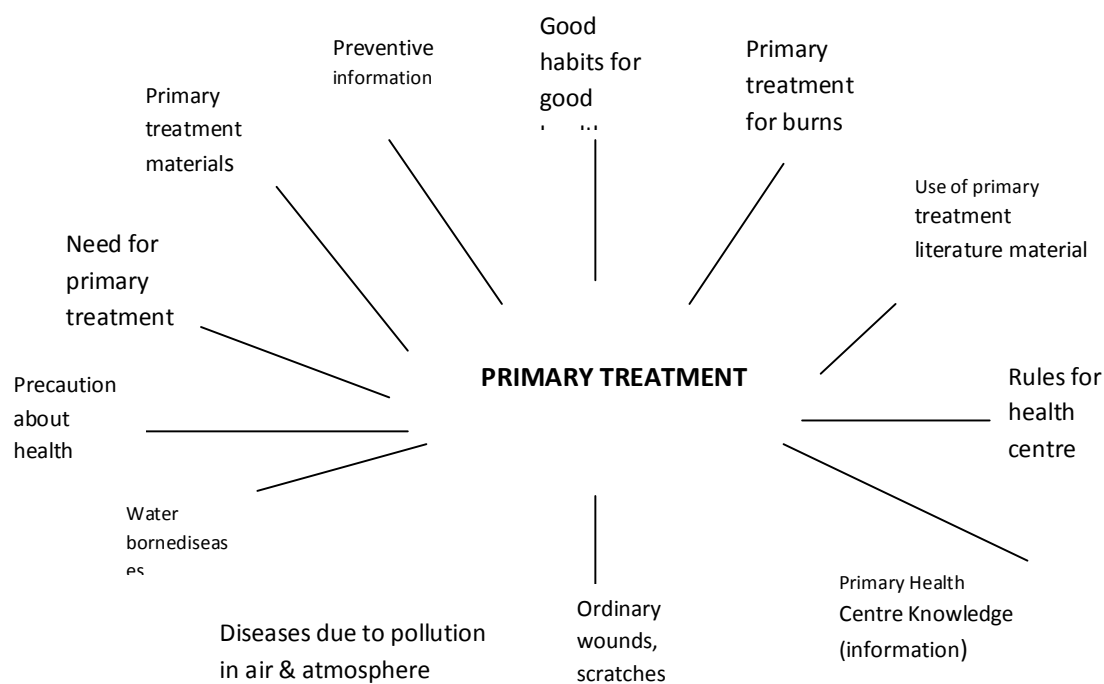
I faced a set of inter-related problems: poor learning outcomes of students, drop out after Class VIII due to lack of proper counseling, lack of parental interest and inconsistent enrollment trends. I was quite conscious of the fact that enrolment is vital for the very survival of the school as an organization. So I made enrollment a family function. Drummers were invited to play and receive the students into the school. Crackers were fired. The children and the parents were made to feel that they were guests deserving a proper reception. Each parent was then given a sapling to plant it inside the school campus. On the eve of the admission, each sapling was named after the parent concerned. The student was entrusted with the responsibility of nurturing the tree till he/she left the school. Since the tree was named after the child's parent, the emotional bonding between the child and the school became stronger along with the growth of the sapling. Wide coverage was given locally when the trees grew well; the names of the parents (also the names of the trees) were publicized. Pleased by the news, parents started to bring saplings on their own. On such occasions, the entire school population received them at the school gate with a lot of fanfare. Once this environment was created, it was easy to organize field trips every week, to enhance the learning among children. Field trips have proved, in my school, that "knowledge does not lie trapped in between the wrappers of the textbook". I also tied these activities with the donations of learning materials and furniture by community leaders and political leaders. This arrested drop-out. I also used the case study approach, by developing case studies of students to track and monitor their personal development. We now celebrate a range of functions, conduct medical camps periodically, and mobilize donations regularly. A compound wall was constructed with the support of Panchayat President with a budget of Rs. 2,00,000; the school garden fetches additional revenue for the school which is used to arrange for drinking water and maintenance. School attendance has regularized now, and the learning achievements are showing improvement.

## VIJAYSINH H GAIKWAD

My father was a primary school teacher. I became a teacher in 1992, and while working, completed my BA and MA. When I joined, there were two teachers in the school. Students started calling me New Guruji. The people were very hard working and had faith in school. I introduced many cultural programs and involved people in them. I painted the school walls and planted trees. I was always concerned about the health of the children, since they frequently suffered from itching, stomach aches and fever. I was transferred to another village, Ambechinehol. This village was situated on the bank of a river and very remote. One could reach it only on foot or by boat. It did not have even basic facilities like clean drinking water. If children got injured while playing, they came to school in the same condition; their wounds would get infected and their health worsened. There were many such health-related problems. I was doing a good academic job, but there were problems on other fronts. One day I was teaching class four students. One student of this class was very good at studies and also good at facial expressions.. I selected him for a drama competition. He had to narrate dialogue from 'Chhatrapati Shivaji' and Chandrarao Javli. One day, he came to me. His face was dark. I touched his body and found that it was very hot. I sent him home. Next day when I went to school I saw a horrible scene, which shook me. His dead body was lying in front of the school and his mother was crying. The entire village was in sorrow. He had become seriously ill during the night and there was no way to go to hospital since the river was flooded. Even after 50 years of independence there were places in rural India which were in a pathetic state. That day I changed my outlook. I had believed that as a teacher I had to provide good education to our future citizens. I realized that, as a teacher, I cannot show helplessness and hide behind traditional understandings of a teacher's role.

I started with the idea of a "Primary Health Centre for students". There are many local practices as remedies: applying turmeric on wounds, smelling onions if you feel giddy, eating neem leaves on some occasions, eating powdered ginger and sugar on Hanuman jayanti day, growing tulsi plants, and so on. These rituals are designed for disease prevention. I began with such knowledge and the health related information that I could gather from other sources. For the centre, the objectives I set were: 1. students will learn the habit of cleanliness, 2. students will get knowledge of medical treatment, 3. students will be alert about their own health, 4. students will understand the importance of primary treatment, 5. seeds of sensitivity and moral values will be sown in the minds of students, 6. students will develop a sense of helping and service in case of an emergency, 7. students will aim for higher goals like higher education.

I discussed the idea with my colleagues, our CRC coordinator and a few others. I was told to visit a nearby health centre. So I visited the primary health centre at Puluji and discussed my ideas with the doctor, Dr Shivsharanji. We prepared a chart.



We inaugurated the centre in March 2004 in the presence of a social worker Mrs. Shilatai Dharurkor and other education experts. The teachers of each grade (from 1 to 4) appointed one boy student and one girl student as student-doctors. These student-doctors then visited the primary health centre and collected information on diseases. The material like tape for measuring height, bandages, gum tapes, iodine benzene, hydrogen, peroxide and tablets, as per the advice of the doctor, were kept in one cupboard of school in one corner. One remark book was kept. The student-doctor was required to make relevant notes like the name of the student getting injured, the treatment given to him/her, name of student doctor. For Example,

	<b>Sick Students name</b>	<b>Date</b>	<b>Treatment</b>	<b>Student doctor</b>
1	Shakeel Mehmood Mujawasr	20/7/04	10 dine strip	Sagar Vithal Kadam
2	Nilesh Vitthal Sonvale	25/7/04	10 dine strip	Sagar Vithal Kadam
3	Sandhya Ashok Athawale	3/8/04	Bandage	Priyanka Hanmant Kadam
4	Sainath Ashok Rajmane	5/8/04	Strip	Prabhakar Rajmane

In case of class 1, the teacher maintained the records. The timings of the Primary Health Centre were Monday to Saturday during school hours. To make all students aware about health care and to remove the fear of the dispensary, all the students were taken to the health centre and Dr. Shivsharanji. This interaction was very useful.

### **Physical Health Check up of Students**

Every three months a simple check up, noting changes in height and weight, is done. The parents are informed about the results. As for example:

<b>Sr. No.</b>	<b>Name of student</b>	<b>Std.</b>	<b>Month</b>	<b>Weight</b>	<b>Height</b>
1	Sagar Vithal Kadam	4	June	15 kgs	92cms
			September	15 kgs	92 cms
			December	16kgs	93cms
			March	16kgs	93cms

The students have got an idea of primary treatment. This has improved their lifestyle and they got habituated to discipline and cleanliness. Our centre has been visited by many dignitaries. Now students regularly get initial treatment at the Health Centre of the school. Primary treatment and local medicines have brought down the incidence of water-borne infections and weather-change related problems. During the monsoon, at home, many students boil drinking water.

Not only students of our school, but aged people of the village have also started taking medical services of the students. Once a teacher hurt himself while cutting paper; a student doctor treated him. The innovation which was started in small cupboard of the school has become fairly large, and more medicines, knowledge and information have started coming in. On seeing their children performing such services, the parents have started to look at the teachers and the school with pride.



## BABLOO SINGH GOUTAM

I am an assistant teacher at the Government Primary School, Sargipal Para, Kondagaon, Bastar, Chattisgarh. This is a tribal area and considered to be very backward. Teaching is a challenging job since people here do not take education seriously. The people are poor, and the parents spend most of their time on labour. Children are left to themselves. These kids do not like school, and despite various incentives that are provided at school, the attendance is poor. I decided to use activities like songs, games and stories. I encouraged other teachers to join me. We prepared many teaching aids to make the teaching interesting. We made a list of traditional and non-traditional games. We related these games to Math, Language and Environment Studies. Children learn quickly through interaction, and so we encouraged group work and group games. I also prepared many teaching aids to help children learn while playing. As a result, the children developed an interest in school and their attendance became regular. I have devised many TLMs and TLM-based games for Math and Language learning, but here I describe one as an example.

### Game: Window Wheel

i *Subject:* Environment

ii *Classes:* III to V

iii *Objective:* To learn the names of state capitals, state languages, cities, rivers.

iv *Teaching aids:* Window wheel, chits, and format (column).

v *The construction of teaching aid window wheel:* Two wheels of different sizes are made of hardboard. On the smaller one windows are made. On the bigger wheel the names of state capitals and other information are written. The smaller wheel is kept on the bigger one. The smaller (kept on upper side) wheel is immobile and the larger wheel is movable. If you move the arrow which is indicated and then stop it at any place, all the information related to one state can be seen in the window.

vi. *How to use it:*

1) Using single window: We can involve all the children in a game to help them learn any one type of information related to a state, for example, capitals. The children are divided into two groups. From each group, the children come one by one and move the wheel. The children have to remember the names of the state capitals where the arrow stops. When all the children have had a chance, the teacher questions them. A right answer fetches one mark, and a wrong one zero. The marks of each group are then totaled.

#### Group A

Name	States Name	Marks
Lata	U.P.	0
Bimla	Kashmir	1
Mahesh	Tamil Nadu	1
Ram	Kerala	0
Dinesh	C.G.	1
Total		3

#### Group B

Name	States Name	Marks
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Shailandra	Maharashtra	0
Eshwari	M.P.	1
Chhama	Jharkhand	0
Laxmi	Bihar	1
Akash	W.Bengal	0
Total		2

Group A is the winner.

2) Using multiple windows: First, chits are made for the windows on capitals, populations, area and language. The children are divided into groups on the basis of the number of windows selected. For instance, if there are 10 children, they will be divided into two groups if five windows are selected for playing. Then the chits related to the windows are distributed in groups. The child has to keep in memory the information of the windows for which he gets the chit. Now any child from A group can come and move the wheel; when the arrow stops the children get all the information of that state. All the children of group 'B' have to remember this. Now the process is reversed. The teacher finally does the evaluation.

Small groups of children can be involved at a time. This makes education interesting. Variations are also possible, depending on the creativity that the teacher exercises.



## **HAMSA BEEVI A S**

Even after extensive training teachers are unable to follow new methods of teaching, which are now accepted as more effective. I was motivated by this problem. However, parents were not willing to attend the school meetings. I felt that teacher training would be effective only when parents also understood what was going on, and so I organized special workshops for the parents, along with teacher training. During the first workshop parents were very few in number. But the positive experience of the participants soon spread and in the second and third workshops the number of parents attending increased. So the strategy was to communicate to the parents, through the workshops, an understanding of new methods of teaching that could help their children, so that they could help their children and also demand such services. I realized that parents must be given training just as teachers are provided inputs. I also built in model demonstrations in the PTA meeting. Parallel seminars for the school's supporters should be included. The final result was that the local bodies took more interest in the primary school.

### **Can you save even one child?**

In my school most of the students are very poor. In fact they belong to families of marginal farmers and plantation labourers. They do not have proper uniforms, books, school bags or umbrellas. Regular absence was the result and eventually children go out of the system. In my school most parents of such children are alcoholics; the vernacular medium school is left with the children of poor and addicted families. So, I carried out a project named "save even one child", for the children of alcohol addicts. I went to several public sector officers and requested them to help. I succeeded in mobilizing financial assistance from such individuals and their institutions. I could provide the children of my school with bags, umbrellas and notebooks. This increased the attendance dramatically.

I am also making efforts for the education of Malapandaram tribe in my region. This is one of the primitive tribes in Kerala which still leads a nomadic way of life. Most of the children of these families do not have birth certificates. We are solving this problem with the help of the authorities, and are looking for seats which can be made available in scheduled caste hostels. For instance, there is a hostel in Peermade for scheduled caste students in which two seats are reserved for other groups.

### ***Edavela Sangamam***

Every school, including my school, has some problem children, who are extra aggressive and unnecessarily hurt others. Under the activity titled 'Edavela Sangamam' I tried to reduce this problem. I decided to occupy their attention in some creative activities during intervals, since these are the most difficult times. I gave them assignments like collecting and sticking stamps, newspaper reading, and some chart-oriented work. I gave them a 'theme' every week, such as 'Gandhi Jayanti, Children's day, Onam, Christmas. Generally, in connection with these celebrations, some events are reported in the newspapers. The students are asked to collect relevant material from the periodicals and paste them on chart paper. These are then used for further discussion.

### **Share the Concern for Nature**

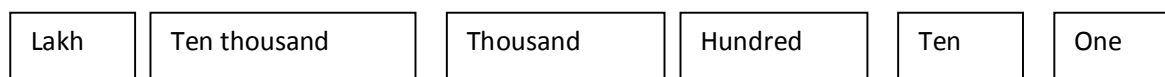
We get plenty of rain in Kerala every year. Our area, Peermade, which is at an altitude of 2000 feet, receives heavy rainfall. Unfortunately, we have to face scarcity of water in summer. I associated myself with 'water-ecology'-- a conservation program organized by a leading daily in Malayalam, Malayala Manorama. With this involvement I could do a project for rain water harvesting in my school which won a first prize in the district. My work was also recognized at the state level. The basic idea of the project was to promote the linkage of water conservation and sustainable development in order to make our school "water friendly and nature oriented". For the implementation of this project I had to work a lot to convince the people about storing rain water and not wasting water.

After establishing a rain gauge in our school and making the students take readings daily and plotting the results graphically, I encouraged the students to make rain gauges by themselves. I then formed a "rain club" in each class, which takes up related issues. A description of the pathetic situation of public pipes was sent to authorities, and as a reward, the government sanctioned a rain water harvesting tank for the school. The third step was to start a magazine, with stories, poems and articles written by the students and the teachers. All the articles are related to water conservation. This was a unique example of a primary school running its own magazine. Other related activities have included establishing rain pits, survey of water resources, study tours for finding the origin of water, quiz competitions on rain-fed rivers, and posters showing the wastage of water. I have also developed a medicinal plant garden in the school with the help of Peermade Development Society. I did this to help students to acquaint themselves with the rich heritage of medicinal plants. Students are also taught how to make home remedies for common ailments. My efforts have resulted in greater awareness towards not only water conservation but also conservation of nature.

## JEEVA R

From my 13 years of experience as a primary teacher I have come to believe that more than imparting loads of knowledge or information, the aim of elementary education is to lay a foundation of habits which would enable children to become good citizens in the long run. Therefore, I use a set of goals to frame my educational work: focus on personal health and hygiene; help children keep the surroundings neat and tidy; involve all children in simple physical exercises; use multiple activities in the teaching learning process; develop a love for “greening the school”; conduct simple contests among students to improve their performance; encourage philanthropists to donate uniforms and note books to economically weak students, sponsor prizes and buy equipment for children with disability (artificial limbs, hearing aids, glasses and tricycles).

In teaching mathematics, I adopt various methods including the use of “place value cards”, “Activity cards” and Abacus. However, some students were unable to learn place value properly. So, I decided to take the children outside the class room and use a strategy which would involve every child. I drew six boxes/circles big enough to accommodate children. For example, to help them learn place value, I used the following method. Each box would represent one value:



I would then call out the number: say, 4, 23, 106. Students would have to run and stand inside the box or circle to get the number: 4 2 3 1 0 6: 6 ones, 0 tens, 1 Hundred, 3 thousands, 2 ten thousands, 4 lakhs. Such a method helps in teachers not becoming a dominating force. Students became familiar with place value and Face value by using the squares/ circles in the play ground. The more numbers they attempted, the more they understood the place value and face value.

While evolving a strategy to tackle a hard spot, I use the following steps:

Central theme

Selection of transaction techniques

Materials necessary

The way the young ones are expected to handle the designed learning materials.

Some examples (other than the squares for place value):

1. Preparing 5 sets of the 247 letters of the Tamil alphabet and help children coin words. This exercise was given to assist students to enhance their vocabulary. The class was divided into four teams to coin words.
2. Preparing eight sets of number cards from 0 to 9, with the teacher facilitating the assembly of 8-digit numbers correctly. With these cards, and symbol cards such as +, -, =, x, >, <, I enable my students to internalize addition, subtraction and multiplication and also to learn by comparing big and small numbers.
3. Using charts as inserting boards, and with the help of word strips, framing new words; the use of prefixes and suffixes becomes very easy.

I constantly evaluate the children’s learning through formal and informal methods: assessing the written work of the students; checking through dictation; asking students to prepare activity cards, recite poems; asking questions after asking children to observe something; checking the ability of students to link what they learn with life-related tasks. I have found that students involve

themselves in learning activities with enthusiasm. I have also contributed to the preparation of the Class IV math text book. Many teachers in my cluster have learned the methods I use.

## **JEYARAMAN S**

I was working as an officer in the Customs and Central Excise Office. I felt that most children do not have access to the latest information on science and technology. To disseminate science news among rural children and to nurture a scientific temper, I started an "Abdul Kalam Science Club", and held many quiz contests in rural schools. Believing that the best way to clean dirty water is not to preach but to get into it and remove the mud, I resigned and became a teacher. I was acutely conscious of the fact that despite governmental efforts and hefty investments, the attitude of teachers was not improving fast enough. Sharing of innovative practices and discussing classroom process were rarely done. Even in-service training centres used one-way communication. This was frustrating. I happened to meet Mr. Eronimus, who was in an NGO involved in various social developmental activities. During our discussions, we identified the need to disseminate good classroom practices and innovative efforts to enthuse senior colleagues who have not changed their transaction techniques as critical. We hit upon the idea of a monthly newsletter, which would invite articles on innovative practices; we could then disseminate these to practising teachers at an affordable cost. We knew that getting a decent number of subscribers to meet the printing costs of the newsletter "Ootru" (Stream) would be difficult. We decided to invest our own funds for the first three months and then give the widest possible advertisement through friends. I visited neighbouring CRCs, introduced the back issues, and generated subscriptions. With each issue being priced at Rs 5, many teachers were ready to pay Rs. 60 per annum. We now have 600 teachers as members. The validation workshop that was held as part of the second round of screening for the Sir Ratan Tata Trust Conference generated a positive ripple effect, since many teachers in the state came to know of "Ootru". Many teachers have reacted positively, and I track the letters to the editor to find out the new approaches and novel methods of teaching that teachers are evolving. I now have no problems getting good articles from fellow teachers from other districts as well. Teachers should realize that they can do more than what they have been doing towards quality schooling.



## SURESHCHANDRA V JOSHI

*Shri Sureshchandra V. Joshi was born in 1956 and started teaching at the age of 19. He has taught all the subjects and all the classes in the schooling cycle of classes one to seven.*

Teaching and education are in my blood. I have it as my heritage from my father who used to be my teacher also. I had seen his devotion to his duty as a teacher. I could not understand much at that tender age but it influenced me greatly. But as I grew mature and passed my S.S.C., I felt a powerful urge to make various experiments in the field of education. Besides, I was greatly influenced by my high-school teacher Mr.Sadashiv who developed a very loving and joyous method of teaching. There is another incident that left a permanent mark on my mind. It took place in my very tender age. One of my classmates was learning sums from a vegetable vendor. As I passed by, he called me too. Here the vendor explained me the basic concepts of Mathematics with the help of his vegetables. I loved his joyful method. This inspired me to think that the burden of education can be reduced this way. In addition to this, as my mother had died when I was nine and my father carried all the responsibilities, I decided to share his responsibilities and joined as a teacher. All these reasons led me to do something substantial to improve the condition of primary education. During my P.T.C training, my inspiration was nourished by Mr.Markand Dave from whom I received spiritual knowledge, first aid treatment knowledge.

With the zeal of young age and training, I joined my first job at Bhimanu Gam on 25-9-75. I was quite young and the field was completely new for me. First I carefully studied their culture and life-style. I felt that religious matters dominated their life. The community of the village was economically and socially backward. The school was run by a reliever teacher. The first problem that I had to face was that of my residence as there was no government quarter for a teacher in the village. First I thought to do up-down from Kalawad. But I felt that if I live in Kalawad I would not be able to give sufficient time to the school. So as my first step, I began to live in the small water room of the school itself. The total number of the pupils was 20. I was the only serving person in the village. When I searched for educated people, I found only three or four persons hardly having knowledge of reading and writing. I was constantly brooding over the question that should be done to increase the enrolment, enroll girls and improve the standard of pupils. Few days passed in the same way. It should be noted here that when I joined the, I had to take charge of two schools. How to arrange for two schools that was a problem for me. So I contributed half a day for each school. After working like this for fifteen or twenty days, I left the other school as another teacher came. Meanwhile I noticed that the villagers were amazingly attracted towards me. When I peeped into the matter, I came to know that there was not any Brahmin who could perform the religious ceremonies in nearby villages. The villagers proposed me to do that. I was completely ignorant of this work. But I felt that it was an opportunity to win their heart and I should not miss it. So I first learnt the religious ceremonies and began to perform them. As such occasions increased, my contacts with villagers also increased. My relationship with them became intimate. Now the time had come when the villagers knew me to be their well-wisher, listened me carefully and were eager to act according to my suggestions. Thus congenial atmosphere was created for innovative changes. I connected education with religion and tried to explain them the importance of education with the help of Vedic illustrations. This quickened the enrollment in the school. I created free and joyous atmosphere in the school and developed intimacy with pupils. As I found that the number of girls was lesser, I began to talk about girls' education during Gauri Vrat and I succeeded. As the school had a room, a chair, a table and a black board, I did not need to do much for infrastructure. Besides, efforts to improve the standard of education were a must. Keeping this in mind, I began in the school the co-curricular activities like school panchayat, games, celebration of National and religious festivals and concentration on pupils individually. As it was a multi-

grade school, I had to see to it that pupils of every standard are given justice. I daily held informal meetings with the guardians at night. Often I visited them at their farm. During such activities, I let them know about the activities of the school. In all the four standards of the school, the activity of reading, writing and hearing was done at the same time. Most of the times, the exercise work and examination were done in the school only. Homework was given and checked regularly. I also took up the technique of appreciating the child in the presence of his parents to encourage him.

But when I got a job at my native district Rajkot, I resigned from here and joined at Chachapar village of Morbi taluka on 19-2-77. I continued the same kind of activities in one or the other form here. But as there were many teachers, I did not get that freedom to work. I had to help the Principal in the administration also. Here, as a new experiment, I began to play football, volleyball, cricket and kabaddi with school children and village youth. I also organized competitions for such games. I received great help from a religious speaker of the village. I arranged religious meetings in the streets of the village and brought awareness among people. Here, too, I succeeded in enrolling children. And as I had only one standard here, I could give my full concentration in improving the standard of education. I could not do any co-curricular activity here.

As I was transferred, I joined at Ganeshpar of Morbi on 15-1-79. But in 1979 Machchhu dam broke and massive devastation took place. As I was compelled to live with my family, I demanded transfer which I got and left Ganeshpar on 13-9-79 and joined at Jambudia of Morbi on 14-9-79 as the Principal. Here the golden period of my career started. If I describe the first sight of the school, the building needed to be repaired badly, a shepherd resting in the passage with his cattle and ten to twelve pupils in the school. I took the charge from the reliever teacher. The village was financially backward. There were mainly three occupations, the majority of villagers were labourers, the rest depended upon farming and animals. The majority of the community was Koli and the rest combined Bharwad, Kanbi and backward communities. Only four or five people had knowledge of reading and writing. But people were religious by nature. As the first step, I began to live in the village with my family in the government quarter. The village people were so ignorant and timid that they, specially children, kept away from me and did not even talk to me. I felt it important to cultivate intimacy with them. As the people were religious, I followed the same pattern that I tried at Bhima nu Gam and I succeeded too. I started my efforts in the school itself to win the children. As children were very careless regarding cleanliness, I used to wash their hands, legs, comb the hair and create homely atmosphere. Meanwhile, many clubs and associations came to help the victims of flood. This brought the villagers nearer to the school. I picked up this opportunity and formed a religious association. The life stories of saints and devotees and religious scriptures were read regularly. My wife also helped me a lot in this as she formed a separate group of ladies and explained them the importance of education. This helped to increase the strength of pupils. I also began the activities to avoid drop out. As a part of such activities, the prayer was done in such a way that it creates quite congenial atmosphere for studies and also nourishes the interest of the pupils. We all used to sit on the ground and pray together. The presence was noted at the same time. As the villagers had great faith in Goddess Mother *Amba*, the pupils began to speak *Jai Ambe* instead of *Jai Hind* or *Jai Bharat*. Along with this, various songs and dhuns were sung and the villagers were also invited in the prayer. This was the first experiment of its own kind which helped to develop the aptitude of speaking and hearing. As the members of the staff increased, I started the activities like news paper reading, map reading and quotation writing with their help which can be considered to be an important factor for the success of multi-grade teaching. I received a lot of help from my family members, villagers and pupils. But I received the greatest aid from The Indian Medical Association in 1980. The officials of this association were willing to adopt a village victimized by the flood. Co-incidentally I happen to meet Dr. Munshi at that time when the matter was discussed. And due to my suggestion, my village was adopted. As the result of this, the village was provided the primary facilities of road, water and electricity. Along with that, the school was provided a compound wall, a line for water and electricity, facilities for gardening and educational

equipments. The financial help was provided by this association and the labour was provided by the villagers. This whole activity was organized by me. As a part of the activities to improve the standard of the pupils, I began a project to improve the pronunciations. In this project, maximum use of tape recorder and other equipments was done. I also gave special training to the pupils to improve their ability of speaking and listening through various tactics. My main aim was teach the pupils at least reading, writing and basics of Mathematics. For that I used various techniques including songs, games and stories. Thus this school had six standards. Here also the multi-grade teaching was done and success was achieved. Along with this, annual planning of the co-curricular activities were done which included the celebration of national and religious festivals; information regarding important days such as soldier day, teacher's day, the birth and death anniversary of the leaders; entertainment programs like ras- garba (folk dance), drama; competitions of games, essay writing, elocution, quiz; *Prabhatferi* (morning march) for social awareness; visits of the guardians, Panchayat, factories, farms by the pupils; school decoration; school panchayat, Balsabha (children's meeting), daily news, gardening, library, tours and travels, co-operative society, participation in the science festivals, guardians meetings, charts and projects, tree plantations, small saving scheme and religious activities, school court, banking and postal activity, hand written magazine, socially useful productive activity etc. Besides, in order to strengthen the educational activities, various groups of the pupils were made such as Science group, Mathematics group. These groups only made different equipments from paper, clay and useless things. As the result, the drop out was almost abolished.

In addition to this, I worked for adult education and educated a group of male members of the age between 15 to 35. The total number of them was nearly twenty. It was my volunteer work, there was not any involvement of the government in it. In accordance with the government policy, I educated the children of the age group of six to fourteen also. I also gave my contribution in the family planning program run by the govt. The Health department had not any case of family planning before that. But our mutual efforts helped a lot to control the population growth of the village. Thus my task was going on smoothly in the school as well as in the village. We also arranged educational folk songs and folk dance in Navratri. We invited the villagers to see the school court. These factors helped a lot to abolish the distance between the school and the village. Thus, continuing the multi-grade teaching, the strength increased up to 150, girls were enrolled. After one year one more teacher joined us. Now we were four teachers and we had six standards.

Meanwhile, few people of the same village formed a separate village and named it New Jambudia. The inhabitants of this new village demanded a new school and asked me to join the new school. As the distance between the two villages was nearly one and a half km, I felt that it might cause drop out. So I talked to the members of taluka panchayat brought a new school for the village. Here a new teacher was appointed who used to visit our school often. We used to held dialogues on education, religion and many other topics. He tried to follow our school. The teachers of my school also helped me in all the possible ways. The celebration of the national festivals was a special occasion for us. Many games and competitions were arranged in the whole day. On such occasions, local members of the international clubs like Lions and Rotary used to be our guests. At this time our training supervisor Mr. Gambhirsinh Rathod suggested me that we should participate in the science festival and also start a hand written magazine. I liked the suggestions and we immediately implemented the idea. We participated in the science festival with our charts and photographs and also prepared a hand written magazine. Next training supervisor Mr.K.G.Jadeja also gave a very good suggestion to start children court. I prepared the constitution of this court and implemented the idea. This also inspired me to start the banking and postal activity. Thus I introduced a lot of activities. The formation of the court was a tough test for me too. For this I first prepared a list of the crimes committed by the children of the school such as a child violates the rules of discipline, does not complete the homework. A teacher who inflicts physical punishment is also viable to the

punishment. I prepared a constitution for it that what punishment should be given for such crimes. Punishment also should be educative by nature. The child was punished to pour two buckets of water or fertilizer in the garden. If a pupil of standard seven was found guilty, he would be asked to sit in the first standard and teach alphabets to the pupils. This innovation was so much appreciated that we decided to form a systematic court. So on one Saturday we had the children meeting and on the other we had the court. A list of the crimes committed in fifteen days was prepared and the court proceeded then. Some children only became the magistrate and each time the magistrate was changed. Black gowns were specially prepared for the lawyers. The teachers used to sit on the ground along with the pupils. And as the magistrate enters in the room, everybody stood up on their feet to respect him and sat only after he sits. If we discuss a case, imagine a pupil named Ramesh has not done his homework, he will be brought to the court. He is then asked to swear keeping his hand on a book. Then the lawyer asks the criminal whether he accepts the accusation that he has not done the homework. Ramesh will accept the crime. The school lawyer says that it is a serious crime so the criminal must be punished. Now the defense lawyer argues that it is true that Ramesh has not done the homework, but there is some genuine reason behind it. Ramesh's mother is sick and he was busy in looking after her, so he could not do his homework. The school lawyer now argues that it is our duty to serve our parents and elders. But the homework is equally important. So it is important to look after the studies along with fulfilling the duties. After listening all the arguments the magistrate gives his judgement and it is executed. It develops the sense of responsibility and justice in the pupils. The villagers were also very happy to see their children arguing this way. Children also accepted the punishment happily. It created positive approach among the pupils. The child itself gives and receives the punishment. If a teacher has given the physical punishment, he also has to give explanations to the magistrate and has to accept the judgement given by him. In addition to this the hand written magazine is our achievement. I noticed that the pupils were completely ignorant of the world outside the village as they had never gone out of the village. So I asked the pupils to collect various songs, stories, photographs and other interesting details. Pupils enthusiastically accepted the proposal. And I was surprised when a child brought to me several photographs of Lalbahadur Shastri. We arranged them in such a way that it gave the whole idea of his life and work. This inspired the other pupils also. We made a same kind of collection with the photographs of Indira Gandhi also. Children also brought various kinds of regional songs such as *Doha*, *Chhand* and *Bhajans*. I also noticed that the handwriting of the children were not so good. So I myself wrote the magazine and entitled it "*Pragatya*" and inaugurated on the Republic Day. Children, visitors and the officers see the magazine and note their observations in it. The next year we published the same kind of magazine entitled "*Pragati*". These two episodes contain some of the rare information and photographs. In addition to this the library had the daily newspapers and books. Along with this, in the news mirror the daily local, regional, national and international news were written and read. The details of various capital cities and metropolitan cities were displayed in the map. In order to teach the basic rules of health, they were displayed under the title "*Do This*". At this time an incident took place that I will never forget in my life. There was a pupil named Harkho in my school. Once he did not come to the school for few days. So I called his parents. They informed me that he is refusing to go to the school. I called him and when he did not give any answer I slapped him. He began to cry. I felt that I did wrong by giving him physical punishment as I shall not be able to know his mind. I changed the way and lovingly asked him about the matter. Then he told me that he had borrowed some books from the school library and he wanted to keep those books with him. He added that if he comes to the school he will have to put the books in the library. Therefore I do not come to the school. This incident moved me greatly and I cursed myself that I punished a child for something that should be rewarded. I told Harkha that those books are given to him and when I asked him whether he would like to take the responsibility of running the library, he accepted it happily. Not only this, he also returned the books that he had taken from the library. I have always realized that as we continue the work, we

automatically find the solutions of problems. If I put it in different words, it helps to develop the ability of analyzing and solving the problem. I had nothing to do except the school duty. However the credit of the success that I achieved through religious activities must go to Sri Balvantbhai Thakor who himself was a teacher. It is through his guidance that I acquired the knowledge of religion. With this I decided to get seven standards for the school.

Meanwhile an incident took place that was really shocking for me. I do not know what went wrong and how I offended the Sarpanch and the District Education officer, but suddenly I came to know that I was transferred to Jasdan and I was said that this transfer was done for some administration reason. I wanted to work a lot in this school and wished to retire here only. I met the Chairman of the Education Committee and requested him to transfer to some village nearer to my native. As my request was approved, I was transferred to Rafaleshvar school. They also regretted for the incident but I accepted the new school and joined on 28-12-88. It was the sub school of the Jambudia school. Here I did not get any kind of help or encouragement from the Principal and negative approach was developed for me. This discouraged me and I could not continue my creative activities here. I stayed in this school up to 30-5-90.

I was appointed in the Ramkrishna Taluka School of Morbi on 31-5-90. The school had all the facilities such as good building with 13 rooms, water, electricity, tables and chairs, fans etc. Here I did not need to try very hard. As this was a Taluka school, it had six or seven sub schools. I was supposed to do the administration of all the schools. Here group discussions were arranged and issues related to the school were discussed. Here I began my efforts with the planning of the annual activities. I gave my colleagues the responsibilities of various activities. We also formed separate groups for different subjects. Here I noticed that the teachers were in habit of talking with each other or with the guests for long time. I successfully abolished this habit through discussion and persuasion. I also took reports of the teachers every two months and provided help and guidance wherever they needed it. I also taught them various tactics to improve the teaching method. Thus I got a good opportunity for the administration work. We also celebrated national and religious festivals. But unfortunately some teachers did not like this kind of changes and as the result they started to hares me by helping the evil forces. When the situation became unbearable, I took transfer from this school. However, before leaving the school, I tried to create a good source of income for the school. We began to give the school building on rent during the holidays. Those who hired the building on the occasions like marriage or any other cleaned the building nicely and gave money to the school according to their wish and capacity. Thus the school got a good source of income.

After that I joined the Lions nagar Primary school on 25-2-94. The school was in the backward area and all the pupils belonged to the backward community. I wanted to work here also but the bitterness of the previous experience did not allow me. But my conscience did not let me rest. I decided to overcome my pessimistic approach and continue my task. At this time, the government and the GCERT took up the new approach called MLL. Experts were to be prepared for this task. My name was selected this time and I received the training at Ambaji for the same. Here I realized that it was nothing new for me as I had been doing that through out my life. I also realised that in my school I can give the benefit of my knowledge to my pupils only. But if this knowledge is imparted with other teachers, many pupils can get the benefit of this knowledge. So I prepared to work in the direction of training teachers. I started to give training to the teachers in different groups of 50 members for seven days at various places like Morbi, Malia, Gondal, Jasdan, Jetpur, Rajkot. In these training campaigns, I offered the teachers my all material that I gathered at Jambudia. I gave them my tape-recorder, hand-written magazine, books, collections, tactics etc. They welcomed it and accepted and assured me that they will follow them. I have faith that they must have fulfilled their

promise. MLL also developed up to standard seven. I also run the classes for it every year. I have attended at least 60 to 65 classes. I also joined in the programmes offered by Rajkot DIET. I served in SOPT too. I provided help and guidance to prepare TLM for Mathematics, Science and languages as a part of Acharya Navsanskran program. I also served for Joyful Learning. I was already familiar with all these things. I taught my songs, stories only. I served for the Principal training program too. This work helped me a lot to know about the problems of the teachers and their solutions. I learned a lot from these contacts and added to my personal progress. I realized that the Principal is the head of the school and therefore it is necessary to train them. For this reason, I was selected as a Resource Person in the District Education Association. I received this training at Palitana. When I studied the modules of the Acharya Navsanskran program, I found nothing new in them. It was quite easy for me. I served in nearly 15 classes of Acharya Navsanskran. The principals who received the training also appreciated my work. Meanwhile our Training Supervisor Mr. Bhagvanjibhai Rathod retired who was one of the best administrators. Some time passed in dark. Then the issue was discussed among the officials. At this point of time the member of Education Committee Mrs. Kanchanben Chauhan visited my school and as she was highly impressed by me during our conversation she referred my name and I was appointed as the Training Supervisor. My name was proposed by the teachers and the principals also. I was given the salary according my standard as a teacher and I worked as the Training Supervisor. Here I felt that it was the best opportunity for the work that I want to do. Firstly a small school, then more schools and now I had the schools of entire Morbi district. I gave my best performance here and provided guidance to teachers and principals. At that time a new programme regarding health in the schools was introduced. As I was asked to prepare a master plan for the whole district, I prepared it and submitted to the Collector. I also gave my in Women Law Education Camp and attended the classes. I also served in camps aiming at removing cast barriers. However, I always felt that I am basically a teacher and I was getting more and more busy in the administration work. At this point of time, Cluster Resource Center (CRC) was formed. Under this programme, groups of different schools gathered and discussed various problems of education, did research, tried to find resolutions of such problems and take steps in that direction; such as if a Balmitra Varg is to be made, how can we make it much better. I noticed that the coordinator and other officials were lost in wilderness and were not aware of right direction. I gave them information and guidance in this respect and served in the same way to the teachers also in CRC. I worked in this way exactly for eight months. Unfortunately this became the cause of jealousy in the leaders of the teachers and they nursed grudge against me. They began to accuse me of corruption and that became unbearable for me. I had full support of T.D.O and D.P.O. but other teachers went upto Member of Parliament. At the end I myself left my charge and joined my job as a teacher in the Lions nagar school. However, the our Res.T.D.O. has given me a certificate as reward of my good service. There is a note of this in my service book also. I started my work in this school without worrying about the Principal became popular among the pupils as well as guardian of the surrounding area because of my acting songs, stories and other techniques. In spite of it, the t dissatisfaction was always there that the wide scale on which I want to work I had not got yet. At this point of time, when DIET organized written and oral examination for SRG ( GCERT) at Gandhinagar, out of thirty four teachers passed in this examination. I was one of them. In Gujarat state 30 out of 70 teachers were selected as SRG. Under this programme, reformation of the syllabus and revitalization of the text book was done. I have that satisfaction that I have served in that task. My lifetime experience was used in this work and will reach to the children of the entire Gujarat state. As the result of that the text book of std. 1 is made. I put this book on my head and danced in GCERT as it was the kind of text that I wanted. This work was happily welcomed by the teachers also. No w the evaluation of that text was to be done. I wanted to do an experiment in some school. At this time with the help of Res. Laljibhai of Gibsen Middle school we decided to make the experiment in five schools. And from 6-12-98 I myself joined the Gibsen Middle school. Here also I continued my project in std.1. I continued my dialogue with

the teachers of Rashtriya Shala and other educationists. I simultaneously study its results, arrange workshops and try to get the benefit of the experiences of as many teachers as possible. In this school I got help from GCERT and IIM. The task of evaluation in the districts of Banaskantha, Dang and Panchmahal was undertaken and as a part of it, I visited two schools in Palanpur, noted their review and gave the reports in IIM. I always had the wish to do something innovative in the field of education and to join in new trends. Unfortunately the Principal who always supported me retired. The person who took charge as the Principal did not support my work. On the contrary, he tried to hurdle my work. As the result my work has ceases since last eight months. However, I continued my work within the class room. Here the pupils of std. Four did not know even reading and writing. So I first tried to develop their ability of reading, writing, speaking and listening. During the prayer I asked the pupils to prepare five sentences on any topic such as 'home'. Then I wrote these sentences on the board and inspired the pupils to arrange them in proper order. Thus I used several techniques and tried to improve their standard. Instead of their improper language, the use of formal and refined language was successfully introduced. I used inanimate things to teach the basic truths of Mathematics. At the end of the year, there was annual examination and the next year I was given std. six. Here also the situation was similar to that previous class, so I used the same method. Meanwhile, as encouraging incident took place. One of our senior teachers was appointed as the Principal. This happened only fifteen days ago. Since then I have begun my planning of future. Since my school is the Taluka school, eleven more schools are connected with us. I wish to work under CRC to improve the standard of education in these schools. I am only suppose to co-ordinate the whole work voluntarily. The monthly and the annual planning is to be done. I have the support of all the persons. I have in my mind the programmes regarding the infrastructural facilities and co-curricular activities. I am also planning to take help from he clubs such as Lions and Rotary who have helped me in the past. But before asking their help I have to have some concrete results. The rest I have left on God. I have only one aim of doing something for the field of education with your help.

#### **Helps that I received:-**

When I left the school of Jambudia, my all colleagues helped me and those activities were continued there for one year. Now the whole staff is changed there. As the result, any of those activities are not done anymore. I personally believe that we must prepare our heir who can continue our task after we have left. Today's need is to wake the conscience of the teachers.

#### **Work for environment:-**

I planted 400 plants in the Ramkrishna school but I did not succeed in that as only 15 or 20 trees are there.

I partially succeeded in Jambudia school. We planted trees in the village also. As there was a large number of animals in the village and we had no facilities to protect the plants, they were destroyed. At this time we did not get any financial help also.

#### **Adult education:-**

I did not get any opportunity to work for adult education. As my residence was in the village and I had intimate relations with the villagers, it was possible there. In addition to this I always encouraged people to study in my routine life. When the Govt. Introduced the programme for adult education, I worked for it and helped my colleagues.

## **Multigrade**

I have worked in Multigrade pattern since the beginning of my career. In Bhima nu Gam there were four standards and I was the only teacher. In the beginning I was greatly confused that how to teach. But I started the work with my own understanding. Firstly I sorted out very dull pupils of all the standards and tried to improve their ability of reading, writing and counting. In the beginning the number of the pupils was small. But as the strength increased, it became all the more difficult as I could not give individual concentration. I also took up the group teaching technique in which the clever pupils of the class teach the dull ones. If we take an example, I taught all the pupils Paryavaran at the same time through songs and stories. I took special care that all I could teach all the standards. Apart from this, we also visited river, hills, fields as a part of educational tours. I taught them such songs that would give them knowledge of Mathematics and Science. These songs also helped to improve the language. In my school the prayer took an hour. In the prayer such activities were done which would be helpful in the process of learning. My school court and the hand written magazine are one of them. This gives the pupils the knowledge of the world in which they are living. And as there is the special use of language in both of them, the pupils can learn the formal language. As the pupils have to keep the account of the expenses done on these activities and the income received from the financial punishment given in the court, their knowledge of accounts and Mathematics also improved. They also learn how to run the library. Educational Groups and work of gardening also add to the personal development. Thus the activities were planned in such a way that all the subjects can be given justice. We had map reading, news reading, bhajans, dhuns, stories which contribute to the personal development.

Socially useful work was also done. In Jambudia, the soil used to make tiles was easily available. I taught the pupils to make a stand to put the Agarbatti. Pupils were very enthusiastic. They made such stands and went to sell them. For the girls we had special arrangement of embroidery. However, I did not know it. I was helped by the women of the village in that work.

In order to make the teaching more effective, I used various educational equipments made out of clay, paper and waste material. I also realized that the sums of subtraction with unit, ten and hundred are very difficult for the children. I used a special technique for that. I made the pupils the figures of unit, ten and hundred and dramatized the sum. This helped a lot in explaining the basic concept of Mathematics. In the same way I taught them the truths of multiplying and dividing also. I took up the method of group songs and games to teach multiplication tables. As the result of all these, I had a remarkable success in the multigrade teaching.

I personally believe that multigrade teaching has some special benefits too because a teacher has here an opportunity to put into practice all his innovative ideas. At the same time, because of mass teaching, the repetition of the subject makes it easier for the pupils to remember it. It only needs sense of duty in the teacher, the solutions of problems and inspiration needed to work will come from the atmosphere and pupils automatically.

## **About text book**

I further believe that innovative and dutiful teachers can contribute very significantly in modifying and recreating the text books. GCERT and DPEP has recently prepared a new text book for std.1. In the very first part of that book, psychological approach is involved. The book is such that it can sustain the interest of little children. One more truth we need to realize is that, sight is very useful to achieve grand success in teaching because 90 percentages of teaching depends on sight. That is why in this book maximum use of pictures is done. It is a great reward to me that my lifetime experience has been used in the creation of this book. The best of results can be achieved even in



multigrade with the help of the experience of good teachers and TLMs which can make the education joyful and burdenless.

### **Drop out**

In my whole career, there is a very nominal note of drop out. When these activities were started, nominal drop out was there which was abolished with the duration of time.

### **Writings**

Through out my career, my time was spent in thinking about the problems and their solutions and their implementation. For this reason I did not get any time to write so much. Only once or twice I sent some articles to the news papers, but whether they were published or not I do not know. However, I have written an article under the title 'Mathematics in MLL' in a magazine 'Ganit Darshan' published from Rajkot. The publishers have often demanded for such writings, but it has never been possible for me. However, I have significantly contributed in the new text book of std.1 published by GCERT. I have a wish to undertake a detailed research and to write a book.

### **Future planning**

In future I want to expand the sphere of my activity, undertake researches, share the gains with teachers and educationists and to make our education system one of the best. I want to study various difficulties and their solutions, arrange seminars and workshops and debates. I also wish to form a taluka level committee to undertake the task of reformation.

If I conclude, teaching is in my blood and it is my life. Till the end of my life, I want to work for the same.

## RAHIMBHAI J KANOJIYA

In my second school, the relations between the school and the village community were tense. The problem arose because of the character of a teacher who had worked there earlier. The total registered number of students was 90 but most of the girls remained absent. To encourage the presence of girls I tried to talk with the girls and their guardians, but they did not reply, because of the opinion they had already formed. I discussed the problem with village leaders but they virtually told me to shut up. I then talked to the only graduate in the village, without much result. Meanwhile, Ms Rashmitaben J Patel was appointed to the school. No one in the village was ready to provide her some accommodation on rent. Ultimately one person agreed after vigorous persuasion and Rashmitaben could find some accommodation in the village. With the help of this teacher the mothers of the absent girls were contacted. After this at least the girls started liking us. This influenced some parents and they began to send their daughters to school. We organized various co-curricular activities for the students. Once the children were trained, we organized a show on the occasion of Republic day. This was attended by some leaders of the village and the mothers and the sisters of the girls.

We continued to contact mothers. We used to plead with the mothers, "Please come to school and see for yourselves that your daughters enjoy being there." Gradually, the mothers of girls began to visit the school. So, I took a chance and organized a meeting in our school for the mothers. The meeting was also attended by all the girls. In this meeting we formed a *Matru Mandal* (mothers' forum) under the leadership of Jashumatiben, a relative of the person who had rented out his house. Soon it became a custom to hold mothers' meetings every Sunday under the guidance of the woman teacher, Rashmitaben. Several problems like lack of sanitation facility for girls were discussed, and this forum introduced a sanitation facility for the first time in the school by providing a soak-pit and enclosure. Now there is a pukka facility available.

From that time, this forum became our major supporter. They always helped us in preparing for cultural programs. In fact we always put their names as organizers. All the practical arrangements were made by them. Gradually the prejudice was removed and the people suggested that any celebrations and cultural programs should be held in the evenings, so that the wage labourers could also attend.

### Teaching the illiterates with the help of students

During the literacy movement in the year 1995, we identified 19 illiterates in the village. We took up the responsibility to teach them by involving the girls of grades 5, 6 and 7. There were 10 women and 9 men. When the bell rang, the nine men used to be present with their school bags. The 10 illiterate women were the responsibility of class 7 girls. The group of 10, led by the school girls Jayaben Chopatiya and Chandrikaben Mandanka participated well. After one year, when a team came for evaluation, the entire village welcomed them and created a festival environment. As the people's co-operation and participation had enhanced I started persuading them for high school education. They agreed but couldn't think of any option since the high school was far away. They said that we should make arrangements for further study here in the village. A seven-day Bhagawat-Saptah was organized at a nearby village. Hareshwariben was to read the Bhagwat. I was invited to that occasion. On Saturday, after school hours, I went to the Saptah. I saw that educated

youngsters and leaders were socializing with each other by discussing various topics. I took the opportunity and raised the issue of a high school. They agreed that something should be done, but asked me to take the responsibility. We formed the Vishwa Bharati Educational and Charitable trust by involving the educated youth of four villages. A Bank Manager took up the coordination responsibility. Within seven days we got recognition from the Education Board. In 1998, Class 8 was started. All the girls that were enrolled for secondary education were exempted from the payment of the fee. In June 2000 the approval for Class 10 was obtained.

Initially the teachers contributed Rs.500 each for repairing the doors and windows of the school. When people came to know about this, they collected a fund and refunded the amount spent by the teachers. Soon there was electrification; and fans were installed. This reflects the feeling of ownership of the school among the villagers. If there was a wedding in any house, the girls of the school organized various events like action songs and Garba. Thus an occasion at any house in the village was an occasion for the school. In case of death a prayer gathering was organized in the school. Now there is no line of separation between the school and the village.

### **Tent school for salt-pan workers and a school for Devi poojak community**

One day I met a handicapped girl on my way to a primary school. She stopped me and asked for a lift on my motorcycle. I took her to the school, where I asked for information about the girl and her parents. He told me that there were more than 20 families of Vaghari (Devi poojak) community residing in the area from where I had picked up the girl. The children usually did not attend school since it was far away. I visited the area, with the head teacher and the CRC coordinator. There we met all the families. The survey indicated that 24 children were out of school. It was a painful scene when a little girl with her brother in her lap stared at us hopefully. With the determination that some or other arrangement will have to be done I discussed the matter with DEO of Amreli.

Around the same period while passing by a temple on the way to a school visit, I saw about ten children playing during school hours. A sure sign of out-of-school children. I was informed that there was a colony of salt-pan workers and that these children belonged to that community. I visited the place which had about 70 families. I discussed the issues with several officers. Finally with the nearest school's and the Sarpanch's support we opened a school of classes 1-4 at the colony in one resident's house. The school was recognized as a sub-school of the main school.

The problem of the education of children of another village's Devi poojak community confronted us. In consultation with the director of GCERT, we found a solution in the form of a tent school as a sub-school of a nearby school. Since June 2004 both the schools have become independent schools. Hence teachers are posted there now. A classroom was constructed with help from the MLA's fund in the first village. At present there are two rooms and 72 children in classes 1 to 4 with one teacher. A teacher has been appointed at the Tent school also. During monsoon, the tent gets flooded and so alternative arrangements have been made in a resident's house. Now the DEC has constructed a 'sintex' room, a prefabricated room. I am satisfied that there has been a permanent solution for all those children.

## SAMEENA A KARIGAR

I was appointed as a primary school teacher in July 1999, in the Urdu Primary School, Akkalkot of Solapur District. I continue to work there. In this small town, three languages are used. But since the state language is Marathi people of this area are more influenced by Marathi language, even if their mother tongue is other than Marathi. People prefer to admit their children in Marathi schools. The reason behind this is a belief that studying in Marathi medium only can get children jobs.

The parents of our students are daily wage earners. Hence they are busy working throughout the day and are not aware about the activities of their children. We discussed this situation with them many times, but they put all the responsibility on to us. The number of girls in my class six is more than the number of boys, since the girls tend to continue in the Urdu medium. Since they come to school only after completing their household work, they are invariably late. The first thing I did was to explain the importance of punctuality. By giving several examples on the uses of education, I increased their interest and encouraged them to come to school daily. Then I introduced activities to improve the quality of learning. One example is "My Best Friend" project. In that project I filled the gap between the students who were good in studies and those who were lagging in studies by inspiring the students who were good in studies to help the weak students. Another activity "**Good Reading and Good writing with General Knowledge**", was motivated by problems related to lack of self-confidence, poor reading and writing skills, lack of knowledge about books other than textbooks, a general lack of exposure to music, cooking and art, and not being able to punctuate correctly. The steps I followed are described below.

The shortcomings and talents of children are first identified. I show the signatures of famous people so as to inspire the children. By using ink pen with a broken nib, I teach the style of Urdu writing. I make them collect a variety of newspapers. I illustrate the importance of greeting cards and teach how to make them. The students collect recipes of cooking. I arrange singing competitions. Finally, I evaluate each child. I operate in 3-4 month cycles, but fix weekly targets. I work out a budget for each girl:

<b>Object</b>	<b>Expenses</b>
(1) Ink Pen	Rs.10.00
(2) Ruled Notebook of two lines	Rs.5.00
(3) Card papers	Rs.2.00
(4) Colour box	Rs.8.00
(5) Gum bottle	Rs.30.00

These expenses are incurred over the four month period. The school gives us some money, but my colleagues and I share the costs of those girls who are in no position to pay. To ascertain their abilities before beginning the activity, I give them some questions, paragraphs and sentences and ask them to read and write with proper punctuation marks and words. For example,

1. Rewrite with proper punctuation marks

Will you have food

Oh how is the climate

Mom what are you cooking

2. Sania Mirza is \_\_\_ world's youngest \_\_\_ first Indian player who has achieved such a position at a young age

Some other paragraphs and sentences of this kind were given to identify the shortcomings or weaknesses of children.

I then show the girls their writing.

Step 1: In the first week I focus on correct reading of words, sentences, paragraphs. Immediate correction helped children to be aware about their own shortcomings.

Step 2: The girls are asked to read out different types of paragraphs and their mistakes are pointed out. The correct method of reading is also taught. E.g. correct speed, how to keep distance or gap between two sentences or words, high and low of pitch of voice, proper use of punctuation marks, proper listening etc.

For these two steps, I used story books, news papers and song books.

Two additional sub-steps are:

1. To give shape to the children's imagination: I asked the children to speak their minds and thoughts openly in front of everyone. For that I gave them some topic. Then I corrected or rephrased some of the things and asked them to repeat.
2. To make a habit of reading other types of books: I gave them reading material like story books, collections of songs, daily newspapers. Children read them willingly. The readings were discussed before starting the relevant lesson in the classroom.

Step 3: To increase the interest towards school: To increase interest among children, I improved the environment of the class. I became strict about their school timings and insisted on cleanliness; I explained them the benefits by giving suitable examples. Children adopted these things willingly and started paying attention. Then to make studies more attractive, I used different methods and material.

Step 4: To increase the self- confidence among children: My students had the potential. I showed them pictures of famous people and told them stories to inspire them.

Step 5: Punctuation signs and good handwriting: My next step was improvement in writing. For that purpose I used writing done by ink pen with broken nib as material. I myself had made some cuttings of curves (done with same kind of pen) for Urdu writings. Learning of punctuation marks and curves takes one fortnight.

Step 6: To write with broken nib: I showed children fine printing of news paper and attracted them towards the activity of good writing. Then I taught them to make decorative Greeting Cards by writing with a good hand and drawing. I got very good responses.

Step 7: In this step I focus on cooking. I explained various recipes that appeared in newspapers and also prepared one recipe daily to teach them the method. In this way their interest in reading recipes and writing out the methods was increased.

Step 8: Along with this, I told them about famous Urdu poets and writers. I showed them their writings, their statements and comments. By showing their photographs, I told them about their lives, popular incidents and honours they received. Then I encouraged students to write what they imagined in the form of poetry.

Step 9: In this step I tried to explain how women make proper use of their time. I also emphasized how they could earn money in the future by spending their time properly.

Step 10: After this I told them about popular personalities of world. I took the help of newspaper cuttings. I showed them the pictures and asked them to write about them. Next day I used to read the information written by the children and correct them whenever necessary. This helped in learning to read and write as well as inspiring them to set higher standards.

Step 11: Similarly I introduced sport personalities.

Step 12: In this step I focused on general awareness. Here I focused on cleanliness aspect and diseases.

Step 13: Again I gave practice in writing. I cut bold-typed words and sentences from newspapers to show them that they too can write similarly with broken nib.

During the last inspection I asked children to read and write some sentences, and noticed good improvement. Some of the difficulties that I faced were: Lack of cooperation from some children;

unwillingness to sit in the school for more time; very slow learning among some children. But as we proceeded, many of these problems disappeared. My activities have increased the students' interest in learning and attachment towards their school. Even today this work goes on.

### **VYANKATESH R KULKARNI**

I was appointed as a primary teacher in 1984 at a place which was surrounded by the Ujani Dam. There was water on three sides. The residents were mostly farmers. They were not interested in education. Through a series of contact programs, I motivated to parents to enroll their children. When the children started coming, I attracted them by telling stories, singing poems and songs with actions. I also introduced pictures and dramas, which made the children interested. The attendance soon reached 100%, and I felt relieved. I then decided to use the ground opposite the school for sports, and with the help of the Panchayat cleaned the ground, removed the stones and made a sports ground for the villages. As soon as the ground was ready I trained the children in a variety of games. I then wanted a garden in front of the school building. The villagers brought black soil from their farms, and I planted mango, eucalyptus, berries and neem trees. I asked the children to water them. I planted flowering trees like Shevanti and asked children to water them regularly. By the middle of 1985 the garden had grown sufficiently well to attract attention. The village was happy and felicitated us on August 15, 1985.

Then I was transferred to a school in Sade, Karmala, Solapur, in September 1985. There were nine teachers in the school. When I joined the school I came to know about the poor interpersonal relationships among the teachers. I started to praise the teachers in the prayer assembly. This had a great impact, and the initial mistrust among the teachers was overcome. It was then easy to discuss education and teaching.

Educational Teaching Aids: One initiative which has helped me is the "moving chart". I have made many charts to explain various concepts of fractions, place value, odd number, even number, and complex words. I have made about 50 such folding charts.

Savings Bank for child welfare, Kolegaon school, Karmala, Solapur: I began with the parents, requesting them not to give money to their children to eat roadside food. I suggested that the children instead could open a savings account. I started emphasizing the importance of saving during school prayers. I explained that such savings should be used to buy study material and not junk food. I started a Savings Bank in the school. The individual accounts were written in each student's notebook and I used to keep a summary account. The children started enjoying it. This made the teachers happy. I thought of investing the money in Kolegaon branch of Bank of India. I opened an account and told the children that they should not withdraw money for one year. The students from classes 6 and 7 approached me with a request to help them open a savings bank account. I told them to take the help of their class teachers. I also told them to open a piggy bank in their home and deposit whatever money that they got there. I also told them that 'don't expect anything from it, after the completion of one year, you'll see the results'. The students started piggy banks. Students of other grades followed suit. The students stopped buying trash from roadside hawkers. After the annual examinations, I invited the students' parents and their relatives. I reminded them of our earlier meeting and presented the savings efforts of class five students. The sum collected was Rs.1827. The parents were surprised but happy to know that this money had not gone to hawkers selling junk food. "If the children can do so, why can't we" was the thought in their minds. So there was a bank and post office deposits drive. In a subsequent meeting of the parents, I withdrew the amount and distributed it to the children as per their accounts in their own notebooks. One child got Rs.225. The minimum amount was Rs. 20. I returned all money to each

child in front of his parents. With the interest of Rs.46 we decided to buy 45 rulers, 45 erasers and 45 pens and 45 pencils. I had to add some money of my own. I distributed these items to the children as a reward for their participation in the savings scheme. This motivated the parents to buy reading material in advance, so that by the time the children went into class six, they had the necessary books and notebooks. I was transferred to Jilla Parishad Primary School, Pangri of Barsh in Solapur in July 2001. Here I advised the children to save their money at home. I also received letters from the students from Kolegaon, who were still saving money. When I was transferred to Pangri School, I was teaching class one children. Everything was new to me but I explained the importance of savings. I opened an Utkarsha Bank for class four students in 2004. The children started saving at home and so the response to the bank was not good. Still, I managed to collect a decent sum.

## YASODA LAMA

Jaagiroad is a small area covering a few villages in Morigaon district, Assam. Nakhola Rajasva is a village to which my husband's family belongs. Here, I saw the disadvantages of being uneducated when I came here in the early seventies. I noticed that the women-folk of the *bastis* relied on *Bhuvras* (one who practices black magic) rather than consulting doctors. Most of the people were poor and depended on animal rearing and labour for their living. Small children spent their time roaming around. Parents were not aware about the formal educational processes. I decided to do something for the children. Initially I gathered them at one place to make them play more systematically. Then through stories and plays, I built a rapport with them. I met the educated individuals and parents and mobilized opinion for a primary school. Together we formed a Village Service Committee and started a school. Sri Jangvab Rana, one of the parents, donated a small piece of land for the purpose. We built a hut which was named "Bhanu Vidhya Mandir Prathmik Vidhalya". I started working as a teacher in this school in 1974. I had already passed my Matriculation exam and had a *Vishard* certificate in Hindi. In 1977 the school got government recognition; till then I worked as an honorary teacher. Initially I started with Nepali children. There were 45 Nepali children in the school and hence I taught them through the Nepali Language. Gradually children of other *bastis* also started coming to the school and they (mainly Assamese) formed a majority. So we adopted Assamese medium for teaching. One more teacher joined me. By 1983 there were 152 children in the school. With great difficulty the two of us managed to teach so many children. Later on (in 1985) school got a grant for the construction of a school building. I was then transferred to Hindi Prathmik Vidyalaya Jagi Road. This school is located in Rajakuchin Maholla of Nakhola Rajasva village. This school was located in the *Tiwa* community, a local tribe. But children of Hindi speaking communities residing in distant areas also came to this school for studies. When I came to this school there were about 65 children in the school. Most of the children were from economically backward communities. I noticed that girls from the Bihari communities were not getting enrolled. I talked to the parents at length, set up committees to monitor enrolment and attendance, and visited the sweeper colonies of Chaar Aali, Nakhola regularly. The result was a larger number of children in school. This strategy turned out to be fruitful especially in the case of children belonging to the families working as sweepers in the Indian Railways. Earlier, the parents hesitated due to the fear of being rejected or humiliated; my assurances created some comfort among them. A VEC member, Mary Goswami, and a teacher, Sri Nathuni Giri, were instrumental in helping me.

There were also other problems like lack of sufficient time due to administrative responsibilities that I had to shoulder for another school in the village. I was responsible for bringing all the children to school. I found it especially difficult to bring the children of the tribal communities to school. The older people were all labourers and the children were left to fish and do whatever they wanted. I used the incentives given by the government, free books, note books and rice (meals), to bring these children to school. I had to make strict rules, like "attendance less than 80%, no rice", in order to monitor the attendance of children.

For my own school I had some unique problems. It was the only Hindi medium school in the district and hence I had to go to the state headquarters to collect question papers at the time of examinations. Another related problem was lack of supplementary material like charts, lesson plans, and workbooks in Hindi. So I had to spend a considerable amount of time translating them from Assamiya to Hindi. Still at least two to three children from my school used to get scholarships. I managed to increase this number to 12. We also got a pakka building for the school with



community support. Though many children completed Class 4, they had to discontinue since there was no Hindi medium school. So I worked towards a high school. As of 2005, about 65 children have passed the matriculation exam.

In 2000 I was transferred to a school in a Muslim habitat. Here also the problems were similar. Children were enrolled in school when they were very old, and those enrolled were very irregular. The children were also malnourished. I allowed them to bring their younger siblings (3 to 4 years old) and thus ensured enrollment at the right age. The children used to stay back till their siblings were reasonably old, and hence they themselves were enrolled late. When the siblings started to attend school at the age of three or four, they were ready for enrollment at age six. I had to bathe dirty children in public; this was seen as a punishment. It helped in sensitizing the mothers to treating the school with respect. I also guided them on small savings, and organized household enterprises like chicken and duck farming, vegetable cultivation and working for wages in well-off families. I have been fairly successful, and now look after all the five schools in this area, as the VEC secretary.

In the late 1970s I realized the need for short bridge courses for out of school children in order to enroll them in mainstream education. I used to run these courses in my own way, using play way methods to teach. Of course, the DPEP and its structures like CRC coordinators (especially Ms. Punyeswari Hazarika), helped me make this long-term interest of mine more systematic and more organized. I have also picked up some new ways of talking that educationists use. For instance, earlier I used to talk to parents using content that struck me as important and used persuasion; now I tell them about 'child rights' and with education being one of the rights, my main concern as a teacher is welfare of the children through education. This tells the parents that I am keeping in touch with the times.

## ASHOK S LAVATE

I have been working as an assistant teacher in the Mauja Bargaon (Deshmukh) school of Akkalkot, Solapur, Maharashtra, since 1999. My school is situated in a locality dominated by labourers, on the Karnataka-Maharashtra border. About 40% of village people were Kannada speaking, 40% were Hindi speaking and about 20% spoke Marathi. But the medium of studies was Marathi. Therefore, we had to face severe language problems. The number of students attending school was very small. To increase the levels of interest among children, I started different activities and entertaining games (sports), including language oriented games.

1. Best boy- Best girl: I planned an innovation named "Best boy-Best girl". This was to attract the late comers and the ones who came in an untidy condition. I used to welcome those students who came on time by giving them roses or some educational literature. This activity resulted in a major positive change in attendance patterns. Then I introduced the activity of giving an "attendance flag" to the class with the highest attendance.
2. Who will become *Gyan Pati*? I tied up with an activity of the Gyan and Vigyan Mandal, Pune, which tested students in general knowledge, by giving my students extra coaching and guidance. Many of my students got good marks and this had an impact on schooling performance.
3. I organized a number of competitions specifically for girls; an example is a henna competition. These competitions motivated the girls. Other competitions for all children included story telling, elocution, composition writing and good handwriting.
4. I also experimented with a number of activities to increase the Marathi language reading and writing skills.

One particular activity which attracted children to school was the "Pen friendship" initiative. The idea was to develop self introduction and social communication skills, especially during moments of joy and sorrow. This was actually the outcome of a listening skill experiment that I had carried out. The children had to listen to the 'Balsabha', a radio program of 'Solapur Aakashvani', broadcast every Monday evening. The children of Classes 5, 6 and 7 gathered in the school to listen to the program. At the end, interesting puzzles used to be broadcast. The solutions were supposed to be sent to All India Radio. I used this to develop puzzle solving abilities and letter writing skills among the child. This led to the "pen friendship" project. I allotted two periods in a week for such activities.

Before introducing the pen friendship project, I developed a structure by discussing the idea with co-teachers, the CRC coordinator, and my head teacher. I began with Class 7 and then worked towards Class 5. The structure involved asking the children to first write a letter, then a demonstration of the correct way, matching nature of the letter with the occasion, and possible follow up activities. I used model letters given in the textbooks of 4, 5, and 6 (Guruji's letter, Pandit Nehru's letter to Indira Gandhi, the letter written to a daughter by her mother). Then I asked the children to write letters to themselves and their classmates about their studies. We posted the letters in a nearby post office. Children waited for the letters very eagerly. Once they received them, the task was to read them out, spot mistakes and correct the mistakes. The activity then went into the next round. The activity was going on when the July 1999 Kargil war between India and Pakistan broke out. I read out newspaper reports of the progress of the war to the children. Some of the children came up with the idea of extending the pen friendship idea to the soldiers. Getting addresses of Army jawans was a big problem. We identified two local people Mr. Bhausaheb Uanjare and Mr. Sunil Doekar, who were with the Indian Army. I sent letters to them through the

school, explaining the pen friendship concept. We obtained some addresses with details like their number, rank, name, platoon, unit etc. Our students wrote letters to them. From here onwards it was easy for our students to maintain friendship with the jawans. Many students were anxious to know to which cities their letters were going because the soldiers' addresses did not mention village or town; only cryptic details like c/o 56 APO/ 99APO could be used. Later on, the children themselves came up with the idea of sending Rakhi and greetings on the occasion of Rakshabandhan. The girls made nice and attractive 'rakhis' and sent them along with notes of greeting. On noticing changes in the writing of the students my co-teachers suggested that they make greetings cards for festivals like Diwali, Makar Sankranti and Id. The students did so, on postcards, and reported that the recipients had appreciated the cards.

After some time, my school started to receive letters written in Hindi, English and Marathi from Army jawans. We were very happy to read these letters. Our students could not read the letters written in English, but we translated the letters. Many of them were very proud, and the parents were also pleased. Educational officials came to know about this activity and they also showed an interest. One jawan from Maharashtra, Bhausahab Ligade, had been badly injured in the war, and received out letter when he was in hospital. He replied, saying that the letter made him very happy. In the same letter he appreciated our students and gave a lot of information about himself. Some jawans, on their way home during their leave, came personally to our school. Among those who visited our school, some who created a great impact on the students are jawans Sunil Deokar, Balaji Rajput, Bhausahab Vanzari and Santosh Rupnare. Our school honored them. Some of them said, 'The Rakhis and greetings sent by you always inspired us and kept our morale high.' With this activity there was change in discipline of students, their attendance increased and they became punctual. I had carried out a simple pre-test and post-test for my evaluation purposes.

**Pretest:**

Grade	Students selected			Number with competence in letter writing			Number not competent in letter writing		
	Boys	Girls		Boys	Girls		Boys	Girls	
Five	15	20	35	3	2	5	12	18	30
Six	22	18	40	4	3	7	18	15	33
Seven	10	15	25	2	6	8	8	9	17
Total	47	53	100	9	11	20	38	42	80

**Posttest:**

Grade	Students selected			Number with competence in letter writing			Number not competent in letter writing		
	Boys	Girls		Boys	Girls		Boys	Girls	
Five	15	20	35	11	16	27	4	4	8
Six	22	18	40	17	15	32	5	3	8
Seven	10	15	25	8	11	19	2	4	6
Total	47	53	100	36	42	78	11	11	22

While implementing this activity some problems arose. Some students did not have sufficient materials like pens, notebooks, money to buy post cards; we provided them with these. Since the mother tongues of many students were Kannada or Hindi, they repeatedly made mistakes in

Marathi. I compiled these mistakes and helped the students correct them. I developed Marathi as a spoken language, and this solved the students' problems.

## **MAHALINGAM R**

I have had to contend with irregular attendance and long absenteeism among students, especially girls, belonging to the scheduled castes and tribes. I followed the following steps, with good success. I first mapped out the students with irregular attendance and long absentees.

I focused on the migrating parents and students.

I organized community discussion of irregular attendance, long absenteeism and drop out

I prepared a list of reasons for re-schooling for discussion with the migrating parents.

I sent the community members to bring back the children of migrating parents back to school, and I bore the travel expenses of the relative, the parents and students.

Later on, the Village Education Committee chipped in and collected funds from well wishers to support the students while they continued their studies after readmission.

Once mainstreaming was achieved, I signaled that I was interested in continuation in school through evening classes and night schools for the mainstreamed children.

I approached the Adi Dravida and Tribal Welfare authorities for scholarships and other assistance to the students.

I linked the migrating parents with women's self help groups for financial assistance for livelihood generation in the village itself or its surroundings.

I monitored the progress with the message that parents should encourage their children by just providing them emotional support.

The students' attendance became very regular. Absenteeism has been completely controlled and as a result dropout and wastage are close to zero. Importantly, as the migrating parents got involved in income generating activities with the help of self-help groups, they settled down in their own village, and so are better able to support the education of their children.

## MANICKODI M

I have always followed the principles of making the teaching learning process enjoyable, working towards community school co-operation and helping children make best use of locally available raw materials.

During English classes I translated difficult English words and gave dictation to find out whether students have mastered the words and their meanings. However hard I tried, students were unable to correlate the correct Tamil “Monitor” and “Key board”. Similarly, they could not correlate years with historical events.

There was a mango exhibition in Dharmapuri District. In the horticulture section, a branch of a tree was planted on which birds made of various vegetables were perched. It appeared as if they were real birds. It struck me that I could also make a model like that and use it for improving the quality of teaching learning process. I looked for a branch with a lot of small branches. I removed most of the leaves and kept it in a flowerpot inside the classroom. On flash cards I drew the picture of various birds and cut them into their shapes and painted them. On the body of the birds I wrote the Tamil equivalents of difficult English terms. Likewise, I wrote important years from History.

I spread the cards of English words on the table. The birds carrying the Tamil equivalents were perched on the tree kept in the flower pot. I instructed the students to observe the game they were about to play. I took one word card from the table which read “Monitor”. I declared that I would catch the bird which has the Tamil equivalent of the word “Monitor”, and went to the tree and caught hold of the bird on which the Tamil word for monitor was written. I read it out to the class. I then encouraged students to come to my table one by one and choose any word for which the meaning was available with one of the birds. Next, I divided the class into two teams. Team “A” would read out the word and one member, if necessary after consultation with the team members, would rush to the tree and catch the bird with the correct meaning. Time taken up by each team and accuracy of the identification of meanings decided the winners. Similarly, year cards were written on cards and kept on the table. The incidents were written on colourful birds. Students not only caught the right birds but also remembered the year and connected it correctly to the historical event.

Now I use different vegetable shapes and flowers. Answers always hang on the tree on the flowers or vegetables. Other teachers also love to follow this method. I have extended this method to teaching Tamil, Environmental Science and Math.

## MARY JOSEPHINE J

My school premises were being used as cattle and sheep pens by one of the villagers. Each morning we had to clean the campus before starting our prayer assembly. The adults of the village also played cards and dice near the school. Their purposelessness directly impacted the learning interest among children. A multi-grade situation with 5 classes, 250 students and only two teachers, and infrastructure deficiencies, did not help.

I found out that the son of the man responsible for fertilizing the school with cow dung was a graduate. I decided to use him to teach the adults of the village. This was the key intervention. I made him a volunteer teacher for evening literacy classes. His family members cleaned the campus and brought desks and lanterns for the classes. As the evening adult literacy classes became a regular feature, cattle chose a better grazing ground.

I then contacted small-scale industries and found the village adults some gainful employment. They in return, willingly spent money on attractive uniforms for their school-going children. By the time I organized the school's annual day in 1989 with my own money, the school-village relationship had been established.

In 2003-2004, I was promoted to a panchayat middle school, which was on a highway, but did not have a compound wall. Parents had already started to pull out their children because of a genuine doubt about the safety of their young children. The staff members had been redeployed to various schools, thus aggravating the multi-grade teaching problem. I took my grievance to the MLA frequently, and finally got Rs. 60,000 for the wall. I was pregnant at that time, but saw this as an immediate duty. Encouraged by this, 70 students got readmitted. The Government sanctioned three more posts, and finally there were eleven teachers. I immediately decided to use this chance to upgrade my school to middle school status. The frequent visits to various people and offices took a toll, and I lost my unborn child. But I was glad to know that the school gained the status of Middle School in middle 2004.

I am now in another school where I organize medical camps for all children regularly, with the voluntary professional help of doctors. I have also mobilized some special teachers to help me handle differently-abled children (children with disability). When children shifted to my school, the two private English-medium schools in which they were studying collapsed. I offered the teachers who were employed there a nominal amount from my salary to work as part-time teachers in my school. The enrolment has gone up significantly as a result, and the land adjacent to the school has been given to our school. I mobilized a school-patron scheme, under which 50 patrons (through an installment scheme) donated 1000 rupees each to the school development fund. With this money, a lab has been established, the only one of its kind in a Middle School in Thiruvallur district. I now have more time to make various models with which to teach children. I am reproducing the various structures of the Indus Valley civilization. I began with the structures of Mohen-jo-daro.

## **SUDHIR G NACHANE**

I started as an assistant primary teacher in July 1985. This school had 500 students and 15 teachers. Most of the students were from the scheduled castes and scheduled tribes, and their parents were usually labourers. They were not interested in studies, and found Mathematics particularly difficult. As a result, their attendance was irregular, or they left school after the lunch hour. At that time I was doing my B.Ed. course and had to develop a few teaching aids. I decided to use this opportunity to help me in my teaching. I made floating picture boards, folding pictures, numerical charts, and other tools. I used these aids in class with good results and used them specifically to prepare students for the scholarship examinations. This attracted the students. I was transferred to another school in 1992. The social background was very similar to the one in my earlier school. I started with mathematics for classes 4 and 5. The students' foundations in math were very weak. In the meanwhile, I was exposed to audio-visual aids at the SCERT, and got a chance to see a Mathematical box made by NCERT. A new idea arose in my mind and I decided to develop a Mathematics box.

I made a list of the basic, primary topics of Math from the textbooks of classes one to seven. I also found out the topics that the students feared. I conducted a pretest of 20 children from classes 4 and 5 to identify the learning weaknesses. I made around 50 aids for Math and 25 aids for science.

In the Mathematical box, there are 30 different educational aids. I was assisted by my colleague Mr. B. N. Khadtare, who had some experience of making multipurpose teaching aids for different subjects. The box attracted a number of children to the class. The materials used are: Flannel Board, Graph Board, Multiplication / Napier Strips, Fraction discs, Frame of Nails, Magnet Board, Place Value Board, Multiple hexagon, Spike Abacus, Place Value Chips, Volume Box, Decimal Fractional Changes, Number Theory Chart, Electric Circuit, Two and Three dimensional Diagrams. The wooden box has dimensions of 2 ft x 1.5 ft x 4 inches. There are compartments of different sizes. The different teaching aids are fitted inside these compartments. The lid of the box is lined with flannel cloth and thus there is a Flannel Board inside the lid and a Graph Frame on the outer side.

### **Multiplication Napier Strips**

The plain side of a foot rule is divided into 10 equal parts and coloured. In the same way by taking 10 such rulers and dividing them into 10 parts and then writing numbers, one can teach tables of 1 to 9. Tables from 2 to 10 can be easily made with the help of these strips. These are also used in multiplication.

### **Place Value Board**

On the front side of this board the lines of one digit, 2 digit, 3 digit numbers are made. The values of the numbers from 0 to 9 are written on it. I have fixed nails so that number can be hung on the board. If a student were to remove the number its place value would appear. The number and its place value are written on different strips, which are fixed with nails on the board. Any number, as given by the teacher, can be placed on the board with the help of nails. Then the value of the same number can be seen from the board.

### **Nails frame**

On the back of the board, 900 squares of 1X1 are made and a nail is fixed on each square. With the help of rubber band or wool different geometric patterns can be made. The information about the area, volume perimeter etc. of regular and irregular shapes can be derived from it. Graphs can also be shown on this.



**Magnet board**

By setting the magnet on the upper side of a nail board, a magnet board is made. The magnet is covered with the help of a paper. There are question envelopes. There are four options (on cards) inside. The student has to choose the correct option and place it on the magnet board. If the answer is correct, the card would stick, otherwise it will fall down. This enables children to learn by themselves.

**Place Value Strips**

There are 45 square strips of 2" x 2" and 10 strips of 2" x 4", 2" x 6", 2" x 8", 2" x 10", 2" x 12", 2" x 14", 2" x 16", 2" x 18", 2" x 20". One square strip is stuck on 2" x 4", two square ones are stuck on 2" x 6", three square ones are stuck on 2" x 8" ...likewise 9 square ones were stuck on 2" x 20" strip. Numbers are written on them, which indicates the place value. To know the place value of a single number, students can expand the number accordingly.

**Graph Board**

On the outer side of the lid of the box squares are painted in black, which can be used in graphs. Various geometric patterns can be made on this graph board. Various other things like area, perimeter, fractional numbers, number writing, letter writing etc. can be taught.

**Spike Abacus**

A wooden plank with holes is prepared. On each hole a spike is fixed and in it the beads are put to be used as abacus. Numbers and operations like addition, subtraction, multiplication, division can be studied.

**Flannel Board**

Inside of the box-cover is covered with flannel cloth and flannel board is made of it. It can be separated from the box and carried it to another classroom. It is used in all mathematical functions.

**Number Chart**

There is chart of numbers from 1 to 100. In the same way charts of even numbers, odd numbers are made. Students can learn divisible and non-divisible numbers, even and odd numbers.

**Electric circuit**

It is made with wire, bulb and cells. Pairs of questions and answers are placed on this card. If a question in the pair matches with the answer, the bulb is lighted. The students find it very interesting, and is useful for self evaluation. It has been used for teaching formulae and basic operations.

**Fractional Discs**

A circular shape was cut from a cardboard and stuck on a square piece. One more card board was taken, a circle cut out and then divided into different parts. By fixing these parts on the circular board, a circle with two parts, three parts etc. can be created. This is used to teach circle, radius, diameter, circumference, area, fractions.

**Multipurpose Hexagon**

Six wooden strips of equal size are fixed with the help of screws, to make a hexagon, in a way that the shape can be changed. It is used to teach geometry.

**Volume Box**

A wooden box of 5" x 4" x 3" with 36 small cubes is used to teach volume, area and various related formulae.

**Board for teaching the conversion of unit from one system to other**

This is made of hardboard and wood. Two hardboards are fixed together by leaving a little space between them. On the upper parts square slits are made. Wooden strips can be inserted into these slits/holes. The numbers from 1 to 9 are written on these strips. They can be used to explain various units and their conversion into the decimal system.

**Modification of Maths Box**

I have modified the box with experience and have added four new instruments. For instance, I added the Pythagoras theorem. As and when I face a problem, I add some teaching aid. I have achieved the objectives for which I created this box. My students got interested in studies and some have gone on to graduate in Mathematics. Many have got math scholarships.

## NAMBI DURAI J

My village was torn by communal clashes. Due to a heavy drop in student attendance and fall in enrolment, the status of a middle school was withdrawn. I joined a downgraded primary school amidst tense circumstances. August 15th was nearing. I prepared for the Independence Day celebrations. The convention was to invite the local Panchayat Chairman for hoisting the flag. But I was told that the chairman belonged to a Scheduled Caste; the former chairman and his loyalists did not want her to hoist the National Flag. So two days before the celebrations, the flagpole was felled by some miscreants. Apprehensive of impending communal clashes, I contacted education officers of the district, but was told to handle the situation tactfully.

The entire village gathered, but when I started the preparations for hoisting the flag, all the villagers left the school. The invocation song was over. The Deputy President of Panchayat, having been attacked, was bedridden in the hospital. Unmindful of the mounting tension, I invited the president of the Panchayat to hoist the flag. Just then one of the elected ward members, a boy, came with a long handled sharp knife and threatened to sever the hands that tried to hoist the flag. I sent for the boy's mother. The mother saw her son brandishing a sharp weapon. She slapped him hard on his cheek and threw away the sharp weapon. After the threat was gone, the troublesome elements could not send a replacement immediately. So, the flag hoisting went on well with out any hitch. I wanted to put an end the communal divide and promote solidarity among the warring groups. I wanted to sensitize the community to the benefits of education.

Cable TV dominated the lives of the villagers. I decided to shoot cultural programs and relay them regularly on the local cable. I invited the leaders of both the warring factions to take part and made children of the factions opposing them to present them with garlands. This was a breakthrough. I then prepared programs on educational issues and schemes available for promotion of girls' education.

The opposing factions visited the school and promised to work for the school's welfare. The student strength jumped immediately. The middle school status was restored. In 2002 it was declared the best school in the district. The main attraction was the incentives for girls' education that I distributed through a widely publicized program. Village elders were present. Parents of other girls flocked to the school demanding incentives. I explained that only regular attendance could win incentives, since the incentives were meant to take care of costs of schooling. This intervention brought girl children, who were normally detained after reaching puberty, back to school. The parents have now collected Rs. 1,00,000 to raise the status of the school to that of a High School.

I extended my social development work to facilitating ration cards for the people. With officials we made an agreement that only those who routed their application through the Headmaster will be given priority, since this helped me ensure that not a single child was left out. This successful activity has now led to the issuing of applications for Government Welfare Schemes and income certificate and community certificates through the school. I also conduct annual medical camps and have a system for following up children who fall sick suddenly.

Given the poor economic background of the children, I am now building on my welfare breakthrough through exposure to technology. Rhymes, letters of the alphabet and jingles are taught through television with VCD/DVD; I use the OHP regularly. All my students get hands on training in Computer use. I also conduct TLM workshops for teachers.



## **KADAM CHANDRA NATH**

I passed my school higher secondary examination in 1972. At that time the primary school of our village was located about three km from our habitation. Reaching it in the rainy season was a problem. A few villagers and I started a venture school in our habitation. I was supported and guided by Mr. Phanidhar Deka, of the Ojhagaon L.P. School. Later, I renovated a 19 bigha public pond and initiated fish farming to support the school. This fishery provided considerable revenues for the school.

The school was regularized in 1982 but I was transferred to Khasbasti L.P. school. This school was in a border area; wild elephants were a terror and attendance of the children used to be very poor. I arranged for electricity supply. The result was that wild elephants gradually stopped crossing the border area. I was delighted when attendance became regular. I am happy to report that with regular attendance of the pupils, prevention of drop out, more community participation and a better school atmosphere, became possible.

The effects of this innovation spread to the nearby schools of the area and similar problems in these schools were solved to a large extent. The attendance in the other schools also increased considerably and a few of the schools built new buildings to tackle the larger numbers. I worked in this school till 1987 when I was transferred to 270 no. Bagicha Chuab LP. Here also there were several problems. Poor achievement level was one of them. First I classified the parents into three categories on the basis of their education level: (1) best (2) average and (3) low standard. Then I classified students according to their scholastic level and matched this with the classification of the guardians. I targeted those guardians, whose children were weak in learning, but themselves were in the 'low standard' category. I myself took up the responsibility for the weak children with 'low standard' parents. I kept an eye on children's needs for writing aids such as pens, ink, papers, slates, pencils. The idea was not to let them suffer due to lack of material. Fourthly I had regular meetings with all the parents. Then, keeping in mind the curriculum, I introduced several interesting things like, various games and sports, and cultural meets every Saturday in which story telling, poems, songs, dance were the content. Experienced individuals from the community were invited to talk to the children and teach them some skills e.g. bamboo work, pottery and needle work. Celebrating festivals was important to help children learn the stories/facts related to the festivals. I compiled stories, pictures, speeches, noble thoughts and hung them on the school walls so as to motivate the children to read. I made diary writing compulsory and organized handwriting competitions regularly.

From the day I began my teaching, I have been following certain rules. In the first month, pupils are allowed to move freely and to talk to each other freely, in the second month drawing anything according to their choice is allowed, in the third and fourth months the focus is on drawing curved lines, in the fifth and sixth months, drawing of straight lines and graphs are added. In the seventh month, letters with the help of the lines learnt are introduced, and in the eighth and ninth months teaching of curved letters is introduced.

To solve the problem of poor attendance, I believe the role of the mothers is crucial. For instance, I first organize a meeting of all the mothers. Those whose children are not enrolled in school are also requested to attend the meeting. In such meetings mothers' groups called "school welfare mothers' groups" are formed. One such group has cultivated a garden in the school campus and is looking after it. The members also inspect the school regularly and assist in the academic activities of the school. As a result, irregularity and absenteeism has reduced considerably. The mothers' groups

and the village youth have also helped in setting up school libraries. Initially books were collected from the village people. The names of the books, and the donors' names are displayed on the walls of the library. It is made mandatory for the students to attend library every Saturday. This has got a positive response.

Three direct advantages that I found after doing work in this manner are: (1) regular attendance of pupils in school has become possible (2) pupils are interested in receiving lessons (3) pupils are attracted towards various other activities. Indirectly, the rate of failure in the examination has been decreasing, the number of out of school children in the age group of 6 to 14 years has been controlled and the guardians are interested in both scholastic and non scholastic areas.

Now my activities have spread to all the schools of cluster through the CRC coordinator of Barangabari. I would like to add that a teacher of a primary school should work as an 'educational leader' in his or her locality. Only then will community participation and education for everyone result.

## SEVAK RAM NELE

I was born in an educated and religious family of Dotopar village of Chattisgarh in 1954. I lost my father at the age of six and grew up determined to be a good person. I joined as assistant teacher in Mudpar village (Block Dogargarh, Dist. Rajnandgaav) in 1973. The village was very backward. There was only one person who was educated up to class 11. The village didn't have a single shop. Though a school existed, it was impossible to do any teaching since the children hardly came to school. Nor did colleagues come on time. I indicated the official school hours on a wall outside the school, in writing, but there was no improvement. So every morning I went to the children's homes to collect them so that I could do some teaching. But still making teachers punctual was a problem. Then I met a few community leaders and asked them to help me solve this problem. I told them to stand near the school at school opening time. I asked them to stand in such a way as to give the impression that they were standing there just to chat with each other. The idea was to put moral pressure on the teachers who came late. It worked and gradually my colleagues became regular. I worked here sincerely making a daily round at 9.30 in the morning to collect the children, bring them to school and then teach them. This continued till I joined a two-year Basic (Education) teacher training institute.

After this training I was posted at Nedarganv village in another block. This was a forest area. I used to teach classes 3, 4 and 5. I focused on quality of education, and in 1984 all the children of class 5 passed the Board exam with merit ranks. Soon after the exams, I was transferred to Dotopar village in another district, Durg. Here also I taught classes 3, 4 and 5. All the children of class 5 used to pass the board exams comfortably.

At all three schools, community visits and participation in community activities were important. I helped people of my village and other villages in a variety of ways—organizing religious activities, NSS activities, undertaking tree plantation in the schools, and so on. I tried to attract children to school using whatever tricks that I could think of, e.g. giving them sweets on occasions like pulse polio day, bal mela, school anniversary, and mobilizing slates, pencils, notebooks from donors. I bought a slide for young kids with my own resources and put it up in one school. This sent a strong signal to the people. I also took rural children on various short trips. In 1981, this was a new thing for the children. I took them to many places like Maitry garden of Bhilai, Gangrel bandh (dam), Shrunji Rishi and Dudhava dams. This was appreciated a lot. Once I took 65 children to an industry fair in a tractor. I asked them to carry notebooks and pencils. They had to find out the functions of the models they saw, make notes, present their findings to the school, and then fill up the gaps in their own accounts from the other presentations. The children were happy and satisfied that their self written notes were 'being heard'.

I have been using joyful learning methods to teach all subjects. Some examples are given below:  
Health related competency (EVS):

I do health related monitoring in this way: At the end of each week I ask: How many children fell sick in this week? How much money was spent on curing the illness? Was the treatment done at the village or at the town? We use the data to compile monthly and annual reports. We also answer questions like, who fell ill most often? Who was ill for the longest period? Who spent more money? Who did not fall sick? Who spent the smallest amount? After using the data in the classroom and I met the parents to present our findings. I then guided the parents on providing balanced diets and cleanliness. As part of this activity we also performed routine checks to ensure the cleanliness of

eyes, ear, nose, nails, skin and hair. Children with good health records were praised and given prizes.

Mock drama 'taking bath in a pond': Fifteen children sit in a circular arrangement to form a pond. One child comes to the pond and seeks permission to take a bath. The pond would ask child several questions (have you cut your nails properly, and so on). Once the child replies satisfactorily, it is permitted to have a bath. Then the child asks: Up to what level of water I can go inside in order to bathe? Then a further set of instructions begins from the pond: Go up to the level of your waist, scrub your body properly, don't go deep. Then the child might say: I am finished. This remark is followed by a set of instructions from the pond about drying the body. Each member of the 'pond' gets a chance to ask a question. And hence everybody is supposed to remember lines which are basically instructions related to cleanliness.

Another similar activity is called 'robot': here one child plays the role of a robot which is instructed by other children to do things related to keeping the surroundings clean: e.g. clean the room, pick up the waste from the floor and dump it in a dust bin, clean the doors, windows, arrange the tables and chairs in proper rows...., make the children stand in a queue, check the nails of the children etc.

#### **Festivals and weather:**

I encourage the children to note down their observations about the weather, like the times of sunrise and sunset. I ask them to note down their observations of weekly changes, fortnightly changes, monthly changes, three monthly changes, half yearly changes and yearly changes in the weather. Similarly I ask them to list down the forthcoming (within a month) festivals and then note down, as and when festivals are celebrated at home, details like things the family bought, what they ate, how they celebrated, what kind of prayer they sang.

#### **Language skills:**

For the development of oral expression I make the children present something in the 'Balsabha'. Younger children (classes 1, 2 and 3) can choose their rhymes, poems, stories, jokes and present them. Children of classes 4 and 5 are given specific topics to present. All the children are guided by teachers. Such activities have gained us a reputation for cultural activities. For developing the children's writing skills I correct their note books daily and discuss the grading pattern immediately after correcting the answer papers. I explain ways of writing properly: the correct use of punctuation marks, the use of paragraphs etc. I share my criteria of evaluation like which mistake would lead to (how much) reduction in marks.

#### **Letter writing:**

I give the children a lot of practice in letter writing through exercises like 'write a letter to your sister thinking that you are away from your home during a vacation'. Usually it is done as an exercise in a note book. But a letter to the *mama* (maternal uncle) is written on a post card and then dispatched in a post box kept on a community. The last line of such letters is generally: 'mamaji, do reply; please do not be a miser! It will cost you only 50 paise!' The replies are read out in public.

#### **Teaching tables the easy way:**

I have written down the tables on circular cards/ wooden strips so that they are always visible. For this each circle has two more circles drawn inside. The two outer circles are divided into ten portions, the one at the centre is very small and indicates the number for which the table is being learnt, e.g.4 in case of 4 times table. The middle circle has numbers from one to ten written in ten portions. The outermost one has the multiplication value written in the corresponding cell; e.g. the



if middle circle's cell has number 2, its corresponding cell in the outer circle has 8. This helps the children in quick revision of tables while playing.

Working for the self-respect of my colleagues has also been an area of concern. For many teachers no farewell is held at either school, village or cluster level. I have often heard such teachers express their unhappiness by saying 'despite my service to this school, people didn't have 25 paise to buy vermilion (kumkum) to do a tilak'. Since 2000 I have started the tradition of honoring retiring teachers in public gatherings. If need arises I spend my own money. On the same platform we also honor teachers who have received awards. Since 2000 it has been a well-known activity in Gurur block.

## **KESHARISINH A PADHIYAR**

I am working in a school that was established in 1882 by the then king. It had a magnificent history, and its centenary celebrations were a grand success. It also happens to be my native village. Unfortunately, it took just a few years to wipe out the institution's identity. Teachers who indulged in unethical behaviour, teacher irregularity, quarrels amongst them, and other problems led to the people rejecting their own institution. The community no longer had a feeling of ownership or respect; officers came to complete the rituals of a visit without any genuine interest in the school's activities. During this period, characterized by confusion and bad name, Shri Abdul Raheman Kadiwala became the head teacher. He was a dedicated person and wanted to reestablish the school's credibility. He wanted me to join the school. I had been his student and my track record in the school in which I was working at that time was good. Some of my friends advised me not to go to my own village since they felt that I would be taken for granted. While I was still undecided, the department transferred me to the village without my asking for it. So I joined with a determination to regain the old glory.

Apart from the teacher-behaviour related problems, the facilities had deteriorated. All the eight rooms had become anthills. Everyday buckets of soil dug out by the ants had to be removed. I talked to the head teacher and told him that I would do the labour by myself. He gave me money for cement and sand. A colleague, some students and I started working after school hours. This created a positive influence on the irregular teachers and there was some improvement in their behaviour. The people then told me that there was something wrong with the mid-day meal scheme. I decided to inquire. The coordinator felt that there was no problem. I undertook supervision responsibility for about a week. I realized that the cook and the other workers were taking out some of the cooked food and manipulating the quantities. I talked to coordinator and the head teacher. The teachers then decided to take up the responsibility of supervising, voluntarily. Soon the change was evident to the villagers and they appreciated the school.

Giving 'a life' to the school through several activities was easy. During my nine years in my previous school, I had undertaken many co-curricular activities. I thought of beginning with sports. The state department had introduced Bal Ramatotsav (meaning children's sports festival which also had several competitions and activities), but it was not prevalent in the schools in our area. We planned three activities mainly: sports, patriotic songs and speech giving. We informed the villagers and invited community leaders and well-known people as special guests. These guests were so happy and impressed that they offered to give prizes. Though the children had not practices properly, the events were reasonably successful. The neighbouring schools appreciated our program. Since then a "shiyalu ramatotsav" (winter-sports festival) has been organized every year by our school for the schools in our cluster.

We next took up the celebration of the Republic Day, since it had not been part of the school's functions for about 35 years. This celebration (in 1999) was critical in building our credibility. Some of my colleagues, who were actually the culprits in giving the school a bad image, didn't like the idea and tried to discourage us but we didn't give up. We organized several entertainment and cultural programs for the people. A huge crowd attended. We got a small fund of Rs. 1000 for the school as a donation, and with this money, we honoured all the teachers who had served in any of our cluster schools since independence. The idea was unique and many politicians, leaders, businessmen agreed to attend. About 50 teachers were felicitated in April of that year. Since many political leaders and various state department officers were associated, we generated resources for

the school through this activity. These helped in buying a hand pump, a submersible pump, and constructing the head teacher's office, a compound wall, a 100 meter long RCC road, and for repairing doors and windows and setting up sanitation facilities for girls. The construction of two rooms was handed over to a reputed firm, L&T. This activity has been most critical in winning the faith of the community.

Meanwhile the district authorities declared a speech competition for children. I wanted my children to participate. I announced that we would have a school level competition for the children studying in classes 5-7; the selected children would represent the school. To my disbelief, only two students nominated themselves. After giving some practice we selected the better one. But, unfortunately that child had never faced a crowd before and fell sick the day before the competition. I decided to remove 'stage fear' from my children. I prepared a calendar of activities accordingly and implemented various public activities over the following months.

Another problem that had crept in when the school was losing its identity was copying in examinations. I first made public certain rules for both the teachers and the students, and enforced them. For instance, children would not carry any material into the classroom; the teachers would not give 'solved papers' for practice. Later on, I formed a students' examination committee, which made things even better. Since 2001 no incident of copying has been reported.

I then focused on the public activity calendar. I called it the '*gnansarita*' program. Everyday, each class had to present something after the prayer, in the common assembly. For example Class one: name of the day; Class two: the date; Class three: the *tithi*, and more complex activities for the higher classes. The tasks were also made more difficult gradually. For instance, Classes three to seven: grammar (synonyms, antonyms, word-meaning etc.); Classes five to seven: grammar (gender, singular-plural, sayings). The children were reluctant initially. Their nervousness was evident in their trembling hands and feet. So, I allowed them to read out from papers. Other teachers were not interested. So I myself took up the responsibility of guiding the children of classes that I did not teach. Gradually, the children became fearless and teachers, too, started taking interest in the program. I introduced several co-curricular activities like forming a shala panchayat, essay-writing competitions. The *gnansarita* program is now a huge tree, nurtured by other teachers of my school. I have focused specially on education of girls through debates on occasions like Raksha Bandhan, ensuring that 50 % of the members of the shala panchayat are girls, special attention during the assembly and so on.

I am now introducing similar initiatives in our cluster schools. After taking charge as CRC coordinator I have initiated a *geet gunjan* program in the assembly. Actually I realized that the new curriculum required oral examination. But only a few sincere (mainly old) teachers of the schools in my cluster used to do that properly. I added the following to the prayer assemblies in the schools:  
Monday: Class one and two: *balgeet*, rhymes  
Tuesday: Class three: poems  
Wednesday: Class four: poems  
Thursday: Class five: Gujarati, Hindi, English poems  
For the older children, I allowed singing of any songs liked by the children.



## PANIMALAR C

My school faced a severe decline in enrollment due to communal clashes. Since I belonged to a religious order, some anti-social dements spread rumours that my objective was to convert children to Christianity. This adversely affected the secular image of the school. I initiated a series of steps, starting with visits to homes of all the children and discussions with parents. I then moved to street plays on the poet 'Bharathi', and secularism. I prepared slide shows by drawing on the resources of children belonging to all caste groups. Forming a human chain and making the PTA take oaths against untouchability have been specially effective. I celebrate the birthdays of all the children. The parent of the birthday child has to plant a sapling on that day and gift one book to the school library.

I created a motto "Students to prosper" for the school. This became very popular. I also created an emblem that asserted the secular nature of the school. To help children as well as parents rise above the barriers of caste and religion I gave "We are all Indians" badges to all the children. Oath taking was made a regular feature. I developed a school song titled "Students to prosper" which is sung by students every day. All festivals are celebrated in school. Blood donation camps are held in the school campus regularly to promote friendly understanding. Excerpts from the holy books of different religions (like The Bible, The Koran, The Gita) are recited during the assembly. There are moral instruction classes between 1.30 and 2.30 in the afternoon everyday. A "Best parent award" is given annually to the parents of those students who evinced keen interest in the school development activities during the previous year.

The most immediate result was that students who had been pulled out of school were readmitted. As the student strength jumped to 293 from 192, an additional teacher had to be sanctioned by the Department of Education. A laboratory has been established with the help of student support. The school won a best school award and after that getting a drinking water facility and toilets for boys and girls with the support of parents was easy. Parents have come forward to sponsor prizes for various cultural and academic contests

## **DHARMISHTABEN G PATEL**

I was born in 1978 in a farmer's family. I had a good academic record and would have loved to do a postgraduate course, but family circumstances led me to a teacher training course. I started my work in Nagwada village, about 30 km from the taluka headquarters. The village is at the edge of a desert and life in summer is very difficult. The village has a population of about 3500, a mix of castes and a mix of agriculture and animal husbandry. Many of them migrate seasonally to work as salt-pan workers. The nearest bus station is about one km away. Most of the villagers are illiterate. I joined the school as the eighth teacher. All the teachers welcomed me. I was allotted Class 4, which had 45 students. I found that the girls in my class were as good as the boys in classroom activities, but were not enthusiastic about extra curricular activities outside the classroom. They were shy and hesitant to the extent that they would sing a poem along with me but wouldn't come in front of the class to present the song. Singing with action was totally out of the question. With great difficulty I could persuade the girls to sing poems in the assembly while remaining seated. The girls did not have any rapport with their teachers.

To solve this problem, I started with action-songs. For one week I taught them a rhyme in Gujarati: Chhuk Chhuk Chhuk gadi chale, Khatkhat Khatkhat Paida Bole, Manadu Marun Dole. I presented the song with action. The children enjoyed watching me do so. Gradually, they started copying me while remaining seated in their places. After that, whenever I taught something, the girls would ask me to teach them songs. So, in our daily routine I introduced a short time period for new action songs and stories. Since this was done towards the end of the working day, children went home happy.

Now my target was to motivate the girls to participate in the assembly activities. Till then all the programs used to be performed by the boys. These included prayers, news reading, taking a pledge or singing the national anthem. I asked the girls of my class to present the action song that we had been doing in class regularly. I finally managed to persuade two girls to take the initiative. This had several effects. The school received them very well; girls of other classes decided to follow suit, and late comers started to come on time. The next step was to encourage the girls with good reading skills to present the 'news reading' and 'thought of the day' items in the assembly. Gradually they started to present bhajans and dhoons. The day Hansa, a girl in my class, stood up for the first time to read out the pledge, the boys were totally taken aback. The most important result has been the increase in the attendance of girls in the school.

I heard about a taluka-level drama competition being organized by a nongovernmental organization. I involved the girls of Class 7 in drama practice. I decided to involve only girls, and hence they had to play both male and female roles. We practiced hard and when we performed it in our school all the children in the school were astonished. The first round was held at a cluster centre school. All the other schools had only boys, and we stood first. At the final stage—the taluka level—we once again stood first. When the results of the competition were declared by the taluka education officers, there was surprise. I had written the play along with a friend, when we were teacher trainees. This made me very happy. We also received a cash prize.

The prize woke up the villagers. They were surprised to know that their daughters had brought pride to their school and village. The sarpanch was a woman, and she was especially happy.

Since then I have been teaching many lessons through drama. This has had an impact on the other classes also. At the beginning of each lesson the students now guess whether that particular lesson

would be dramatized or not. If the lesson has to be played out, then they get to choose the characters they would like to play. The children then have to prepare on their own. This has helped me reduce absenteeism and make the children regular school-goers.

## **GORDHANBHAI C PATEL**

Shri Gordhanbhai Patel was born in 1957. He joined the Sherpura Primary school in late 1981, after passing his physical education instructor's course. Ever since, he has been working in Sherpura. When he joined, there were two classrooms and two teachers. The school building was in a bad state of repair and the surrounding land was in very poor shape. His first assignment was to teach class five and to impart physical education to classes 5, 6 and 7.

### **Community rapport, trust and resources**

Shri Patel wanted to do something about the classrooms and the animals wandering into the classrooms through the school's broken fencing. But he was not sure of getting support from the village people. It is his belief that a teacher should first build a good rapport with the village people, by demonstrating to the people that they could trust him. Therefore, he started taking the students of classes 5, 6 and 7 out of the school, to an open place where anyone could observe them. He paraded the students for about a kilometre every day. The villagers were impressed with this show of vigour and disciplined behaviour. Shri Patel then took pains to learn the dialect spoken locally (Marwari), by asking the school children the meaning of words in their dialect. He then used these words in his conversations with the villagers. Slowly, a relationship of trust was established. Initially, when he broached the subject of a fund for school repair work with the village leaders, they were reluctant because of their previous experiences when donated money had not been utilised properly. But the people agreed to give him a chance, and Shri Patel himself, with the help of one labourer, repaired the building.

In early 1982, the Sherpura school was asked by a government official to organise a children's rally. Shri Patel by this time had come to know that the village people were a religious lot and considered feeding children a good deed. So he collected funds from a few individuals and organised a rally during which lunch was served to the children. The people appreciated the gesture. Soon after, Shri Patel instituted a system of fines for irregular attendance. An absent child was fined 10 paise; once a sufficient amount was collected, charts and maps were bought.

He also started organising entertainment programmes for the parents, and games, parades and cultural programmes for the children. On each occasion, he made it a point to collect funds, for some specific need of the school. While explaining the need to the people, Shri Patel also explained the budgeting that he and his fellow teachers had done. Careful accounts were maintained, and as soon as the work was over, five villagers attested to the completion of the work with their signatures.

In 1982 Shri Patel started organised celebration of the *navratri* festival with *garba* singing and dancing at the school. This initiative has, over the years, become a part of the village's culture.

### **Pre-school education**

Shri Patel observed that the absence of any pre-schooling activity in the village was a hindrance to the proper induction of children into the primary level. He talked to the parents about the 'play way' method, and about the need for Rs. 200 per month for a teacher and snacks for the children



everyday. The villagers agreed, and a *bal mandir* was started. Very young children learned to hold slates and chalks, and to draw simple geometrical shapes like squares and triangles. In addition, there were games. Shri Patel drew up a curriculum for this *bal mandir*.

### **Establishing a high school**

He also observed that class seven was perceived in the village as a ceiling level, since there was no high school nearby. Shri Patel visited two high schools to obtain guidance from them on how to start a school. He then organised the *sarpanch* and other enthusiastic young people and drew up plans for raising the Rs. 25,000 that was necessary to form a trust. The group decided that they would rent a house for a few years for the school, since government grants for buildings were available only after a certain period of time. A few principals from the town of Deesa were brought into the group for guidance. Finally, a high school was set up. It has proved to be a great help in raising educational levels beyond primary schooling.

### **Team work with the village**

In 1984 the education inspector in charge of the school requested him whether he could organise a sports festival. There was not much time available, but Shri Patel agreed. He quickly drew up a plan for the materials and equipment needed, and a budget for food for 600 children and for preparing the playground. He first went to two brothers in the village, who had once offered to help whenever something like this cropped up. They immediately contributed Rs. 1000. With that amount, Shri Patel and his colleagues visited every household and collected another Rs. 7000 by nightfall. The total amount finally collected was Rs. 15,000. The playground was prepared with the help of a couple of tractor owners. A volunteer group was set up to take care of the lunch serving arrangements. And since the village was not connected by a good road, six tractor-trailer owners were organised to pick up the children from a central point and to drop them back.

The programme went off well. The villagers felt a sense of pride, satisfaction and ownership, since they had contributed to the event. Shri Patel's rapport with the villagers became very strong after this event.

### **Education of girls: Motivation through sports**

After this programme some of the girls pointed out to him that only boys participated in such competitions, and wanted to know why they were being left out. Shri Patel had not realised up to that point of time that the girls were interested in games, but were not being provided opportunities to participate. He started a training programme for girls in the upper primary classes that began at four o' clock in the evening. Running, kho-kho, and kabbadi were the three events with which the programme began. Within a year, the girls were winning prizes in taluka-level competitions. By 1986, they had won various events at the district level.

This experiment of vigorously promoting the participation of girls in sports was noticed by the district officials, who encouraged them. Shri Patel then decided to project the winners as role models. After the morning school prayer, he would invite the winners, and also the participants, to share their experiences and feelings with the rest of the school. He observed the reactions, and noted that after a few months, girls started joining the school, since their brothers had related the stories of the winning girls to their parents, resulting in some pressure on the parents. Shri Patel noticed these changes, and in village meetings and social gatherings, encouraged the parents who had started sending their daughters to school.

### **Mobilising resources**

In the same year, 1984, one of his colleagues informed Shri Patel about certain new teaching methods that the Primary Teachers' Training Course's trainee teachers were employing. He immediately contacted the principal of the teachers' training college and requested him to send some of the trainees to his school, so that he and his fellow teachers could observe the teaching of the trainees. The principal agreed, provided that he could ensure a total student strength of 500, and could arrange transportation for the 50 trainee teachers for a period of one week. So he contacted a nearby school and convinced it that the two schools would benefit by presenting a combined proposal to the college. This way he managed to get 500 students. He then discussed the idea with the village people. Twelve tractor owners agreed to transport the trainees. Shri Patel and one of his colleagues then visited many well-off people over three days to collect Rs. 12,000 for the trainees' food expenses. This initiative also went off well, and parents felt that he was really interested in creating the best opportunities possible for their children to learn.

In more recent times, Shri Patel has managed to enlist the co-operation of teachers with special skills in carpentry and painting to prepare low-cost teaching aids. He has also organised an education tour of ten good schools of the district for ten influential leaders of his village.

Shri Patel feels that people are convinced when the teacher puts in sincere effort in a transparent manner, and when such effort pays off. They then come forward with resources and help. Today, all parents, irrespective of their caste or social status, voluntarily donate some money when their children are admitted to school.

### **Audio facilities**

Shri Patel observed that students remembered film and other songs well. He thought that if poems could be presented in an audio form students would remember them better. He collected money for an audio system and audio cassettes. The wiring was done by colleagues who were knowledgeable in this field. He managed to get donations of eight speakers from eight shops, one from each shop. Thus all the eight classrooms in the school were connected. The total money spent was Rs. 12,000. This system has been in operation since early 1997. There is also a system in place for teachers to access the cassette they want: they leave a written request with the principal, who decides which cassette should be supplied on that day to which class.

### **Establishing new schools**

Shri Patel has also helped two neighbouring village communities to establish schools. These communities lived about six kms from the nearest villages, and came to him with their problems. He guided them through the procedures for demanding, and setting up, a new school. This success has helped people in these two villages to get their children educated.

### **Developing infrastructure**

His initial experiences with repairing the school's fencing and improving the classrooms helped Shri Patel in installing a water supply for the school. He obtained a connection from the *sarpanch's* water tank for drinking water. Then, with the help of his students and other teachers, he started the construction of toilets. The villagers were pleased with his initiative, and raised Rs. 13,000 on their own. With this money, the construction of toilets was completed.

Over the years, government funds have been used for construction of classrooms. In 1992, under the Jawahar Rozgar Yojana some funds were allotted to the village. A boundary wall was built around the school, and the enclosed land planted with trees.

## **PRABHAKARAN P**

The main problems I have struggled with are the enrolment, attendance, and achievement of children in the age group of 6 to 18 years working in tea shops, cycle repair shops, provision stores and similar places. I evolved a careful strategy of house to house awareness building among the parents of child labourers, and communicating to the parents that I was not an “employee”, but like a brother or father of the family. I then started a social movement with the community people, and took part in all their functions and festivals of the village. I then mobilized financial assistance from various trusts and important people of the locality and an NGO, and school building funds from the village development program of the local MLA. I also involved the self-help women’s group of the village in the development of a garden. I also organized morning breakfast to the needy students (those who do not get to eat a morning breakfast). I then turned to equipping the classroom with audio and video facilities. I have never used a cane, and adopted a very simple dress code, so that I could be easily approached by anyone. I followed with the supply of free uniform, textbooks, notebooks and scholarships to the top ten ranking students in all the classes. I allowed the villagers to use the school for their family functions and mobilized donations from the public for library books and laboratory equipment. In other words, establishing a rapport with the community and following up with material support are the keys to keeping child labourers in school.

## **PUGAZHENDHI B**

I have been working as a primary teacher (SGT) for 12 years, as a Teacher Educator for 5 years and as a Head teacher for about 3 years. My main educational goals have been building a rapport among the school, teacher and the village community, maintaining transparency in all school activities in order to build trust, reinforcing the contribution of local youth and village elders to school development by public recognition and ensuring 100% enrolment and retention.

First I addressed poor enrolment of students through a simple strategy of first preparing a list of out-of-school children (including the dropouts) aged over 5 years, along with a “VIP list” for every area, and visiting each area every day. During the visits, the parents were met in the presence of the local VIPs, with admission applications in my hand. This last action was important. The school had 97 students in five classes, and three teachers handled all the five classes. The three of us identified 45 out-of-school children. Enrolling them would mean that we would become eligible for one more teacher. This was one motivating factor. We visited all the areas over a five day period, with admission applications, ink bottles and pens in hand, along with the local VIPs. We did not have to visit every targeted house, since the people gathered on seeing the local VIPs and the teachers. On the spot admission was given to dropouts and all eligible children of school-going age. The responsibility of bringing the newly admitted children was entrusted to some children hailing from the same locality and ward members and local VIPs. This step ensured the commitment of the local public in bringing the new children to the school. Free text books and uniform were given to the students on the same day. This built up a sense of belongingness in the child.

At the end of each day, the list of target population and the actual achievement were compared. About 95% of the target group was admitted in the first drive. This was an unprecedented success. The remaining 5% who had been to their relatives houses were traced and admitted to the school the next week. The student strength which had been constant for seven years was changed to 147 in just two weeks. It is heartening to record that some of these children are now in high school. Currently every school in Sendurai block is emulating my strategy.

### ***Difficulty in reading Tamil words among Class 2 students***

Ms. Shanthi, a Class 2 teacher, once expressed her frustration about her inability to make her children read Tamil words. First I insisted that every child be given the list of the letters of the Tamil alphabet; every day, the children had to learn five new words with the help of the list of the letters. The children had learnt the order of letters by rote and did manage to reproduce them orally in the same order. But, if a letter in the middle of the line or at the end of a sentence was pointed out, the children fumbled. I had noticed in Class 3 how children were able to pick up English letters quickly if some one repeated the order of the letters in English. I used the same sound-character recognition association to help the children learn Tamil words easily. This helped them identify the correct sound for the relevant letter. The same letters were reinforced in dictation. For this purpose, different words having a common letter in the middle are given: for example, “zha” is a problem letter, and two words which have this letter are pazham (fruit) and azhagu (beauty). Exercises like these made the learning easy. Children not only wrote the words correctly but pronounced them well.

I developed a variation on this for Class 3 children who felt that English was a difficult language. I instructed students to record single, double, three, four and five lettered words in a separate note book. The choice of words was restricted to the content words in the text book initially, but later they were allowed to pick out words from any source. First, all the two letter words the children were confident of reading on their own had to be underlined. The words they could read correctly were then ticked. The underlined words which were not ticked were then listed and the help of peers taken. When even the peers could not help, the students were free to approach me. Gradually, I raised the difficulty level to 3, 4, 5, 6 & 7 lettered words. Children enjoyed the challenge and tried their best to master as many words as possible. The method was extended to Classes 4 and 5 as well.

When students found learning Tamil Grammar separately not very interesting, I decided to teach grammar using local slang or daily life; children learned with alacrity. While teaching syllables, formulae did not enthuse children. For example, "a short form of vowel takes one syllable, the longer form takes two syllables and consonants take half a syllable." This was correlated with a doctor's prescription of pills. "If one falls sick, one meets a doctor. If an adult has fever and head ache, the doctor gives 2 tablets. If the fever is not much, he just gives one tablet. If a small child has fever, the doctor gives only half a tablet. Consonants are like babies and take only half a syllable." "A short vowel is like ordinary fever for which even an adult takes only one tablet. So, a short vowel takes only one syllable. Long letters are like severe fever. They naturally take two syllables."

## VINABEN M PUROHIT

Vinaben Purohit was born in 1954. She was married at a very young age to a teacher. She was good at studies in school and wanted to study further, but chose not to. She joined her husband's profession for two reasons: she feels that it is good to work with the husband, and secondly she felt that it would be criticised in the society if she was more educated than him.

Vinaben's first appointment was at Janvad primary school, taluka Santrampur, District Panchmahal in 1973. She worked there for 8 days and was transferred to Hirapur Primary school in the same taluka. Then she was transferred to Janvad primary school once again where she worked for 2 months and once again she was transferred to Hirapur primary school and there she worked for five years, till 22.11.78.

### Enrolment Campaign

She carried out an "increasing attendance campaign". From 1975 lists of regular absentees were prepared for each mahhola, and each teacher was given a list to meet the parents of absentees, to find out the reasons and persuade them to send the errant children regularly. The following week the impact was studied; i.e. regular students' names were cancelled from the list, and once again teachers went to those who were still not regular; repeated visits were paid to parents at regular intervals, so, parents that grew uncomfortable and started ending their children to school regularly. Vinaben believes, apart from such efforts, a good learning environment in the classroom is important, like an attractive classroom, (inter class decoration competitions could be organised for the purpose as she has done in the past), Bal Mitra Varg, toys etc. are features which do attract children to school. Decorating classrooms is an activity she does even today in which VEC members are also involved.

**Gotil Primary School:** She was transferred to Gotil primary school, Santrampur taluka on 22.11.78. Here, she worked for 9 years. She made students participate every year in sports competition, science fairs, essay competitions, debate competitions etc. Several students won in essay writing competition. Due to her efforts the school received the General Championship Award of the taluka twice. It also received the first prize in Ideal School competition held for the schools of five tribal talukas of Panchmahal district.

The school also received various prizes at cultural programmes held at taluka level through her efforts. She made the students practise a lot to participate in such competitions.

### Education In Science- An Experiment

In 1983 she established a Science Club in her school, where she did experiments with the help of students of her class, so the science teaching also improved. In the club, she started with the topic "Reflection of light". For her experiment she made various aids with the help of students from things easily available. Then she divided the topic into five sections and allotted each section to five good students to study at home. Each student was asked to make a presentation in classroom with the help of aids and carry out discussions with the rest of the class. She used this method till 1989 for different topics of science. She wrote two booklets "Vignana Yug na Amijharna" (Nectar of the Science Age) and "Gnan Vignana Kanikao" (Drops of Science Knowledge) as a part of the Science Club activities. She collected articles related to scientific development like invention of boat, radio,

telephone and television from news papers, journals etc. and prepared her first booklet. Another one included articles explaining the functioning of eyes, concept of sound- how it is heard, movement of muscles etc. She tried to relate these while teaching. Students enjoyed reading these articles and they too were then inspired to collect such articles. She started a science circle in her class, where students were divided into several groups and each group had a captain, who, alongwith his group members, completed the group assignment.

In 1982, she won second prize in Science Fair held at district level . In 1983 she won first prize at district level and third prize at state level competition. Vinaben was honoured by the parents and the principal in the function. In 1984, 1985, 1986, 1987 she won first, first, second and first prize respectively in district level competitions.

Every year she used to participate in cultural programmes organised at group or block level. Due to her efforts school won prizes in different activities like Balgeet, Action song, Garbaas etc.. She organised cultural programmes in “continuous education camp” organised by Men’s Teacher Training College, Santrampur and on the occasion of inauguration of “Mamlatdar office”. Children who could not do the homework regularly due to electricity problem at their home, were allowed to work at her home till late night. She helped five children this way.

#### Zalod Primary School

In 1987 she was transferred to Zalod road primary school. Here too she continued to participate in science fairs, debate competitions, garba competitions etc. She received first prize in Science Fair organised at district level and participated in state level competitions in 1988 and 1989. Her efforts enabled the school to get general champion shield and first prize in debate competition and essay writing competition in Science Fair organised at district level.

In 1990, she was transferred to Taluka Kanya Shala, Dahod and currently she is working there. To improve science education, she used “film projector method” to teach science in 1990. At this time using T.V. as teaching aid was a new concept. She prepared a pictorial roll for the topic “reflection of light” where different sub-topics were discussed with picture examples. Due to this method she could present the concept in a simpler manner by bringing novelty in her teaching. This equipment has not been maintained and is now not in use.

In 1993-94 this school got seven shields. She won the fourth prize of Rs. 1000 in essay writing competition which was organised by “Action Aid”. The topic for the essay was “contribution of primary teachers in improvement of education”. She also received first prize in ideal and hardworking teacher competition held by Rotary club.

She organises cultural programmes at Police Parade Ground on Independence Day every year. She participated in garba competition organised by “Bhagini Samaj” and “Rotary club” and won prizes. She had also organised various cultural programmes for literacy mission in harijan localities by involving school-girls living in these localities.

#### **Learning geometry through cards**

To make geometry education interesting , Vinaben started card circulation method in 1991. To teach the concept of “area of triangle” and “area of circle” she prepared cards of triangles and circles of different sizes. Pairs of students were formed in class and one card was allotted to each



pair and was asked to measure the length of base, height and calculate the area by using the given formula. Same was done with the circular cards. She has also prepared cards of congruent figures so that the students can compare the figures by placing one card on other and try to understand the concept. If the cards do not match, they pass them on to other children. She believes that students learn easily by this method, but the teacher has to supervise and provide guidance continuously. There is also less scope of copying or learning by rote for students if this method is used.

### **Magnetic Board for Chemistry Education**

Vinaben prepared a magnetic board to explain a lesson about element, compound and mixture etc. For this experiment a metallic board was prepared and name of elements, their symbols, Latin name etc. were written on separate cards and a piece of magnet was stuck on the back of each card; similarly definitions were written on separate strips. In class a strip showing the definition was stuck on the board and cards showing the name, symbol etc. of element were stuck below it, then the details about the particular element was explained to students. Evaluation was also made simpler by using this method. It was checked by observing whether students were able to arrange proper combinations or not. So, it was joyful learning by doing.

In 1994-95, she tried to teach science with the help of “drama”. She tried it in class VII to teach the topic “element, compound and mixture”. Here, ten children were selected from two divisions and were asked to wear boards showing the name of elements, compound etc. and they sang songs about element, compound and mixture. The cards, charts etc. were also used in between to explain the concept. Parents too liked it when Vinaben explained to them the details of the drama. But she has stopped this practice because of the amount of work involved.

She believes that the success of such attempts depends upon teacher’s expertise, her hard work and ability to get work done from children. In 1996, she taught science with the help of models and teaching aids. The performance of class VII students in final exam had indicated that they were weak in science, so she used various models and charts to teach lessons about the functioning of various systems of the body more effectively and used models of respiration and digestive systems, brain, eyes, etc. , which were prepared from thermocole and nearly 14 charts along with it, to explain the lesson. She had also prepared charts to explain how plants prepare food, how animals get food etc. She found that students were interested in learning by such methods and got more marks in tests.

### **Mobilizing resources for school development**

For the development of Gotil primary school she collected money. She herself donated money for the decoration of school, when it participated in ideal school competition. She also collected small amounts from leaders of village. The compound wall, toilets, stage etc. were made by using the fund collected from village people. In this attempt school teacher and village leaders helped financially. She thinks that society is a part of education and it is important for school to develop relationship with society. She organised Safai Abhiyan (cleaning campaign) on Gandhi Jayanti to celebrate Gandhi Saptah, where the groups of students were formed and each group was assigned a task of cleaning one locality. People on seeing children clean their area, started cleaning their areas afterwards. It was done with the purpose of teaching the value of self-reliance and developing positive attitude towards labour.

She organised “Vali Sammelan” once in a year to make the parents aware about their child’s development. Once the festival of Ganesh Chaturthi was celebrated in school, and money given

(presented to God) by people, approximately 700-800 Rs., was utilised for school. This practice was given up when she was transferred but was replaced by Navratri celebrations. She feels that due to all this efforts parents developed a positive attitude towards the school and attendance of students was also positively affected.

### **Education of girls**

She realises the importance of girls' education and gives special emphasise to girls belonging to the backward class. She often discusses with the students the difference between educated woman's living standard and illiterate woman's living standard.

While teaching, she incorporates various aspects like need of education in today's world; rational for girl's education, place of girls in society, how to be self dependent etc. wherever possible. In 1995 a Jyot rally was organised for the Mahila Jagruti Abhiyan.

In 1986, a competition was organised by NCERT where her article "Don't teach but educate them" was published in "Jeevan Shikshan". In 1988 again her article "my efforts to make education child centred and" was published in same magazine. In 1988 her poem was published in Maitry. She thinks that talented teachers can play a role in improvement of curriculum. She was involved in training women teachers in how to educated in 1999 in two schools.

She approves of new approaches coming in picture due to DPEP. She thinks that teaching with play way methods, attitude for creating a learning environment, joyful learning approach, teaching with the help of concrete things etc. are helpful in making education effective in classroom and curriculum should be revised keeping in view these aspects.

For that curriculum should be activity oriented, simple and useful to children in their life. There should be a note about activities and aids which can be used to teach. Evaluation should not be examination oriented and it should include those aspects which are helpful in developing good qualities in children.

Vinaben thinks that finance is the major constraint in trying out various innovations and many times she had prepared aids by spending her money.

She was inspired by the training for English Teaching, which she had undergone. She thinks that children are unable to write spelling correctly and as a result they are not interested in learning the subject. For that she tried out two games: Spelling Chain and Bingo Bingo.

For the first game a child speaks out word and its spelling and next child has to speak another word which starts from the last letter, same way chain goes on, e.g. ear, ring, girl, lion etc. As a result children develops interest and their vocabulary also increased alongwith the knowledge of correct spelling. In second game children speaks spelling of different things like fruits, birds, objects in surrounding etc. Here, only five words (spelling) has to be spoken, one student gets up and spells out any one fruit, then other ... and so on, up to five words, after that they sit down while clapping and saying Bingo Bingo. She thinks that these methods have been useful in English teaching and within three months many of the students are able to spell out the words correctly.

For Maths education, she prepared a Ganit Gammat booklet. She collected riddles, puzzles from news paper, children's magazine etc. and stuck on the paper and prepared this booklet. She had also prepared a booklet explaining the various things about the concept of sound and "volume", where different figures, their parts, formula to calculate volume etc. were presented. She had prepared a scale to explain the concept of "place value of numbers".

She had also prepared a booklet from the collection of greeting cards, like booklet containing picture of birds, animals, monuments, historical places etc. She had also prepared a booklet containing different leaves; leaves were dried up by keeping them between the pages of notebook and then stuck on the paper. She then explains various things about it like its uses, where it is found, its shape etc. She thinks that when she uses such material children enjoy the learning and they too are inspired to draw and paint the pictures and collect such materials.

She organised tours regularly from 1986 to 1992 to various places -- historical, religious, dairy etc. She had, once helped a child belonging to harijan community to continue his study by giving three hundred rupees. That student, then completed his studies with the help of scholarships and did his P.T.C. and got the job, afterwards he also did M.A. and M.Ed.

## RAJENDRAN T H

Communication with others is the main purpose of any language. The ability to speak with others in English is a well respected skill but correct pronunciation gives beauty to the language. Unfortunately nowadays students do not give much importance to pronunciation. Even simple words like morning and early are not pronounced correctly by children. I felt that proper guidance regarding correct pronunciation was essential in the early stages of language learning. As a BRC trainer I have visited many schools and hence had many chances to observe lessons in English language learning. How we can improve the spelling and pronunciation is one of the problems teachers face in most language classes. From my experience I feel that a phonetic class is one solution. I felt that the children had no idea about sounds. So I thought that as a teacher of English, I should undertake some innovative activity to solve this problem. I thought of changing the English classroom into a *language lab*.

I feel that in a language lab we can give more exposure to the children to develop their listening and pronunciation skills. I tried the idea of the language lab in many primary schools in the VadaKara Educational District. The teachers and pupils appreciated the idea.

First of all I arranged the classroom seating in semi circles. I used a tape recorder, loudspeaker, VCD and Television set in the lab. The cassettes used were recorded at the Regional Institute of English, Bangalore. The set contains four different cassettes. The first one starts with the correct pronunciation of English alphabets, words, numbers etc. The other cassettes consist of stories, rhymes, dialogue, descriptions. After each letter or word in the first cassette there is some space. The children are required to listen carefully and then to pronounce correctly in that space. By repeating this exercise they were able to get an idea of correct pronunciation. At the next stage I introduced cassettes containing simple stories. Pupils are required to listen to a story and then answer questions. If a child gives a wrong answer, the cassette corrects it by giving the correct answer. In this way rhymes and descriptions were also introduced. I found this method very effective in the classrooms.

The children accepted this technique with pleasure. In the feedback they said it was a new experience. It helped the teachers motivate the children. The monotony in the language class was broken and the children learnt without getting bored. Every child participated in the activity. After the activity I found that about 90% of the children had developed pronunciation skills. This encouraged me and I applied the method in a number of schools.

Then I moved to video cassettes in the classroom. The RIE Bangalore has also introduced strategies for learning poems. The four basic skills LSRW of language were well learnt through the cassettes. I also introduced, with examples, 44 sounds and their categories.

The idea of a lab impressed media persons and they gave publicity to this programme. As BRC coordinator I was able to apply this method to a number of schools. I feel proud and happy as this program has been appreciated by the students, teachers and community.

Suggestions for Improving Language Skills:

1. Set up a permanent language lab in all schools
2. Give importance to a "phonetic class"
3. Use modern techniques in language classes

4. Use headphones and other materials to make teaching and learning attractive
5. Give effective training in phonetics to teachers.

## **RINA DEVI**

If we consider education as a lifelong process, aiming at the all-round development of children, we have to acknowledge that the teacher cannot work in isolation. There must be co-operation and co-ordination among parents, guardians, community and other agencies. Such ideas which I imbibed theoretically in various workshops and seminars are reflected in my work as a teacher. My experiences show that community participation is an absolute necessity in the following areas: attendance of pupils, ensuring a good teacher pupil ratio, monitoring teaching methods and creating a conducive environment in the school

During my service period I noticed a high level of irregularity among pupils in rural schools. Another major problem affecting the quality of education was the non availability of a sufficient number of teachers. In addition, I had some weak areas in different subjects. I took the community's help in various academic tasks in which I was not very proficient; for instance, drawing, reciting poems, singing, folk sayings and songs, knowledge about local plants and herbs. As a teacher, one has to teach such things, but there are so many people in the community who are experts in such fields. Other areas of community support are described below.

### ***Checking regular attendance***

While I was working as a teacher I found that most pupils were irregular. This resulted in low achievement and ultimately dropout. To deal with the problem I asked the community to help in the following ways.

1) Meetings with parents and guardians every Saturday after school hours: The main points of discussion were: a) to inform the guardians/parents about the daily attendance of the pupils and b) to share with them the progress of the pupils, as indicated in the evaluation reports.

2) General meetings of the school once a month: a) to prepare and activate the school development plan b) to create awareness regarding regular attendance c) to check out and prepare a list of community resource persons to help the teachers and the school d) to provide recognition in the form of awards or letters to pupils with high attendance.

### ***Develop the school environment***

Here I focused on both inside-school and outside-school environments. I targeted the following: a) a protected school boundary b) a spacious and hygienic school building c) the availability of a playground and d) a flower garden with a nursery. For all these things I sought help from the community and a local NGO.

### ***Collecting data and information which help teach different subjects like science, EVS and language***

To make teaching locally relevant I used some formats to collect information from the community with the help of the pupils. For example, the children were asked to collect the following information through questionnaires: a) the names of valuable trees found in their locality b) the name of the oldest man in the locality c) the names of organizations/ institutions in their locality d) the names of medicinal plants /herbs in their locality

Such questionnaires generally helped children gather local geographical knowledge and helped them learn Science and Environmental studies. I feel such an indirect process of teaching is effective.

### ***Evaluating pupils***

For all-round development of the pupils and comprehensive evaluation I tried to collect various kinds of information from the community. I then invited resource persons from the community to evaluate pupils in those areas. The following are a few examples:

1. For classes 1 and 2 (to develop speaking and listening skills)
  - a) Story telling from community experts and evaluation of pupils' story-telling in the presence of community persons.
  - b) Recitation in the presence of community experts.
  - c) Directing conversation in the presence of community persons.

(b) For classes 3 and 4 (for Science & Environmental studies)

<b>Sr. No.</b>	<b>Name of common diseases</b>	<b>Generally occurs during the month</b>	<b>Course of such diseases</b>	<b>Remedial measures</b>

(c) Crops and grains (Science & EVS)

<b>Sr. No.</b>	<b>Name of Crops &amp; Grains</b>	<b>Place where grows plenty</b>	<b>How to use</b>	<b>Other utility</b>

These formats are first given to the pupils to collect information from the community. The students then have to undertake a self-learning exercise and carry out self assessment.

### ***Preparing TLMs***

I had listed a set of useful TLMs and whenever I found myself lacking in expertise, I invited an expert person/s from the community to help me. In addition, I involved the community in the following: mothers' group formation; a mobile library; collection of books for the school library; creating a space in the daily school routine for a "community class"; plantation programs; programs on health and drinking water. All these activities helped create a "public ownership" of the school. I extended this to a systematic action plan, with monitoring points:

the community persons from whom I would seek help and when; the community teachers to be engaged and their tasks; the use of community persons to prepare records. Such a listing helped me monitor myself, but more importantly, the community took an interest in the various tasks set for them. Some of the direct impacts are: proper classroom transactions, regular attendance, improvement in pupils' achievement levels and control of the dropout rates. Some of the indirect impacts are: public ownership of the school, community participation, social awareness, knowledge of health and hygiene and effective grass-root plans for school development.

I extended these initiatives to four schools (Lathabori Nehru L.P. School, Practice Teaching L.P. School, Pachatia L.P. School, Moriati L.P. School) with the only modification being an adjustment for the rainy season and farming timetable. Three schools (Kanaklata L.P. School, Milanpur L.P. School and Morigaon M.V. School) have borrowed the initiatives for adaptation in their own contexts.

## AKHTAR M RIZVI

I have been a teacher since 1990. At present I am working at the middle school in Baruali, Dholpur district, Rajasthan. So far I have been involved in several activities of the state department, like teacher training and preparation of modules on teaching science, Urdu, school mapping and micro planning, PRI training, and training of visually impaired children. My most innovative and significant work has been in mainstreaming physically challenged children. In 1998, I was involved with Lok Jumbish, which was working with state government's education department for universalisation of elementary education. I was in charge of 'community participation' and an alternative night school for working children. Once, in such a school in a village called Jodhpur, I noticed that a child, on being asked his name, just made a sound "ee, eei, eefki". I asked the instructor, Mr. Hoshiyar, the reason. He told me that the child was deaf and dumb. Actually, the school was being run for working but out-of-school children; this child was attending the school. Eefki became my source of inspiration. The next day I sent a letter to all the instructors of the block, calling them for a meeting. They were asked to bring data on physically challenged children in their villages and in the nearby areas. At the meeting, we cross-checked and tabulated the data. We realized there were 913 disabled children in 106 villages—324 boys and 240 girls of whom were out of school. All of them were in the 6-14 years age group. I felt that there was a need to find some way of educating these children. I made a plan and sent it to the authorities of Lok Jumbish. Around that time the chief of UNESCO was visiting Rajasthan. He was shown the proposal, and funding was sanctioned immediately. Our program titled 'Jiyaa-e-Ummid' (ray of hope) started as part of a larger program for the education and development of disabled children.

We first listed all the children and then organized a three-day fair (camp) for them. Children were invited along with their guardians. I had arranged for a medical check up of the children and based on that, certificates of disability and roadway passes were to be given. I had also approached the Social Welfare Department and the Bhagwan Mahavir Viklang Sahayata Samiti for providing children with various supporting tools. Both the organizations agreed. We organized various activities of the children's choice, like making things from paper, making toys, origami. There was a separate corner for each activity. The parents were impressed. We then talked to them about the idea of providing their children with a residential educational course of a few months, and then mainstreaming them in regular schools. It was important to take them into confidence because parents in rural areas do not part with their children easily. We asked them about the hindrances that they face in putting their children to school. They shared their problems with us. Their conservative attitude became evident as one of the reasons for the deprivation that disabled children faced in matters of schooling. We shared with them our plans for three types of residential courses: School readiness camp of one month; a three-month program for preparing children for the curriculum of Classes 1-3 and a six-month program for preparing children for Classes 1-5.

In the school readiness camp we invited 57 children of the 6-7 years age group. Fifty two children stayed for the entire month. The challenging task here was to handle the young ones who often cried and asked for their family members. We tried several interesting interventions like stories, songs and dances. One small girl, Manju, enjoyed the 'dance' so much that even though she was not able to walk, she used to roll around on the floor whenever music was played. Other children also liked to see her performance! Another innovation we tried, especially during the night session (since this was the time when they missed their family the most), was the use of the mike. We had often seen that children liked to speak into the mike. We kept a mike and made the children take



turns in speaking. Thus, through several child-friendly activities we kept the children entertained and feel welcome. After about 15 days, I introduced activities like drawing circles, curves, lines etc. After one month, we enrolled them in the schools located near their homes.

With the success of the first camp, we were enthusiastic about the three-month camp. About 65 children were enrolled in the camp, but only 47 completed the course. One boy, Azharuddin, from Levda village, proved to be a difficult case. His legs were polio-affected. Due to lack of activity he had developed the habit of smoking *bidis*. He used to smoke about three to four packets a day. When his mother came to drop him off she gave me some money and told me that if I did not give him bidis, he would fall sick. I refused to accept the money and assured her that I would provide for bidis. Initially, I gave him two packets and monitored his consumption. Gradually, I could wean him away from bidis. One more interesting incident happened in this camp. The little girl, Manju, mentioned above came to know about the camp; she came with her parents and wanted to stay on. We tried to persuade her to leave, but finally had to allow her to stay with us. We formed groups of ten children; each group had one instructor, and was given a name. The instructors and I were strict in ensuring that no student used abusive language (since this usually related to their particular disability). This was important for building self-respect and removing an inferiority complex. Actually I had one strange experience when I went to a village for enrolling some of the identified children. When I asked one child his name, he replied 'Lulyo' (one without legs). When I asked his father, he too said the same 'thing'. He said he actually couldn't recall his name and that I would have to ask his mother. His mother told me that his name was Dinesh. Such a nice name was spoiled; his disability became his identity. I felt very sorry for the child. So I decided to make sure that by the time the camp was over no child had any 'wrong ideas' about his/her name.

In this camp also we had problems in helping children get rid of home-sickness. Finally, though we faced difficulties, children learnt the pre-decided competencies like letters and numbers. The most interesting outcome was, however, the children calling each other by their true names. Another good outcome was that they learnt various motor skills and also learnt to use the relevant gadgets/tools. One child, who was not able to walk, learnt to walk, first with the help of a walker and then without it. When I took him to his village his parents initially couldn't believe their eyes and then they blessed me. There are many such examples. At the end about 25 children were enrolled in Class three, 13 were enrolled in Class two and rest were sent to Class one.

The third camp enrolled 47 children in the age group 9-14 years. Here our target was to teach them the condensed course of Classes 1-5. In addition, we trained the children in several vocational activities like repairing cycles, methods of farming, tailoring and making baskets. At the end of the camp 18 children could pass the examination of the level of Class five and the rest could pass the exams of the level of Class 4, 3 or 2. The lessons and inspiration from these camps helped in conducting other camps in Pratapgarh (Chittoorh) and Sagwada.

The responses of parents and children were published in different dailies including the Times of India, and we were encouraged by these. Some of the children who were enrolled in our camp have now completed their Class 8 education. I am very happy about this and it is a matter of pride for me.

## MAHENDRA SAIKIA

I was a student in the 1960s and used to feel that something had to be done to improve educational facilities in my area. There was no school in my village. My father was a good man, but given our poverty, he had to leave me in a boarding house for my education. I promised that I would start a school in my village to educate my childhood friends' children. In 1968 my father encouraged me to give some education to children staying in my neighbourhood so that they were able to write their names and count up to ten. With this inspiration I started group-tuitions every Sunday morning. After a few months, this class became regular and was converted into a school (Keyajan ME school, Mayong, Morigaon, Assam). The community constructed the building with local resources. Since then I have been starting schools in various disadvantaged locations and have been involved in many educational as well as developmental activities. Here I describe two of my favourite activities.

### Formation of sub-block (zone) for information networking system

In 1995 I called a block level meeting of head teachers, selected assistant teachers, CRC coordinators and some members of the examination board to discuss academic issues. I noticed that only 15% of the members attended. In the second meeting I reduced the number of invitations, but only 38 % turned up. And in the third meeting the same thing happened. The answer I got to my question was that the block was a very big block with various natural barriers like rivers and hills, and tea garden areas. "People had no awareness of the need for primary education." This meeting was my inspiration for learning about topography and for the formation of sub-blocks for information networking.

About 40% of the 122 absent participants were selected at random; 10% from the tribal areas, 10% from remote areas, 10% from tea gardens and 10% from other areas. I selected 48 participants. I sent a questionnaire to the participants and the village people. I also sent a discussion paper for VEC presidents. I gave 12 volunteers an observation schedule for studying the selected villages. The time set for completion of the exercise was two weeks. The participants informed me that the invitation letter was not received (50%); the invitation letter was received but they could not read it (21%); the invitation letter was received but they do not like to attend such block level meetings because they feel inferior (19%); the invitation letter was received but they could not attend due to house hold tasks (10%). The village people indicated a range of problems like, the cost of foregoing income, illiteracy, feeling of being neglected, and so on. I came up with the concept of a sub-block (zone) on the basis of topographical ordering of the regions of the block. I created four sub-blocks with 4 to 6 CRCs in each. The main activities of the sub-blocks were:

- Networking information system: with this system, any information can be conveyed to all the CRC coordinators as well as school teachers in the sub block (zone) within three hours. The responsibility to convey the message goes to the person who received the information first. For this purpose, certain things are to be followed.
  - o Maintain good relationships with neighbours having telephone connections.
  - o Maintain good relationships with neighbours having two wheelers.
  - o Develop sound knowledge about the terrain and routes in the block.
  - o Develop suitable behaviour towards community, teachers and children.

- Take interest in cluster mapping and sub-block mapping.
- Monthly sub block level meeting: the meeting is held on the first Saturday of the month with concerned CRCCs, VEC presidents, centre secretary and presidents of teachers units and community persons. In these meetings academic and non- academic problems are discussed. The ultimate objective is to empower the information networking system on academic issues up to the grass-roots.

By December 1995 the system was fully operational. To assess its effectiveness, every year in December each sub-block has to organize a sub-block convention for the VECs, teachers and CRCCs. More over, in all monthly meetings the flow of information was assessed. Each sub-block coordinator has to present a brief report on the networking performance in the monthly meetings. There is now competition among the sub-blocks to do well. Sub-block Makaria is more active and effective than the others.

Initially what was an arrangement for some clusters became a general practice not only in Morigaon but in other districts as well. Now a group of CRCs so formed is known as a zone. Interestingly there is no budgetary provision for such zones and their meetings. It is organized by the members or CRCCs, often at their clusters or residences on rotation. At the moment, the zonal meetings are like extension of the fortnightly CRCC meet since the unfinished work like preparation of lesson plan and TLM are completed or fine tuned in these settings, thus lending more professionalism to the CRCC's job.

As a BRC coordinator I had the opportunity to be in contact with many schools, villages and communities. I have fulfilled my desire to form MTAs, self-help groups (about 50 have formed, some of which are the result of initiative taken by women themselves without the education department's intervention). These self-help groups raise Rs. 5 per month per member and deposit the money in a bank. The money is loaned to needy members. The members help the family whose children are unable to attend the school due to poverty. Many groups also help the teachers in maintaining regular attendance.

#### **“Morigaon district Somala Mahila Sangha”**

- I am proud of this achievement; I was instrumental in setting up this NGO. I felt that women had to be organized and in 1998 I invited women from about 100 villages to discuss the possibility of a district-level women's organization with a focus on socio-economic development, primary education, health and hygiene, and communication in rural areas. The women agreed to the proposal and decided to form sub-units at the villages. The Morigaon district Somala Mahila Sangha undertakes the following activities: motivating families to develop horticulture gardens; promoting animal rearing; undertaking health education; organizing monthly meetings of women and keeping watch on the school and children. The society also prepares dress material for children and distributes it to poor children, organizes literacy campaigns for women, supports women who are engaged in local cloth production, organizes bridge courses for children, facilitates the participation of local experts in teaching in the schools, and adopts tea garden areas for community mobilization. The society has 600 sub-units as members.

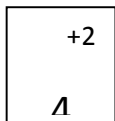
The two long-term bridge courses (Paleguri and Baramari reserve) have been particularly successful, with 1003 students being mainstreamed. No funds have been received from the government or any other agency for the activities of the Somala Mahila Sangha for primary school or for mainstreaming the non-school going children. It is an innovative and entirely voluntary activity. But some money has been set aside from the fees collected from the members of the

organization for the universalisation of elementary education. Many government officials and other civil society actors have been helping me informally. I am thankful to all of them.

### SALEEMA JAN R

My students could not learn the symbols +, -, x, /, properly. I decided to try out a dice game to acquaint children with the various operations such as addition, subtraction, multiplication and division, and to develop application skills by using a special Math game chart.

The cubic block face has a number at the centre and one instruction for an operation at the right corner. For example,



If the dice falls as above, one member of a pair of children should do the sum  $4 + 2$  and give the answer. When the second one casts the dice, if she gets a 5 in the middle and  $\times 2$  in the top right hand corner, she will have  $2 \times 5 = 10$  entered into her account, provided the answer is correct. She will then lead her partner by 4 points. There is also a minus symbol that would reduce the accumulated score; for instance 9 and -4 would reduce the score by 5. The one who gets 100 points first is declared a winner. But the score has to be kept through a “math game chart” which adds its own twists and turns (see illustration; the blocks are numbered sequentially from 1 to 100). When a child reaches the 20<sup>th</sup> block, he or she will go back to block 15. The chart shows how even 99 can be a turning point. The child would have to go back to block 33. The feverish prayer of a boy not to touch 99 while casting the die and his partner’s pleading that he do so, make for an interesting atmosphere in the classroom. Other children also learn different operations subconsciously while helping the players move the coins doing the operations indicated in the block concerned in the Math chart.

1	2	3+3	4	5	6x4	7	8	9-3	10
11	12+5	13	14	15x3	16	17	18	19	20-5
21	22	23	24	25x2	26	27	28	29	30
31	32-6	33	34	35	36/6	37	38	39	40
41	42+12	43	44	45x2	46	47	48-14	49	50
51	52	53+17	54	55	56	57	58	59	60/3

61	62	63+7	64	65	66	67	68-25	69	70
71	72	73	74+6	75	76	77	78	79-5	80
81	82	83	84+12	85/5	86	87	88/2	89	90
91	92	93	94	95	96	97-50	98	99/3	100 WIN

### **JOY CHANDRA SARMA**

Having joined the Nasomsali L.P. School, I realized that the children of classes 1, 2 and 3 had lots of problems in reading and writing letters. Their handwriting was also not good. I tried to solve the problem by providing remedial teaching. I divided them into two groups of advanced learners and slow learners. I used TLMs like letter cards and word cards. I taught them to write by drawing the picture of a ball (I have described the method later on).

By the time I was transferred to the Punia L. P. School of Sipajhar block (in 1988) I had established good relations with the children and the community because of the interest that I took in their physical welfare. Here, as secretary of VDP (Village Development Party), from 1988 to 1994, I always tried to protect the villagers from any danger they faced. I supported them with the help of other VDP members. Once we helped the people of Gharahal village fight back against violence and establish peace. We also formed a child welfare society to help poor pupils by supplying books and other materials. We inspired such children by giving prizes. We also organized several co-curricular activities to celebrate the VDP's anniversary, and days like teachers' day, children's day. Due to my child friendly methods, the results of school examinations were also good. As a result I am respected by the villagers of Punia even today.

In 1991 I was transferred to the Byaspara L. P. School as assistant teacher. There were six teachers, but there was no systematic class routine. After consultation with the Head Teacher I prepared a new routine and introduced child friendly methods like the use of cards. Gradually the academic level improved. As a result, in 1995 two boys, in 1996 one girl, in 1997 two boys, in 1998 one boy and three girls were able to get scholarships.

For development in co-curricular activities we used to hold a weekly meeting of the pupils. They used to participate in different programmes like singing, giving lectures, playing music and doing exercises. We had a pupils' union to maintain discipline. Guardians also co-operated with it. From time to time I used to seek the expertise of local people in guiding my students in various skills related to music, agriculture, cottage industry etc. The guardians encouraged my activities. Many children from our school got prizes and certificates in sports competitions. Seeing such progress the villagers were very happy with the teachers.

In August, 1999 I was transferred to the Ghorashal L. P. School as Head teacher. When I joined, the educational environment of the village was not good. The main reason seemed to be the school building, which was in a shabby condition. It did not have the capacity to accommodate the 90 pupils who were on the rolls. The roof was damaged and rainwater often flooded the classrooms.

Within a week of my joining I called a meeting of parents and guardians to consult them about the school building and the regular attendance of the pupils. During the meeting we formed a school managing committee and made a proposal for the school's development which was submitted to the local MLA. As a result, a building grant of Rs. 1 lakh was received. We constructed a 30 feet by 24 feet room. Now the building is large enough for the children to sit in, but the old part of the building is still in poor condition. We are getting this repaired. Apart from me there are now three teachers working in the school.

A mothers' group looks after the pupils' regular attendance and health and hygiene issues. A remarkable outcome is that the school building, which was originally established on private land in 1921, has now been transferred to the school's name (Ghorashal L.P. School).

### Easy method of teaching the alphabet and digits in Assamese


I found that pupils of class 1 were very slow in learning to read and write. I tried to solve the problem using an easy method of writing and reading for the pupils. Initially an experienced teacher provided me with the spark, and I had to build on the idea and modify it to suit my purposes. The method is described below. It requires TLMs like (1) a plastic ball (2) a picture of a ball (3) a slate (4) letter cards (5) word cards (6) digit cards. Children like pictures; so these were used extensively. Before beginning to teach the Assamese letters 'ka' Fala and 'Aa' Fala, we start with a ball. At first a plastic ball is thrown to the children to touch. They are happy to touch the ball. Then I show them a picture of a ball and ask them to draw a picture of a ball individually in their slates with chalk pencils. If they are unable to draw I help them and advise them to trace the picture of the ball again and again. After some time they should be able to draw the picture of ball easily; and then I teach them that the picture of the ball is called 'Zero (0)'. Then I teach them to divide the zero/picture into four parts by drawing two lines. The three points on the left, the top and the bottom are called the sun "0", ~ (moon) and + (star). Then I advise them to join picture of sun, moon and star. Thus the letter Ba appears. Similar processes apply to other letters and numbers.

in Assamese called <sup>(130)</sup> *ব*. After receiving the letter *ব* we can go to teach the linear letters like - *ক, খ, গ, ঘ, ঙ, চ, ছ, জ, ঝ, ঞ, ট, ঠ, ড, ঢ, ঙ, ঞ, ণ, স, শ, ষ, হ, ঝ, ঞ*।

From 0 we can get *ক, খ, গ, ঘ, ঙ, চ, ছ, জ, ঝ, ঞ, ট, ঠ, ড, ঢ, ঙ, ঞ, ণ, স, শ, ষ, হ, ঝ, ঞ*।


As like as from 0 we can get *০, ১, ২, ৩, ৪, ৫, ৬, ৭, ৮, ৯*।

The details of the process given below by stages. —



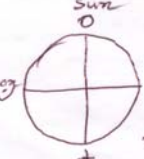
1st stage

Teach them to overlap the picture again & again on their slate.



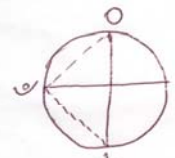
2nd Stage

Advise them to draw the picture of ball again & again.




3rd stage

Advised them to draw a cross mark in the circle, then named the cross point as sun, moon, and star with symbol.



4th stage

Then we go to join the points 0 (sun) & (moon) and



5th stage

then remove the unnecessary part of the letter *ব*।



ব ৱ বব  
 ১ ২  
 ব ৱ বঁৱ  
 ১ ২  
 ব ক কল  
 ১ ২

ব ধ ধন  
 ১ ২  
 ব ঝ ঝকঝক  
 ১ ২  
 ব ঞ ঞঁত  
 ১ ২  
 ব ঞ ঞসি  
 ১ ২

Already the pupils can write and read ম। We got some letters from ম as below.

য ঞ ঞাড়া  
 ১ ২  
 য ঞ ঞয়া  
 ১ ২  
 য ঞ ঞসি  
 ১ ২  
 য ঞ ঞব  
 ১ ২

য ঞ ঞব  
 ১ ২  
 য ঞ ঞাল  
 ১ ২  
 য ঞ ঞাণ  
 ১ ২

The above linear letters should write and read again and again. Here after we can teach some letters from ০ (Zero). The stages shown as below.

০ ০ ত অ, আ, তলা, অমিতা, আম  
 ১ ২ ৩ ৪ ৫ ৫  
 ০ ০ হ অ, ইটা, ঞপাল  
 ১ ২ ৩ ৪ ৫ ৫  
 ০ ০ ড উ ডলা, উট, উণ, গড়, জয়লা  
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## SELVI K

I work in a government primary school in Pondicherry (Puducheri). I have undertaken many experiments for the lower primary classes during my teaching career, but in this note I describe an experiment that I implemented for Class 2 children. A common problem while learning the Tamil alphabet in classes 1 and 2 is the difficulty children face in distinguishing among the four kinds of letters: vowels, consonants, combined vowel-consonant letters and a letter 'ikh' specific to the Tamil alphabet. A second problem specific to vowels is the inability to separate the long vowel sounds from the short sounds. While reading or writing, young children often make mistakes in correct pronunciation or in choosing the right vowel form for a particular letter. I was good in teaching through songs, plays and stories, and so I decided to apply these methods to solve the vowel problem. I first developed a series of actions. Each action was specific to a particular kind of vowel sound or consonant. For instance, a short vowel sound would call for the body to be bent forward and the hands hanging down—to become like a short person. A long vowel sound was associated with an upright body and hands extended towards the sky. For a consonant sound the children had to bring both hands together around their midribs. Special long sounds of vowel and consonants (for instance 'ow' as in how) called for hands reaching up, but with splayed fingers and rotating wrists. An example is the word 'Amma' (mother) which demanded three actions: a short vowel, hands coming up to meet in front of the stomach for 'm' and then the hands going up for 'maa'. A variety of words were taught using this method. These included the children's own names as well. For instance, the child Subhash would start with 'su', go straight up for the 'bha' and then bring his hands to the middle for 'sh'.

A second variation is to use songs. I have songs, each line of which stands for one consonant. These lines are in the sequence in which the consonants appear in the alphabet. I have also used readily available songs for this purpose. As an illustration, I present two lines of a song which has all the vowel and vowel-consonant combinations.

'Kanne maniye ka sollu' (dear child, say ka) would call for the short vowel action when the letter ka is called out.

'Kadai kuriviye kaa sollu' (dear bird, call out kaa) would call for the longer vowel action. And so on, for other letters.

A variation of this is to use a ball. The short vowel would call for bouncing a rubber ball on the ground and catching. 'Kaa' would have to be accompanied by throwing the ball into the air and catching it when it came down. Thus 'Kiliye kiliye ka sollu' (Parrot, parrot, say ka) will be accompanied by bouncing the ball on the word ka.

A fourth variation is to build on the hop-scotch game. A two-column table is drawn on the floor with a circle representing a 'fruit' as a reward at the end. A girl has to hop on one leg from letter to letter in sequence. The letters can be set be the set of vowels or a set of any of the vowel-consonant combinations. An example is given below.

'Fruit'

'Fruit'	
	'ow' as in how
'o' as in go	'o' as in goal
	'ai' as in sky
'e' as in bed	'e' as in aid
'u' as in bull	'oo' as in fool
'i' as in ink	'i' as in feel
'a' as in but	'aa' as in bath

Yet another variation is to play a game of kabbadi with the children wearing cardboard crowns representing the various short and long sounds. There are two teams, one of the short sounds, and the other of the long sounds. Instead of the usual kabaddi, kabbadi calling out, the sounds have to be called out. For instance one boy of the long sounds team may be wearing the crown 'kee' and the other 'kaa'. They will have to use only the sounds written on their crowns.

I have found that the children learn the letters of the alphabet (the vowels and consonants) easily and are better able to distinguish the short vowel sounds from the long ones. I try to keep experimenting with such methods for very young children.

## SHAFEERA BANU G

I joined my present school in 2001. I was shocked to find that the villagers were using the school premises for undesirable and illegal purposes after school hours. The school was a regular venue for gambling sessions. The villagers broke the doors and often took away the school's property. Students followed their parents, and indulged in violent behaviour and in beating up each other. I learnt that the nick name of this village, Athanurpatti, "Murderers' Village", was apt; many of the parents were frequent visitors to the jails for anti-social practices and offences.

I decided to reform the "valueless" adult community by changing their children. I believed that children would learn good manners and acquire values by involving themselves in scouts and guides training. So I undertook the 'cub master' training and equipped myself to train children. Initially, the parents doubted the motive behind my venture. But I evolved a strategy of regular discussion with parents, with the help of my colleagues and Headmaster. Since the parents did not have much money, I persuaded the Panchayat President to sponsor uniforms for all the 24 students. Children, being young and naturally inclined to good behaviour, cooperated well.

Vazhappadi block was fortunate to send 12 cubs for the presidential "Golden Arrow" award. One of the boys was from Athanurpatti. After I came back from Delhi, the parents hailed me as the "Delhi Teacher". I got noticed. Now I involved the children in gardening and school campus cleaning. They responded with great enthusiasm. They have improved remarkably. Every year, a number of students appear for examinations leading to the winning of "Golden Arrow Awards". Incidentally, students have developed a love for learning too. I feel happy when I am told that the children of violent parents have become ambassadors of peace.

## RAHIMAN R SHAIKH

My father died when I was very young and I was brought up by my mother who was a labourer. Karmavir Bhausahab Patil, the founder of Rayat Shiksha Sanstha inculcated in me the value of self-dependence. He also taught us that the value of true education lies in the social work that one does after completing one's studies. Even after doing very well in my secondary examination, I was not able to continue with my studies. My village people advised me to become a primary teacher. I completed my training and was appointed a teacher in 1992 in Maluje primary school of Khurd taluka, Rahuri district, Maharashtra. Helping children, which my teachers had demonstrated by personal example, has been my guiding principle. My first school was in a remote village, dominated by the backward classes. The children spent their day loitering in the jungle or working with their parents. Parents were not serious about their children's education. I started visiting their homes. I saw filth all over the place and I felt very bad. They offered me tea and but I refused. They were hurt. Then I had to tell them the truth. I told them that I was not comfortable with the levels of cleanliness. After that, I took tea if it was offered. This became an instrument to bring children to school.

From there I was transferred to Katrad taluka in 1994. Here there was a large school, with 16 teachers and 500 students. Here I met different kinds of parents. One day I had engaged children in cleaning work during work experience class. By accident, the fingers of one boy were trapped under a stone while he was trying to lift it. Unfortunately, there was no hospital nearby. About five km away, there was a hospital, and I took the boy there on a bicycle. I paid the bill. Next day, his father came to school in the morning and started making enquiries with other teachers. I was very scared. I thought he would scold me. But he took out money from his pocket and told me to take it since I had paid the bill. The father appreciated the work that I had given the boy and my gesture in taking him to hospital and paying for the treatment. This was a significant event for me. When I was transferred to another place, I found parents coming to school and abusing the teachers. My earlier experiences had taught me to place faith in parents. I told them, "If you keep cribbing about the past, there will be no progress." Then I took stock of the problems. We started a cleaning operation. I initiated several activities and brought about a change in the school with the support of my co-teacher. Children had not been exposed to music. With the help of my co-teacher, I organized cultural programs and presented them to the parents. They advised us to take part in competitions and promised to help. We took part in a district cultural program and our very first attempt got us the first prize. For the children of a small village, it was a great experience to be a large auditorium.

With this success, I was able to enforce the one school-one uniform activity. I gave parents the responsibility to maintain 'clean uniforms'. We also started preparing the children for scholarship exams; since 2002 many of our students have appeared in the merit list. This was followed by a spate of activities: tree plantation and gardening. The District Council Ahmednagar awarded us the "Ideal School" prize in 2004.

Some of the children (especially of well to do families) continued to attend private schools in the larger villages like Vambori, paying large sums. One problem was that the children coming to our school were from poor families. Some did not have slates, most had broken slates. Discussing this issue with parents did not help, since they promised to buy slates, but did not do so. We were only two teachers with 54 children. It was not possible to spend money on slates for every child, every year. Also I was planning to bring back children from the private schools to our school. I would have to provide for a larger number of slates. Meanwhile, I also wanted getting benches, since the private

schools provided benches. We called a parents' meeting and presented these two requirements. My idea was to make slates on the benches. The parents responded well. I thought of it as an experiment and named it "Bajaa pati" (bench with slate). The key aims in my mind were: to provide children with slates and seats, to use the top of the bench, to save the direct costs incurred by economically backward students, to provide an easy way to practice, to make giving different exercises to the children easy, to keep the bench-slate in the vision of the children always, to make multi-grade teaching easier, and to provide a space for rough work while studying.

Benches of suitable height and size were designed. The distances and angles of the surfaces were borrowed from specifications in the literature. To economize we took the help of the local people, like the village carpenter. We prepared the wooden strips on holidays. Thus 16 benches for classes one and two, and 16 for classes 3 and 4, were prepared. By making groups of two benches (four seats), the desks of the second row could be used as a back support by the first row. Such benches also do not move around. We saved about 35% of the materials usually used. We used Babool tree wood. The immediate advantage was that children could sit in rows. On the front of the desks we painted words, Marathi letters, and English words. On the top we had the slate.

For Classes 1 and 2: The top of the bench was leveled and after a primer coat, was divided into three rectangles: two 'bench patis' of 32 cm x 26 cm were made in a way that a rectangle of 18 cm x 26 cm separated them. The bench patis, which the students used for writing, were painted with black colour, and the middle section, which is used for writing exercises/ questions, was painted with pink colour. A border of 2 cm width was made with yellow colour for the bench patis. Thus, the 16 benches had 32 bench slates and 16 exercise slates. We inaugurated the benches in June 2003, and up to September of that year, monitored their use. Since then, they have been in regular use. Now, teachers go to the students to check the exercises, rather than the children rushing to the teacher and making her task of paying individual attention difficult. During the four months of monitoring, we tracked children's use of the slates and their motivation to study on their own. Exercises in language, math, science, history, geography and drawing were done on the bench-slates. We rotated the children among the benches so that all children could address a variety of problems, which did not have to be written every time for each child. (The lesson slates, thus, are more permanent, and need to be changed only when the teacher decides to do so.)

For eight benches, the following materials are required.

1. Steel: 140 kg. 24 bars of 18 ft long and 1" diameter.
2. Wood: 11 cft - 1" thick, 68 planks.
3. Primer colour: 2 liters.
4. Bolts: 1.5", 2 boxes (100 nos.)
5. Black board colour: 2.5 liters.
6. Yellow colour: 100 gm.
7. Red colour: 50 gm.
8. Colour powder: 50 gm.

The costs of the benches for class one were borne by the community and the costs of the class two benches were met from school funds.

Costs for Class 1:

<b>Credit</b>	<b>Rs.</b>	<b>Expenses</b>	<b>Rs.</b>
Contribution	4505	Steel 140 kg * 22	3080
		Wood 11 cuts * 20	220
		Bolts 2 boxes * 90	180
		Fabricator labour charges	400
		Transport expenses	160
		Primer colour 2 litres * 80	160
		Black board colour 2.5 litres	250
		Yellow colour 100 gm	35
		Red colour 50 gm	15
		Colour powder 50 gm	5
Total collection	4505	Total expenses	4505

When we made 32 benches, 16 benches each for classes one and two, we spent Rs. 14,325 in all. The school provided Rs.7000, the community Rs.4500, and my colleague and I chipped in with Rs.2825. The per bench cost was about Rs.450 or around Rs.225 per seat.

Now, 56 children of our classes one and two sit comfortably. Their parents tell their visiting relatives about this and insist they see for themselves. Students have benefited, since there is a lot of bench and slate space. Revision of lessons has become easier, and about 51 children have learned the art of self-study. The regular use of the slates made the surfaces too smooth. By rubbing with emery paper and applying powder mixed with black board colour, we had to make the surface rough.

This initiative has also been examined by our SCERT. Many teachers have liked our benches and in our tehsil (Rahuri) 22 schools have made benches with our guidance. This initiative, along with our other activities, has ensured 97% average daily attendance. This experiment has become a friend of our school children.

## **NAYANA Y SHINDE**

I was appointed assistant teacher at Injbav Zilla Parishad school which was in a drought-affected area. I stayed in the village with my colleague. We had to buy water. Conditions were difficult, we tried our best to educate children. Every morning we took extra classes to help children prepare for the scholarship exams. We also used attractive aids like tape recorders to teach correct pronunciation. Using different aids and methods we helped the children increase their vocabulary. Instead of decorating the class with colourful streamers, I drew pictures on card sheets and wrote teaching notes and created “talking streamers”. I was then transferred to Rajal school, in another taluka. I concentrated on getting girls into school. I attended local women’s gatherings and social ceremonies like haldi-kumkum, and also organized meetings of parents. In the classroom I made many types of learning tools. I created three dimensional pictures, flash cards, models, magic boxes, folding pictures, multipurpose boxes and other aids. While teaching I made use of all these tools and also taught children to use them. This made the children happy. The school walls became lively with pictures and charts. I made self-study kits for each subject. I asked the children to make exercise cards for every subject. Later on, these were used for practice. I assisted other teachers in organizing sports competitions and social events at the district level. Here I would like to describe only one of my many projects on language learning.

We have often seen that people do not use punctuation marks properly. Children also face the same problem. I did an experiment to help children learn the use of punctuation marks. The objectives were:

1. To understand the meaning of full stop, semicolon, comma, question mark, exclamatory mark, inverted comma etc.
2. To read specified matter with proper understanding of the punctuation.
3. To speak in high pitch or low pitch by understanding the meaning of punctuation.
4. After listening, to write down the passage with correct usage of punctuation.
5. To write compositions with proper punctuation.

Although this project can be organized in any class from 1 to 7, I chose 20 students from class 4. A time period of three months was decided and I conducted a pre-test. Two language classes, that were part of the school timetable, were allotted for the project. After starting the actual work of the project, large models of punctuation marks were put up in the class for the benefit of the students.



## Schedule

Preparation of the project	5 days
Planning of Program	5 days
Material preparation	5 days
Pre-test	1 day
1) teaching about full stop	11 days
2) teaching about comma	11 days
3) teaching about question mark	11 days
4) teaching about exclamatory mark	11 days
5) teaching about inverted comma	11 days
6) teaching about semi colon	11 days
Post-test	11 days
Results	3 days
Report writing	4 days
Total	90 days

I developed a series of working definitions for all the punctuation marks. These followed standard use. I then used various materials:

- Pictures: I asked the children to describe and make use of three-dimensional pictures, flash cards etc.
- Sentences strips without punctuation marks.
- Sentence strips showing correct use of punctuation marks.
- Model: large models of each punctuation mark.
- Pictorial sentences (strips).
- Comprehension cards.
- Small passages.
- Tape recorder.
- Newspapers.
- Story books.
- Bal mitra (magazine).
- Children's magazine 'Kishor'.
- Moral Stories.

For the pre-test, I selected one passage with many punctuation marks. I dictated the passage to selected students. I tabulated the results for future reference. Then I focused on teaching of each punctuation mark as indicated in the planning chart. I used a variety of material and exercises. For example, I asked the students to open any page of the book and told them to search for and count the full stops. They were very happy doing that and came to know that after each and every sentence completed there is a full stop. I dictated small passages to student and checked whether they put full stops at the right places. I gave exercises using story books, I asked them to read out with proper use of punctuation marks. Some material like cartoons and funny stories were enjoyed greatly.

I evaluated the students after three months. I used a dictation of a paragraph containing all types of punctuation marks. I found that only two students couldn't use the semi colon properly. The others had learnt to use all the punctuation marks. The experiment has helped the students do well in various competitions such as handwriting, composition and elocution. This is the biggest

achievement of this project. I extended the initiative to all classes. The entire cluster is about to implement this initiative.

## ILABEN E SOLANKI

I have been working as a teacher for about 26 years. At present I am in a boys' school in Anand district, Gujarat. I had always taught the upper classes. A few years ago, I was suddenly asked to teach class one. The children used to reject me and cry; these children were attending school for the first time, and were away from home for about six hours a day. I often took them to the playground to make them happy. When I asked them to write something on the ground they did so happily. This made me settle down and also gave me the idea of an open classroom. But soon I realized that it is very inconvenient to take the blackboard outside frequently. I came up with the idea of creating a garden full of TLM specifically for young children. Often I noticed that some children do not take an interest in playing when they are taken out for playing. It is just that their moods do not match with those of the others. So, providing them with an alternative to learn in a garden seemed to be a good idea.

First of all I needed a space and then money to carry out the idea. Inside my school, there was a piece of wasteland just next to the classroom allotted to class 1. This patch had been used earlier for the mid-day meal. There was a tap which people used to wash their hands. There was water dripping always. I stopped people from using the tap; then I got the land leveled, but left a small pathway in it. Then I planted a *mahendi* and some other flower plants as a boundary to supplement a wall that was already there on one side. I spent some money from the community's fund to buy two small swings; SSA funds came in useful to buy a slide. We arranged all these in the garden. Now there was ample time to create TLMs in the garden. I got the boundary wall whitewashed and wrote numbers and pictures showing number-curves. As a result, children started drawing the pictures on their own. Part of the wall was used to write letters. These letters are written randomly. Other things were added. For instance, I brought a broken cylindrical pot from a pot maker; I inverted the pot on a stand and painted it. We had a statue now. I painted the front side (the broken part was on the other side) with a picture showing numbers 1 to 10 (as given in the Class one textbook).

I kept on adding TLMs to garden. There are more than 15 big TLMs in this garden prepared from waste material, some of which was gathered from community. Once I saw a broken tree trunk lying on the roadside. I managed to get it transported to our school and made one TLM from it. It is again based on material given in the textbook. Once I needed some stones which were lying as waste at a faraway place. I requested some labourers to bring these to the school for a small sum of money. I used these as well. The story of the monkey and the crocodile of the textbook is now in TLM form (a small pond with the statue of a crocodile and a tree nearby with a statue of monkey on it). Likewise I have covered many of the activities of Language, EVS and Maths in TLM form in this garden. Now children enjoy playing and study together.

Later on I added other items taught in the upper classes. For example, the increasing and decreasing order of numbers taught in class 2. I found that the TLM garden attracted the children to school. I have also done small evaluations to assess the learning that children receive from the garden. About 80% of the children have shown acceptable progress. They immediately answer questions related to numbers, letters, colours and other things displayed in the garden. Most interestingly, some children who were neither interested in studies nor play have become enthusiastic learners. Often I see children (including children of the higher classes) stop by the garden to question each other and thereby check each other's knowledge. I am satisfied with the outcome.

## Adopting children for education

Once I saw a child begging on the railway platform while returning from a nearby town. I asked him whether he was going to school. He said “No”. I asked him “Why?” He told me that his mother was blind and his father was an alcoholic. I told him to come to my school whenever he had time. That boy came to my school after three days. Since he didn’t bring his parents along I confided in my head master, filled a form and signed as his ‘parent’. I bought him clothes, textbooks and notebooks. Everyday I brought lunch for him. This child, Raju Ramesh Rathwa, was in school but I had to accept his request to work while studying. He was good at studies. So when he progressed to the next class, I told the teacher to help him by allowing him to come to school according to his convenience, provided he did well in studies. The next year he landed up at school with his younger brother. Once again I had to sign a ‘parent form’. Unfortunately his parents took the younger kid with them when they went back to their tribal village. But Raju is still in school, studying in class four. He works in a nearby restaurant to support himself. This is one case in which I feel I could not prevent child labour.

I now stay in town near the village and commute by scooter. I used to observe a few small girls near a group of huts. Once I stopped and asked them why they were not going to school. I started leaving my home a bit earlier than usual, and taught these girls for a while. Then I bought them study material like slate and books. Gradually they became attached to me and used to wait for me. Sometimes I stopped on my way back to teach them in the evening. Once I had established a rapport I asked the parents to enroll them in school. I brought those seven girls to my school. But these girls wanted to sit with me in the boy’s school. The head teachers were very understanding and allowed the girls to sit in my class. This entire story developed over two months. After some time, I wanted them to be in the system properly, and persuaded them to shift to the girls’ school. But they ran away home. I brought them back and visited them a few times every day. The teacher teaching them in the girls’ school, Ms Indira, was very helpful and took special care of these deprived girls. Their improvement was a matter of great pleasure for us. The day Ms Indira gave them Rs. 150 (given by government) for the uniform, they came running to me to show me the money. As of now five of them are doing well, but the other two are still in school and trying hard. Their mothers are very happy for them. I am also very happy for them.

## SUNDARA RAJAN P P

The first skill necessary to the learning of any language is the learning of its oral presentation. Oral presentation is the original form of a language. But unfortunately most of our children are reluctant to open their mouths in an English class. They are always afraid of grammar, usage and word order in English. A good English teacher is one who tries to deal with this reluctance and to make them speak in English. At the beginning, 'saying something' must be given more importance than accuracy of language use.

In my school I have noticed that most children hesitate to speak English even in the classroom. To enhance the skill of oral presentation I carried out an activity-based project among the children during the last academic year and the result was very interesting. Here I present a few ideas which I hope will help children to overcome their hesitation in speaking English fluently. To elicit more and more oral output from children, I give importance to teacher-pupil, pupil-teacher and pupil-pupil interactions.

The plan followed had the following steps:

Identifying the causes of hesitation.

Measuring the level of speaking ability in children through a pre-test.

Grouping of children according to levels of speaking ability.

Planning and conducting the activities.

Evaluation.

### *Pre-test*

A pre-test was conducted among the thirty pupils of standard four in my school (the Vellur MLP school, Nadapuram, Kerala). After examining the test results it was found that twenty to twenty five pupils are afraid, shy and lack confidence in saying anything in English. The pre-test procedure took about two days. The children were asked to say something about themselves like their names, house names, village names, names of family members and their activities. I gave a 'sample' introduction of myself. While a pupil was introducing himself, the other pupils were instructed to ask questions for more details and thereby encourage the speaker.

This was repeated for all the children. To enhance confidence they were given sufficient time to prepare and we avoided the roll call order of the class.

After verifying the results of this pre-test, the pupils were divided into five experimental groups of six children each. Then I gave them some more opportunity to listen to 'English speaking' from audio cassettes.

### *Probable causes noticed*

Classroom situations do not encourage the oral use of English among pupils.

Sufficient opportunity is not available for conversation and speech in English.

No examination tests skills in oral presentation.

The traditional method of teaching affects the children badly.

Teachers do not exploit natural classroom situations.

The pupils' vocabulary is insufficient.

The differences in word order between English and the mother tongue (Malayalam) are confusing enough to make the children hesitate.

### *Activities*

To overcome the hesitation in speaking English we practised different kinds of activities, pitched at the level of the pupils. After each activity a review was made so as to record the merits and demerits of the activities and the pupils' responses.

The pupils were asked to collect the names of things which we use in our houses, schools, names of grocery items, stationery items. Then they were directed to write the names in their mother tongue and read them out in class. The other groups added the names that had been missed out. After presenting the names in their mother tongue the children were directed to find the names of those items in English. This was done in order to help the children increase their vocabulary in English.

The children were also asked to prepare charts and then make oral presentations of these. Many similar situations were created both inside and outside the classroom.

Pictures of familiar personalities like Mahatma Gandhi, Sachin Tendulkar, and film stars, were used in the classroom to help the children speak without hesitation. Groups were instructed to ask other groups questions.

The pupils were asked to draw pictures of their favorite animals, birds, pets etc. Then they were asked to say something about the pictures.

Games, quiz competitions, collecting the names of various things, talking and shooting questions, making real situations in the classroom, interviews with other teachers, role plays, narrating school events, helped with speaking practice.

Audio cassettes of poems, stories and narratives, readings of news-clippings were also used in the classroom.

### *Evaluation*

Once all the activities had been completed, I planned a post-test for the children. Three different types of situations were created. A new person was introduced and the pupils were directed to ask him questions and to note the answers which they received. Pupils were graded according to the information they collected from the stranger. The result was interesting. More than twenty pupils were able to collect almost all information about him. Seven pupils were average and the rest showed only a slight development. Two more activities were given to the children to evaluate their progress in oral presentation skills.

I have done whatever was possible within the constraints on my time. I need to spend more time on the preparation of materials. But I can say that at least 75% of my students showed acceptable levels of improvement in their oral skills. They have overcome their hesitation, and show more confidence now. Similar interventions can be carried out in other classes by changing the activities according to the children's mental age and their contexts.

## **BALDEVBHAI K SUTHAR**

Shri Baldevbhai Suthar was born in 1943. He could not study beyond secondary school due to financial constraints. Though his family's traditional occupation was carpentry, Shri Suthar wanted to take up a government job. In 1963 he was offered a teacher's job, though he was yet to train as a teacher. In 1969-70 he completed the teachers' training programme.

He started his career at Kolawada Boys' Primary School, where he spent 17 years until his transfer to Vavol Primary School in 1980. At Vavol, he was inspired by the head teacher of the school to explore new methods of teaching that would counter the prevalent routine teaching procedures. He decided that enabling children to learn mathematics, which was perceived to be an abstract and difficult subject, would be his mission.

At Vavol Shri Suthar first spent a few years building on the ideas for innovative teaching aids that he had developed by then. He prepared a set of 14 educational aids for teaching basic concepts of arithmetic. During trials he found that these devices were appreciated by the students. He also started participating in science fairs. Shri Suthar received awards from the state and national governments for his use of educational aids—the state science fair award in 1981, the state's 'Best Teacher' award in 1986, the 'Vigyan Vijay Padam Trophy', a first prize certificate at the National Science Exhibition, and the national 'Best Teacher' award in 1988. Since then Shri Suthar has spent a lot of time in workshops and seminars for training teachers in preparing low-cost educational aids. Some of the more popular aids that Shri Suthar has designed are presented below.

### **Innovative teaching aids**

#### ***Mechanical Calculator***

With the help of this mechanical calculator, positive and negative numbers, zero, addition and subtraction, place value, complete numbers and fractions can be taught.

Material required:

1. 4' x 1.5', 12mm plywood, one piece
2. 4' x 3" aluminium strips, three pieces
3. 1.5' x 3" aluminium strips, six pieces
4. 4' x 0.75" aluminium channel, two pieces
5. 1.5" x 0.75" x 1.5' teak strips, two pieces
6. 0.5" x 0.75" x 4' wooden strips, three pieces
7. 0.75" screws, 12 pieces
8. wirenails 100 gm
9. white primer lacquer 250 gm
10. white paint 250 gm

11. black, green, red paint, each 50 gm

On the plywood sheet, no. 2 is fixed in the centre. This is the number line, which is fixed. Parallel to it, and at a distance of 4.5" above and below, two channel strips are fitted. No. 6 is fixed on channel so that they move freely.

Above these channels, two no. 2 strips are fixed. In the center of these two strips no. 3 (three pieces) are fixed at right angles one on top of the other. These have windows cut in them.

4" long wooden strip, a 3" x 4' long wooden strip is fitted. On the strip the units of number line are printed. This strip is a fixed (immovable) strip. On the 4.5' rectangular distance, a channel strip is fitted to the sheet which is parallel to fixed strip. Now 1.5" X 3/4" X 4' long strip which can slide very easily in this channel is prepared. An aluminium strip is fitted on this to both side. In the centre of the two strip an aluminium strip of 3" X 1.5" is fitted rectangularly. On this aluminium strip 3 number showing window is provided. From this window complete number and fraction can be seen as per requirement by moving it vertically. As mentioned above, arrangement of a strip is provided at rectangle on the fixed strip which can slide easily. By keeping this strip into the centre, the number printed on the below strip can be seen in the window. Any types of difficulties to be taken care of, while sliding, the top and bottom strip in left side or right side horizontally, which is fitted to the number showing window. Maths symbols are shown separately, which can slide on an aluminium strip and show greater and smaller number. For demonstrating the use of this mechanical calculator, it can be hung on the wall or put on the table and used.

It is easier to trace the following concept Maths on the fixed strip on (-5). Move the addition showing window which is on the vertical strip fitted on the addition showing strip so as to show (-5). Now both the windows are one upon another and showing (-5). To add +4 move toward right side because addition of a positive number to any number results in a number which is always greater than the original number. Number greater than original number always remains on rightside on the number line. Hence by moving 4 units to right side from (-5), (-1) can be seen in the window.

Addition of Negative Number on the Number Line:

Put the sliding strip of the fix strip on 3, move the addition strip on No.3 as mentioned above, 3 is visible in the window of both strip coming together. Now to add (-5) to 3, move to the left side because....addition of a negative number to any number results in a number which is always smaller than original number. Number smaller than original number always remains on the left side. Hence by moving the addition strip to (-5) unit left side -2, is visible from the addition showing window.

Subtraction of Positive Number of Number Line:

$$4 - 7 = (-3)$$

Move the strip on fix strip upto 4. Move bottom strip of subtraction upto 4. Now 4 is visible from window. Now to subtract 4 out of 7, move towards left side on number line because....subtraction of a positive number from any number results into a number which is always smaller than the original number. Number smaller than the original number is printed on left side on number line. Hence (-3) is visible from subtraction window by moving 4 to 7 units left side.

Subtraction of Negative Number on Number Line:



Fix the sliding strip on 5. On fixed strip move the window of subtraction bottom strip upto 5. Now 5 is clear and visible. Now to subtract -4 from 5, will have to move on right side because... on subtracting a negative number from any number, the resulting number is always greater than the original number.

Greater number always comes on right side on number line. Hence 9 is always greater than the original number. Many more similar operations for the benefit of the students of upper primary classes can be done with this calculator.

The objective of this device is to teach plus and minus numbers, position, unit distance, full and fraction numbers addition-subtraction of plus and minus numbers through practical experience. Children are encouraged to use it themselves.

#### (2) Calculator to Teach Numbers:

This instrument was made in 1981 at Fatehpura primary school. It received the state level science fair award in 1981.

Its objectives were:

- (1) To explain the value and position of numbers from 1 to upto 10 crore.
- (2) To impart understanding of natural number from 0 to 9.
- (3) To explain measures and units of money, weight, length and liquid in decimal method.
- (4) To explain power of ten.

This device can be used for children up to standard 4 to explain numbers and their position and value and units, measures and value of money, weight, mass length, liquid etc. This also can be used for children of standard 7 to explain decimal numbers and power of number ten.

#### (3) Two Digit Calculator:

This instrument was also made in 1981 at Fatehpura primary school, and it received the state level science fair award in 1981. This device looks like a harmonium. It shows two numbers 0 to 9. It can be used to teach two digit numbers. It develops calculation skills in children and develops their orientation towards Maths. It teaches them bi-numerical additions and subtractions. Shri Suthar used this device to teach bi-numerical additions and subtractions skill to children of standards 7 & 10.

#### (4) Calculator for Multiplication Table:

This device was made in 1981 at Fatehpura primary school. This device looks like a television set. The objective of this device is to explain the basic concepts of addition and multiplication. It helps children to develop basic arithmetical skills of additions and subtractions and multiplication divisions. It also teaches them the rules of serial no.s, groups and divisions etc. He used this device in Vavol primary school for students of 1st to 4th std. to teach them divisions of numbers up to 300 without remainder. Shri Suthar received encouragement prize in science fair for this device.

#### (5) Calculator Explaining Basic Facts Of Additions And Subtractions:

This device looks like an incense sticks pocket. The objectives were to teach children basic facts of additions quickly and to develop calculation skills of children. This device was also made in 1981, and he received third prize in science fair for this device.

Shri Suthar used this device to teach and develop additions and subtractions skills to children upto standard:4. In standard 5 he used this device to explain the fact that additions follow the rule of serial and the rules of serial do not apply to subtractions.

These devices were prepared while he was with Fatehpura (Vavol) primary school. He used his carpentry skills to prepare these devices from waste materials. He used them in his classroom teaching and got excellent results in students' performance. When the children went home and described their experiences, the parents too visited schools out of curiosity and were pleased to see these devices. This too encouraged him.

Mathematics being an abstract subject does not appeal much to the intelligence of children. But if taught with the help of concrete objects not only that it becomes effective, but also the effect remains long lasting.

His wife and students are the inspiration behind his efforts and success.

(6) Calculator explaining the concept of equality & inequality: This device got the state and national award of science fair, in 1986.

This object looks like the stick of a traditional balance. After indicating the centre of the stick both sides are marked with numbers from 1 to 18. A hook is fixed at each marked point. A folding wooden stick is fixed above this stick parallel to the ground.

This device is used to teach the use of mathematical signs like =, <, > (equal, less than, greater than) and also the place value of each number. Basic arithmetical skills of addition, subtraction, multiplication and divisions can be effectively taught using it. This device with hooks and rings attached to it, attracts children and they feel interested in numbers and their value.

Various mathematical skills which children are expected to develop at primary education level can be practically taught with the help of this device. This device can be useful in different ways for students upto std. 7.

He developed this device while he was at Gandhinagar Govt. Primary School, sector: 12. He has got excellent results in teaching with the help of these devices. His inspiration constantly urges him to find more and more effective ways to teach mathematics.

(7) Calculator Showing Angles:

He prepared this device in 1989-90 while he was at Vadavi primary school. It was a multi class teaching system there.

This calculator looks like a television set. The screen shows two parallel lines rays steady in one direction. When the button on the set is turned both the rays start separating. Along with the rays there is a circle drawn on the screen with angles marked on it. The lines (rays) separate and move on this circle showing angles, on a corner there is a light which shows the type of angle (right angle, acute angle, & obtuse angles).

This device has been made to teach geometric facts to the children of 5th and 6th standards, especially various types of angles and how they are formed. Children themselves can turn the button and learn about angles. Children can see the line (ray) passing by each degree 10,20,30, etc. And learn how the angles become smaller or larger by the positions of rays.

On the lower side a window has been formed which shows the name of the angles. A paper roll with the names of the angles written on it is fitted there, which moves in synchronisation with the rays on the screen. Children also learn how various kinds of angles are formed on the dial of a clock and also that it indicates a full circle of  $180^\circ$ .

The same device can be used to explain the working of a radar. A directional plate has been drawn on the back of the device. Gandhinagar city has been kept in the centre and cities of Gujarat state are indicated by dots on the plate with their actual distance from Gandhinagar. Children can use this device to know the distance and direction of various places from Gandhinagar.

#### (12) Writing device for the handicapped:

Shri Suthar came across many children with simple disabilities which prevented them from holding pencils. He designed a device for helping such children write lines, shapes and pictures. The device is a slate on which a plate moves on channels vertically or horizontally. The plate has a belt arrangement which can be tied around the hand to make it and the pencil 'steady'. Shri Suthar has presented the device in science fairs, but feels it has not attracted the attention it deserved.

#### (13) Pesticides Spray Pump:

Farmers use pesticides on their crops, but Shri Suthar found that the brass pumps they used costly, heavy and difficult to use. He designed a simple pump with a used rubber tube of a scooter or four wheelertyre. He fitted an extra inlet/outlet for pesticides with a valve and pipe-nozzle attachment. First air is pumped into the tube with a hand or foot pump, then pesticides are filled in through the inlet. The farmer can carry the tube on one shoulder, and by operating the valve, can spray a mixture of air and pesticide. The tube is wrapped around with plastic string (for protecting the rubber), and also has a shoulder strap.

#### (15) Screen Printing Model:

Shri Suthar prepared a screen printing model to teach children screen printing skills. He used the model for two years, till his transfer to another school. The first stage involved cleaning cloth with a number of chemical processes. The printing process followed; and then came the processes of drying, steaming, cutting and rolling. The project was more in the nature of demonstration, but the students of the upper primary classes could use it to prepare Diwali greeting cards, identity cards and similar items. He also demonstrated the project as a self-employment option.

#### (16) Generation of Electricity with the Use of Dynamo:

Shri Suthar decided to build a prototype of a dynamo (creating friction with the help of weights going up and down) for presentation in science fairs. The experiment was found to be too difficult for students of classes six and seven, and so he gave up the idea after some time.

### **Creating a positive physical environment**

Shri Suthar has always believed that the school should be located in pleasant surroundings so that children are motivated to learn. Wherever he has been posted he has taken care to plant trees, creepers and shrubs in whatever land was available with the school. He personally selects the most suitable species to be planted, and buys the saplings from established nurseries. He encourages children to join him in the gardening activities, and has found that usually there is a lot of enthusiasm among children for such activities. He also celebrates 'van mahotsav' (forest festival), and uses them to teach children practical lessons in the care of plants and trees. Parents have also come forward to help him in these activities.

In a similar initiative, Shri Suthar has prepared playgrounds using the open spaces attached to his schools. He has extended this preparation to teaching the children prayer songs which are sung during assemblies on the playground, and to building up a children's band for mass drills. Shri Suthar found that many parents started attending the mass exercises and prayer sessions. So he introduced yoga sessions every Saturday for parents. He has found that such initiatives have helped in better communication between parents and the school.

### **Inculcating discipline**

Once Shri Suthar felt that instilling discipline and order among children by making them walk only in designated lanes was necessary. So he made walking lanes, which had fences on either side, in the school compound. He found about 85 percent of the students used the lanes and did not need to be told to use them. The rest continued to cut across whatever space was available.

### **Geography**

With the help of his teachers and students, Shri Suthar once made large maps of the districts, Gujarat, India and other nations, on the school grounds, indicating relevant information like cities, towns and important tourist sites; rivers, hills and forests were indicated by artificial rivers, hills and forests. These maps generated a lot of interest and were appreciated, but their maintenance became too difficult. After a few years, the project was abandoned.

### **Developmental activities**

Shri Suthar feels that children from rural areas are aware of agricultural practices, but could do with more exposure to systematic methods of growing crops and flowers. He has used the space around his school to cultivate various vegetable crops and flowers with the help of students. The sale of vegetables and roses has enabled the school to buy things like a blackboard and a clock. One experiment which was appreciated was his style of making fences. Instead of making the usual circular fences around young plants, he made fences in different geometric shapes (squares, hexagons, and so on) which would also educate the children.

As part of the developmental role, Baldevebhai believes that a teacher has to raise funds sometimes from the people themselves. For instance, during 1973-76, he raised substantial sums through a series of three-act plays he wrote and directed. The money so raised was instrumental in helping set up the school's infrastructure and in obtaining the district's 'best school' award.

Shri Suthar believes that a rural primary school teacher has to also play the role of a social worker in order to attract children to school and to convince parents to enroll their children in school. Thus, Shri Suthar used to keep a record of absentee children, and visit their homes with toffees. If

there was a death in the family, he would go and console the family. This created a lot of trust among the parents. He also plays a trick often: At the end of the morning prayer, he would tell the children a story, but stop at a very crucial point and promise to conclude it the next day. Most of the children would be eager to listen to the ending of the story.

Another problem was that some children avoided school because they did not have proper clothes to wear. Shri Suthar collected clothes from well-off homes and gave them to needy children. He used to talk to the children of the donor families so that they did not develop a sense of superiority. He also permitted children (especially the older ones) who could not study at home due to lack of facilities like lighting, to use the school late in the evening for studies. He used to be present at these times, in order to help the children with their homework. Many such students have studied further and are at present in senior levels of the bureaucracy. They keep in touch, and this gives Shri Suthar a sense of satisfaction.

Shri Suthar also encourages children to avoid wastage and instead contribute to the school. For instance, he felt that children started buying and flying kites many days before the kite-flying festival, *uttarayan*. These kites were usually wasted because the conditions were not right for flying kites. He convinced the students to delay the purchase and flying of kites, and to build up school funds with the money so saved. Many children agreed to this proposal, and have made the delaying of kite purchases a regular practice. A register with the names of the donor children and money contributed is maintained.

## SWARNA BAI S

My grandfather received the National Best Teacher Award from President V. V. Giri, in 1973, and he has been my inspiration. The turning point for me was my encounter with a child, Perumal, who wanted to learn and study, but had to travel from village to village with his parents, making baskets. I took a personal interest in the boy, and trained him for two hours everyday. I also got him all the notebooks and material he needed. He completed his Class VIII, and then I supported him up to his B.Sc. education in LNG College. This may be a single experience, with a lot of time invested, but it was important in my vocation as a teacher. Perumal's son was enrolled well in time, and I was asked to bless the child before he began his studies.

An interesting problem that I solved was student absenteeism on Fridays. The school was located in a landlocked village seven miles from the main road. The only bus which used to come to the village twice a day was withdrawn by the State Transport Corporation because people treated the bus as their property and did not buy tickets. Ultimately, the children as well as teachers who used to travel by the bus, had to walk or cycle in the deserted tracks. There was a fear of ghosts and supernatural spirits and so Fridays, supposedly the day for such spirits, was a holiday for the children. I treated the problem as one of irrational fear. I first collected fables and parables; then I announced I would meet parents everyday. Everyday, I gave the children an "ounce of self-confidence" by narrating stories from the rich cultural legacy of our nation. These stories had removal of personal fears as their theme. The clear message I gave was that one who learns to face individual challenges will succeed in life. I then gave them a variety of interesting assignments on Thursday evenings. The children had to collect relevant information and present it the next day, a Friday. There was an element of compulsion here, but the children started to focus on their accountability to the task. Gradually, they forgot about ghosts and Friday absenteeism disappeared as a problem.

Another example of how dealing with single experiences helps us in our teaching vocation is the case of Prabhavati. She had suffered a severe polio attack and could not even walk without falling. She could not grasp anything with her fingers. As saliva was always dribbling from her mouth there were permanent wounds beneath her lips. Her parents saw her as a curse and did not take much interest in her. She was also partially blind. I wrote words in large letters exclusively for the partially blind child and used to explain them, even if it meant more time for the class as a whole. For instance, I would never proceed if the girl had not written what was on the blackboard. The differently-abled girl needed different treatment, but the point is other children learn about sensitivity to the needs of such children. I gave her a handkerchief and instructed her to wipe whenever saliva dribbled from her mouth. I had to repeat the instructions till the action became an involuntary activity. As she could not hold a pencil, a pen or a chalk with ease, I had to help her write easy letters first—those letters which had only straight line strokes. In due course of time, she was able to write on her own by just seeing words on the blackboard. I gave her practice in sweeping the floor and tying her own skirt and instructed her regularly on personal hygiene. All these were targeted at improving her self esteem. Her learning achievement came up to 80% of that of the other children. This was done in Panchayat Primary School at Puduppedu. The girl completed her V and left the school. Her mother died recently, but she is able to manage her household very well—including cooking and doing other chores. At least, she is able to take care of herself. This has been a very satisfying experience, an example of teaching "life skills".

## NEELIMA THAKUR

My first appointment as teacher was in a school in a tribal district in 1984. My father was a sarpanch and from him I learnt to take an interest in the community's life. My elder brother, who was a good teacher, had a talent for dramatization and teaching of language. I learnt this skill from him. In 1987 I was transferred to a Bhilai school. Here I initiated women's self-help groups in the villages of Durg. At the moment there are 15 such 'banks'. My plays on the evils of the dowry system and similar activities brought me closer to the women and children.

Here I share some of the activities that I carried out to solve the problems specific to learning of various competencies. Competence to write and express the textbook content with understanding has often proved to be difficult for children. The weakness is evident when I correct the children's notebooks. To address this problem I carried out the activity of "*bal srujan*". I got the inspiration from the activities that I had tried out while teaching illiterate women as a part of literacy campaigns (many of them learnt well and got good scores in the final evaluation). The following steps and indicators are important:

- Check the homework regularly
- Give priority to writing and use it to identify weaknesses
- Inability to articulate dialogues/ stories (in written form) is an indicator
- Inability to articulate letters is another indicator
- Inability to describe/narrate events seen/heard
- Inability to write /articulate description based on the lessons from the textbook
- Hesitation when asked to write unfamiliar words
- Doesn't use the words relevant to the lessons under study.

The phases of activity/innovation:

- First create interest in children; for that inspire them to collect various written material like magazines, stories, jokes, riddles, news from newspapers.
- Tell interesting and educative stories.
- Arrange for the children to narrate/tell stories, poems, jokes, riddles etc. and encourage the better performers.
- Show the written material and tell them that they too are capable of writing such things and that the material being shown is often written by children of their age.
- At this stage, give them some topic to write about, and help them identify topics that are educative.

What should be included in '*bal srujan*'

- 1- Interesting stories
- 2- Educative information
- 3- Educative riddles, jokes
- 4- News related to school, *mahholla*, village etc.
- 5- Folk stories, poems, scientific observation made in surrounding
- 6- Information about talented children
- 7- Process of forming children's group in school
- 8- The information about the problems/solution (compromise) that occurred between children (here another objective is that writing of such events would help children inculcate develop positive attitudes towards one another)
- 9- Introduction of the school's teachers
- 10- Information related to national festivals and religious festivals

There are three critical days which I have used well. The children were given an opportunity to express their creativity through painting on red-cross day (November 7). This collection formed a part of *bal srujan*. This was carried forward on children's day, November 14. We celebrated it as *bal-diwās* by organizing children's workshops for story writing, poem writing and painting. November 21 was the beginning of *Kaumi Ekta Saptah*, and I organized a competition for various activities like: writing songs, stories, poems, lecture, *rangoli* etc. Most of the children participated in some competition or another. Finally I organized a two-day workshop at my residence after school hours. I took the parents' permission first. I asked the children in advance 'to write' various things. The idea was to compile all the writings. The children brought scraps of paper. They had to re-write the content brought by them on A-4 size papers, which I provided. Thus *bal srujan* got its final shape by the end of November of that year (2003).

All the children were given the book to take turns reading it. This book was formally released on by the DEO in February of the following year. Later on it came to the notice of many other officers at the block level. Ever since, this activity has been continued in my school and children regularly bring cuttings/written matters.

Another activity that I would like to share here is related to Mathematics teaching. Children were unable to understand the concept of zero; more specifically they had difficulty in understanding the place value of zero. According to me it is rather complex for the children studying in primary classes and hence to simplify it I did the following activity. I was inspired by a workshop for activity-based Math education. What I am narrating here is just part of the activities that I do to help children learn the place value concept e.g. use of cards. I try to teach all the subjects with the help of activities and concrete objects. The first step is to recognize that children face difficulty in learning place value:

1. Often children skip the portion of the textbook/syllabus dealing with place value
2. We notice that children are often unable to do the sums involving the concept of place value or increasing-decreasing order of numbers
3. Often we see children are unable to understand the concept of unit, tens, hundreds, thousands.

I tried to solve this problem through drama. I wrote a drama 'hero-zero'. Eight children played the characters of numbers 1 to 8. Two children played character of zero, two children played the character of 9, one was a judge. I organized this play on the occasion of the release of '*bal srujan*'. We also performed it in an inter-school drama competition held at Bhilai. The drama begins with



judge's entry on stage. Then numbers 1 to 9 present their complaint about zero. For instance, 'one' says the following:

Zero you are far away from me/ Come near me/ Without you I am just one/ If you are on my side I am ten/ if you are on my side twice then I would be 100.

The judge orders the zero to be on the side of 1. Likewise each number presents its case and the drama continues. Each one gets a chance to have a higher value than some other number. Finally drama concludes with zero saying, "I would like to be on everyone's side, but these numbers fight (for value) with each other and they tease me by calling me zero (valueless). The judge concludes that zero is very important since it increases the value of a number by being on its side and hence should be called 'Hero'.

Another difficulty that I solve is the understanding of 19, 29, ...99. This is done by introducing a dialogue where 9 is asked to be on the side of each of the numbers, one by one. After teaching the numbers, I give children practice for remembering these numbers through the game of dice. Children have to throw the die and write down the number that they get in their notebooks. This is played in a group. Finally, the score of each member is added to get the group score. The groups that get the total score of any number ending with 9 then get the prize. This helped children in learning these numbers well along with addition. Once this difficulty was solved children took more interest in mathematics lessons. I believe that too much of TLM is also not good. There should be the right mix of explanation by the teacher and the use of material.

#### **GEETHA THAVAMANI V**

he problem I encountered was the slowness with which young children got acquainted with the written symbols/ letters of the alphabet. The strategies I used to address this problem are listed below.

As children love colours, crayons and sponge tipped sticks were given to children to draw strokes and then the children were gradually led towards writing the letters.

Wet sand tray was used to enable children to carve letters on the wet sand. If children had injuries on their fingers, they were allowed to write letters on the wet sand tray with a stick.

#### ***Cubes / dice for learning spelling***

Prepare about 20 cubes with six faces. Paste the letters of the alphabet on the faces. Depending on the number of words to be taught, the number of cubes will vary. Then it is up to the creativity of the teacher to use the cubes in a variety of ways.

A variation is making each child wear a big letter around his/her neck like a pendant. When a word is called out, the students with the relevant letters would have to line up to form the word. By dividing children into two groups, a healthy contest in spelling can be arranged. Yet another variation is Word building cards using a pack of 52 playing cards. On the top left corner one letter of the alphabet is written and on the opposite corner a different letter is written so as to enhance the chances of framing a number of meaningful words. The cards should be shuffled. Four can play at a time. Each will get 10 cards. The rest of the cards will be kept face down. Each child can take one from the pack in exchange. I have developed case studies of the students whom I had targeted for reading and writing improvement (Classes 1 to 3). I have found significant improvement.

## **THILAGAVATHY R**

Children struggle to master the 247 letters in Tamil. As a result, some children become repeaters and often drop out. The specially misleading letters are la, zha, na, ra, and some long vowels which are joined with consonants are also confusing. So, I first focused on the letters that are likely to confuse children. As letters and their combinations had a pattern, I used funny signals and gestures to help students remember letters correctly.

Initially only a few students were able to read flawlessly. But after I translated the theory of association into funny signals and gestures representing letters, the results were astounding. About 80% of the children were able to read the lessons very well. For the past nine years, the innovation has proved to be very effective. There is no language related retention in my class. The class average achievement is 89 to 91% in Class V. I also identify young talent. The best example is that of a Class III student who won a district Republic day contest by creating our National Flag using vegetables. Others have won prizes in the National Energy Festival.

## VASANTHY D

I have tried to make my school student friendly and extend the classroom to the open ground when needed; appreciate even small achievements with gifts; nurture a love for the environment; and do everything possible to integrate differently-abled (disabled, in common language) children into the system. I have drawn my inspiration from the agony of the parents of differently-abled children.

Most of the students of P.V. Elementary School at Thazhainagar hail from scheduled communities. When I joined the school as a single teacher, the attendance of the students was deplorably low. Parental demand for quality education was almost absent. They did not seem to believe that education is important for their children's future development. I first decided buy a number of play things for the young ones. To ensure the attendance of all class one students, I changed the classroom atmosphere by pasting beautiful pictures on the wall. The confidence building measures that I undertook included contacting parents in their own houses; attending all family functions, both tragic and happy ones, without waiting to be invited; and discussing agriculture and health related issues—key issues for the people. This invariably placed heavy demands on my time, but I did not mind these.

As children are familiar with Tamil pronunciation, I decided to cash in on it. All phonemes of English do not have Tamil equivalents, yet I looked for letters which could be paired or combined to represent more or less the expected English sound. Then I demonstrated how English could be learnt with the right pronunciation. Initially I short-listed Tamil letters which have sound equivalents and gave sufficient practice to all the children. Though English vowels have different phonemes, I wanted to introduce sound and correlate each sound with one or two letters. Consonants in Tamil with equivalent letters in English: c,s,g/ ng/ nj/ d,t/ n/ m/ p,b/ y/ r/ l/ v/ zh  
Vowels: a/ i, ee/ u/ oo/ é, ey/ i, ai/ o/ ou

These were written on a chart and put on display so that students could always learn subconsciously by looking at the chart.

e.g.: Kalyani

k+a	l	y+a	n+i
Ka	l	Ya	ni

I consider a good memory important. I found the children weak in this area. I decided to challenge and reward their memory skills. I sing "Thirukkural and all poems amenable for memory development. I then encourage the children to repeat from memory. As it turned out to be a kind of singing competition, not a recitation, many students volunteered to prove their skill. They were able to memorize the stanzas. I then displayed a number of things. I divided the class into five groups. I invited each team to come and stand around the table and look at the things for 45 seconds and go back and list out the things they had seen. They were given 2 minutes to recall and write. The submission had to be a group submission. As the game was repeated, the students' observation and memory skills developed.

### ***Problems in Mathematics***

I use games and puzzles to make arithmetic interesting. Two examples are given below. Let us take four consecutive natural numbers 2, 3, 4, 5. What is the product of the first two numbers?  $2 \times 3 = 6$ . What is the product of the next two numbers?  $4 \times 5 = 20$ . The difference between these two

products = 14, which is the sum of the four numbers ( $2+3+4+5=14$ ). I use similar problems to create interest. A different example: Students are asked to stand in a circle. At various points of the circle +, -, and = symbols are written/drawn. Two number cards are kept at each of these points. When the whistle stops, the child who stops on = symbol should ask the child who stops on the + symbol the numbers which are to be added; the = child then has to give the right answer. If the child fails, he or she will be out of the game. If she succeeds, she should ask the boy who is on the - symbol and ask which number is to be subtracted from which number. Thus the game goes on.

An example of teaching the 9-times table is given below ( $1 \times 9 = 9$  to  $10 \times 9 = 90$ ).

- i) Unfold your fingers so that the palm of both hands faces your face.
- ii) Fold the thumb of your left hand, then count the remaining fingers as ones and say  $1 \times 9 = 9$ .
- iii) Fold the index finger of your left hand; then count the finger left to it as tens and the fingers which are on the right of the fold finger as ones. Add and tell the answer as  $2 \times 9 = 18$  (1 ten + 8 ones =  $10 + 8 = 18$ ).
- iv) Fold the middle finger of your left hand; then count the fingers to the left of the folded finger as tens and those to the right as ones. Add and call out the answer as 2 tens + 7 ones =  $20 + 7 = 27$ .

I use similar games for multiplication of two digit and three digit numbers, to make children learn alternative ways of arithmetic with fun.

I also use a "Calendar" to teach Math to children of Classes 2 and 3. The materials needed are a calendar, paper and pencil.

Give the calendar to a student. Choose nine numbers from the calendar in the form of  $3 \times 3$  square matrix. Ask the child to tell the result in one minute. Add all the nine numbers in any order and verify whether the result is correct.

				1	2	3
4	<b>5</b>	<b>6</b>	<b>7</b>	8	9	10
11	<b>12</b>	<b>13</b>	<b>14</b>	15	16	17
18	<b>19</b>	<b>20</b>	<b>21</b>	22	23	24
25	26	27	28	29	30	31

Choose the smallest among the nine numbers; and build problems with the other numbers in the matrix. For instance, choose 5; add 7 and multiply by 13. This method motivates the students.

## BALASAHEB S. WAGH

I became a teacher in 1992. During the first year, I trained the students in sports, with a special focus on kho-kho. The school improved to such an extent that it won a second prize in a major tournament. I then joined a small village school in Khurd, Akkalkot, Solapur in Maharashtra. Here I had two major problems: the school was dominated by Kannada speaking pupils and the school had only two teachers, the head master and I. During my nine years in this village, I managed to turn the school into a high school with eight teachers. I was successful in developing, among the 700 people of the village, an affinity for the school. When I joined, barring a few individuals, the entire village was busy with its farming. There were very few girls in the school. And the boys were busy with their sheep and cattle. The young girls did not have much opportunity. My main objective was to ensure that these girls attended school. A few steps that I took brought about significant changes.

- Organizing meetings of the village women to discuss various issues of importance to them (including legal information), and following these up with competitions for women on cultural features.
- Introducing sports into the school's life: Even the girls participated actively. Within two years, the school became known for its sports and cultural activities at the block level.
- Use of TLM: I introduced English. It was a new idea for the villagers. But the use of material like charts, flash cards and pictures increased the interest.
- Handwriting improvement project: I introduced this for classes one and two. I taught the children to compile booklets of various items, prepared in their own handwriting.

After nine years I was transferred to a school which had classes 1 to 7. Here, too, I initiated a program to educate the mothers on the importance of educating their girls. I faced similar problems, but had to find some new solutions. My most novel activity during this stint was the use of the Overhead Projector (OHP) for teaching. I tried to improve the academic output of children using several TLMs that I had used earlier. But I was not getting satisfactory results. I thought the OHP would help and so I gathered a lot of information on its construction and use. The cost was way beyond what our school could afford. My school did not have electricity either. I looked for cheaper alternative components. After several trials, and with the help of my co-teachers, I devised a local OHP in 2003. This is now used to teach Marathi, Math, Geography and other subjects.

The following material is required: a laboratory stand with two holders, a wooden box, a concave lens, a mirror, 6V/12V bulb, a torch reflector, a battery eliminator.

Method: Adjust the screw holders as required. The wooden box has to be the same shape as the reflector but slightly bigger. Fasten the mirror to one of the adjustable screw holders. Thus the graphic or a picture can be reflected on the wall or screen. Fasten the concave lens on another screwed holder so as to magnify the image size. The distance between the mirror and the lens should be adjusted so that the image on the wall or screen is resolved for sharpness and clarity. The wooden box contains the reflector and the bulb which is connected to the mains through the eliminator. The top of the box carries the transparency or the picture/graphic. In case there is no electricity the bulb can be lit by a 12V battery. The OHP should not cost more than Rs.200. The break up of the cost is as under:

1	12V battery	Rs. 90
2	Eliminator	Rs 40
3	Concave lens	Rs. 40
4	Mirror	Rs. 7

5	6V bulb	Rs. 3
6	Torch reflector	Rs. 10
7	Glass piece	Rs. 5
	Total	Rs. 195

I divided those sections of a subject which were to be taught through OHP into units. English for classes 1 and 2 was divided into the following units: 1. Look, listen and repeat. 2. Look and say. 3. What is it? 4. Look and answer. 5. Copy down. For Marathi, the units were: 1. Folk tales. 2. Graphic description 3. Pictures for poems. 4. Pictures and their captions. 5. Word formation and grammar. Mathematic had the following units: 1. Comparison: small-big, near-far, one-many, short-long. 2. Geometric shapes: circle, square, rectangle, triangle etc. 3. Numbers: in figures and through pictures, comparison of numbers. For drawing and painting, the focus was on development of the art through picture slides, and for self-study a variety of student-prepared material.

To make good pictures you have to be good at drawing or else you need a good artist. But to make slides or transparencies, none of this is necessary. Pictures from books can be traced through transparent glass, or a marker can be used to trace outlines. Photocopies of freely available pictures are also good enough. Once there is sketch or tracing, lamination with plastic film can be done, provided the budget is available.

My local OHP has been a useful teaching aid and it can be made by anybody. I use it for classes 1 and 2, but it can be used for upper classes also. I have also made many other TLMs, especially for self-study. Children themselves handle the material and learn. For instance, soaked newspapers can be used to form basic shapes to which a lot of additions can be made. I have been using waste hardboard, toys, wire and plastic, marbles, shells, and tamarind seeds. The point is that all these require very little sums of money. Of course, the quality should be good—and this is where the teacher makes a difference—so that the material is not seen as a poor substitute suitable for poor children.

## YUNUS ALI

I have been working as a teacher of Urdu since 1975. I have never been satisfied with my work. Something was always missing in the teaching of Urdu. Unfortunately the textbooks published by State Department didn't help me develop as a teacher; neither did they help children learn better. I always looked for 'platform for teachers' which could address my dissatisfaction and help me bring forward ideas that I tried at an individual level inside my classroom. While my efforts were not systematic initially, the 'Lok Jumbish' initiative gave me a good platform. One strategy was to mainstream certain backward pockets of the Muslim community in Kaman region by promoting literacy in Urdu. My work had by then become locally known. When another organization (Sandhan) was involved in material preparation and training of teachers, I was requested to share my ideas. I discussed some problems like the inadequacy of the time allotted to learn to read or write Urdu, the non-suitability of the textbooks of class one; the weak focus on developing motor skills/ movements of the fingers, the inappropriateness of methods like showing a picture of an object and calling out the letter with which the name of object begins (e.g. a for apple). I then worked as a master trainer for many years.

Finally I decided to share my experiences of teaching children with different methods and also the learning that I was fortunate enough to related to through my experiences with educational non-governmental agencies. With the support and encouragement of Bodh Shiksha Samiti, and the Agha Khan Foundation I have published two primers: 1. Urdu Talim ka Jadid Tarika 2. Hidayat Barai Mudarris, which have helped teachers. The books are based on my own experiments that I have tried out, and on some of the insights provided by Shri Gijubhai Badheka's book, Diwaswapna. The Jamia Millia Islamia has been very supportive as well. I am now working on a second edition of the books.

## **MANGESH S AJGAONKAR**

I started my teaching career in 1966 at the G.P.S Kurti, Primary school Khandepar, and retired on 29th May 2005. I narrate below my experiences in various schools.

### **School upgradation**

I was born into a lower caste (scheduled caste). At that time the evil of 'untouchability' was very prevalent. When I was a teacher in Dhave-Sattari in Goa (1982-86), I was denied a residence because of my caste. I had to stay in an old broken down house which was unsuitable for the monsoon. But I was determined to stay there and continue teaching. This school had classes up to the 4<sup>th</sup> standard, so standard 5 onwards the students had to go to a distant school, which was about 10 kilometers away from the village. It was really difficult for small children just out of class 4 to study further. So I, along with some known people in the village applied for upgradation of classes and as a result, standards 5, 6 and 7 were added to the school. Besides that, with the help of the students, I created a beautiful garden in front of the school where the students liked to play during their recess. My outstanding performance in the school won a place in the hearts of the villagers and I got a better house to live in.

I did similar work at the Govt. Primary School, Hadkon –Banastari (1970-76). While working at the Govt. Primary School Mardol, Ponda (in 1970) I helped the community acquire land for the school.

### **Enrolment of students**

When I was head master of G.P.S Duler, Mapusa (1990 onwards), I saw that there were very few students in the school. I tried my level best to increase enrolment by visiting every house with some village leaders, telling people about the importance of education and encouraging them to send their wards to school.

I formed a parent-teacher association to attend the overall needs of the students. It was possible because of my efforts to contact the local people and to bring them closer to the happenings in the school. As a result, some members of the P.T.A. volunteered to overcome the difficulties of the school and to ensure 100% enrolment.

### **Quality Education**

I observed that small children were attracted by toys and games more than studies. Taking this into consideration, I created some attractive teaching-aid toys, so that the students could enjoy their study. Due to this attendance increased. I have participated in several teaching aid competitions and won them. I also emphasized developing good handwriting.

To create a competitive environment, I arranged various inter-class competitions like elocution competitions, story-telling, singing competitions etc. Several educational functions were organized in 2001-2002, in the Mapusa-I School Complex and a grand function was held on 19.3.2002 in the presence of the Chairman of the Goa Board of Secondary & Higher Secondary Education and the Deputy Education officer of the north zone.

I also organized excursions, annual gatherings, and celebrations of national festivals like Independence Day, Liberation Day, Republic Day, Gandhi Jayanti etc., with the co-operation of the PTA.



To teach the importance of the environment, the school celebrated Vanamahotsav (1<sup>st</sup> to 7<sup>th</sup> July), Wild life week (2<sup>nd</sup> to 8<sup>th</sup> October), National Environmental month (19<sup>th</sup> November to 18<sup>th</sup> December) every year.

### **Community work**

During my teaching career, I was able to rescue a student while working as Headmaster in the Govt. Primary School, Duler. On 18<sup>th</sup> October 2001, a student named Mast. Saularani Gurudas Kalangutkar came into contact with live electric wires and was seriously injured. I immediately took him to hospital with the help of the local people, and got him admitted to the G.M.C., in an unconscious state. This effort brought the child back to life.

Besides teaching, I worked at social welfare activities like making residential complexes free of plastic and garbage. I also mobilized resources for the construction of a Ganesh Temple for public worship in this area. I enjoy writing articles and have won many awards. One of my articles, "*Shikshanatil sanskarache mahatva*" which was written for the *Dyandeep* magazine won a second prize. For my outstanding performance, I was given the National Award and a year's extension of teaching in G.P.S. Duler, Mapusa.

## C ARUNADEVI

I got my first promotion as Head Mistress of the P.V.P. school, Cannanore, village Thirumayam on 16-06-2003. This school, to which I was transferred, had a bad reputation as a “backward school”. It is located in a remote area. Bus facilities are very poor. I was required to commute about 25 kms (to and fro) on my two-wheeler everyday. But I was determined to work hard in order to make the school a ‘forward school’. The HM and assistant teacher were on leave and thus, for 55 students, I was the only teacher in the academic years 2003-04 and 2004-05. The students’ education standard was very low. Girls did not study beyond the 10<sup>th</sup> standard. As there was no bus facility at school times, higher education was not possible – that was the state of affairs. In such conditions, I had to work hard and tactfully, to inculcate a spirit of learning among the students, to create awareness in the local people, to generate enthusiasm for female education, etc. While attempting to do so, in this village, I learnt my work in the true sense.

I was determined that during my tenure, I should do something for the children and for the local people. Firstly I used the school grant of Rs.3000/- and the parents’ share of Rs.2000 for painting/writing educational content on the walls of the school/classrooms.

### **Subject wise list of topics**

**Tamil:** The ethical principles given in the Thirukural, proverbs, scriptures, epics, the name of the Tamil months, English months, tastes, Tamil alphabets, pictures of 10 Tamil scholars, national leaders, good habit training etc.

**English:** tenses, words, sounds, alphabets, pictures and names of fruits, vegetables, flowers, plants, animals and birds etc.

**Math:** pictures for counting, addition, numbers 1 to 100, tables, time measurement, pictures of Math scholars, etc.

**Environment and General Knowledge:** pictures of 6 scientists and details of their inventions, pictures explaining the parts of a flower, fish, pictures of parks, Sun-Moon rise, scenery, etc.

**Environment and social study:** pictures depicting the life of ancient man, religious harmony, the Jalianvalabaug massacre, directions, long straight lines, the map of India, Tamil Nadu, District map, pictures and names of 6 kings, pictures depicting the celebration of National festivals, names of Indian states, drawings of national symbols etc.

**Health, art of living and good-culture education:** pictures depicting good habits, writings about the concepts of good culture, pictures of excellent players, writing about the balanced- nutritious foods, etc.

Since they see these principles daily, learning becomes easy for them and they cannot forget with the passage of time. Along with this the seeds are sown for girls’ education since, from the beginning, they too would aspire to become like Indira Gandhi, Mother Teresa, Janaki etc.

Secondly, I have been carrying out various experiments to be able to deal with the multigrade situation. Here I describe one experiment to teach the EVS concept of ‘plants’ in a multigrade situation.

“

### **Multigrade education” for grade 1-5 regarding plants**

The concept appears in various grades as:

Grade	Lesson No.	Lesson caption
1	10	Colourful garden
2	7	Vegetable? Or Fruit?
3	7	In Grandfather’s Garden

4	3	Manure friends
	7	Good guest/ Good Reception
5	10	Ideal diet/ Nutritious food

**Activity 1: action song**

The following song was taught with actions (translation of Tamil song):

“Chingcha, Chingcha, Chingcha, Chingcha,

Going to pluck flowers, please wait

Pl. listen to me, come here

Turn that flower into a raw fruit

raw fruit into a ripe fruit

that fruit into seed you change

Therefore do not pluck flowers

Enjoy their beauty! Come – here

Chingcha, Chingvcha, chingcha, chingcha

**Activity 2: game**

All students are arranged in a circle, and one student, in the inner circle moves around the circle calling six words: “flower, raw fruit/vegetable, fruit, tree, plant, creeper plant”. Then suddenly he halts in front of any student and says any of the six words e.g. “fruit”; the other student has to speak the name of any fruit. Likewise the game continues giving the students practice in remembering the names of flowers, raw fruits/vegetables, trees, plants, creepers.

**Activity 3: Showing actual/real articles**

The actual flower, fruit/vegetable, fruit, seed, plant, etc. are brought into the classroom and the children are explained details.

**Activity 4: Wall colour paintings**

Pictures like those of flowers, raw fruits/ vegetables, fruits, plants, creepers, trees, etc. make learning easy for students, develop their imagination, inquisitiveness and zeal. The concepts/ideas in the lesson are explained with these aids.

**Activity 5: Explanatory Cards**

These pictures are also drawn on cards and the contents of textbook lessons are explained with the audio-visual method.

**Activity 6: Field-study/outdoor education**

The children are actually shown and explained the details of plants, etc through visits to the school garden, market place, etc.

**Activity 7: Class participation – Participation study**

The students are asked to touch any one picture on the wall. Touching any one article, he/she has to speak three lines about it.

Example tree:

- I give shade
- I give raw fruit, ripe fruit
- I help bring rain

All students are given the opportunity to participate.

**Activity 8: Group education**

The Children are distributed in to 6 groups: raw fruit/vegetable flower, fruit, tree, plant, creeper. The pictures on the wall are the reference material for the groups. Then group discussions are organized and they are made to write four lines about the pictures.

***Activity 9: Aptitude based learning through poetry, article, painting/drawing***

Taking clues from the pictures on the wall, students are imparted training in painting/drawing, poetry, article writing. In this way, they are given the opportunity to express/ exhibit their aptitudes and interests.

The wall paintings related to these topics consist of 44 pictures.

Apart from wall paintings I also use clay prototypes. Chart paper/cardboard are cut in various designs and used as teaching aids. By collecting newspaper pages and pasting them on separate card-boards, album series are maintained. Various games are taught. Training for writing poetry and articles, drawing, painting etc., is also imparted. Twice a week, I organize a class in music, good culture programmes etc. for students. Thus, in my school, I have opened up opportunities for growth and development in multifarious activities and the students are made proficient in the field of their respective aptitudes and interests.

This approach has made school more attractive and the students are enthusiastic to come to school. The slow learners have especially benefited from the idea of learning from walls paintings since it gives them a kind of daily learning practice. Parents are now attracted by school and hence school and community relations have improved.

## J BANUREKA

Learning through a language other than the mother tongue disrupts the enthusiasm of the students. I observed this problem in two PUE schools situated at Keezeripalayam and Suranayakkanur in Perundurai Union

### **The source of problem**

The mother tongue of the children belonging to the Thottinaicker community studying in schools at Suranaickkanur and Keezeripalayam is Telugu. These children know only Telugu till they are admitted to school and hence are unable to understand the Tamil spoken by the teacher. So they are unable to speak with the teachers and other students. At Suranaickkanur the language that was spoken among the children in school was only Telugu. Students of grades 3, 4 and 5 used to speak in Tamil only when they talked to the teacher whereas the children in standards 1, 2 did not understand Tamil at all. At the Keezeripalayam school, as there were some students whose mother tongue was Tamil, Telugu speaking students in the 3, 4, 5 standards could understand and speak Tamil to some extent. The first standard students did not speak in Tamil but the students of grades 2, 3, 4 and 5 translated Tamil into Telugu to help them.

I felt the need to address this problem since a child cannot understand anything if it has no skill in the Tamil language; it is of no use just to learn the letters without the speaking ability. I felt that a situation of sub-standard achievement would arise. So I carried out research under the heading "To nurture the ability of understanding and speaking in Tamil for those children who have Telugu as their spoken language studying in the First standard at Elementary Schools".

Only 20 Telugu speaking first standard children from panchayat union schools in Keezeripalayam and Suranaickkanur were selected randomly for this research which was carried out using a pre-test and post-test experiment design.

### **Pre test**

To evaluate their understanding and speaking ability, an oral test was conducted for 20 children studying in the elementary schools in Keezeripalayam and Suranaickkanur.

An oral test was conducted and researched for the first standard students to judge their knowledge, their ability to listen to the subject matter and information in Tamil.

### **Activities**

The obstacles faced by the Telugu speaking children in learning Tamil and the difficulties encountered by the teachers serving in the schools of this area were identified.

A discussion was conducted among the head master, teachers and parents.

A discussion was also conducted between the first standard students and their brothers and sisters studying in the same school.

Based on the pre test findings and discussions the following activities were taken up:

### ***Action1: Teachers' contribution.***

To train the 20 children by using Telugu words equivalent to the Tamil words used in class room activities, communication, conversation and teaching and explaining to them in both the languages.

A minimum of one hour's training was given everyday. Everyday an evaluation of their performance was made regarding their speech ability and improvement and individual attention was given to the slower children.

Training was classified under the following heads:

1. Training in sentences used to find out information about the children.
2. Training in sentences used in the classroom situation.
3. Training in the words of the subject matter.
4. Training regarding numbers.
5. Training about relationships.
6. Training in sentences of general activities.

One week's training was given under each heading. The children's improvement was evaluated at the end of the week, and the weak students were given individual attention.

***Action 2: Contribution of children studying together in 2, 3, 4, & 5 standards***

Action was taken to discourage the use of 'Telugu' completely at school and in the classrooms by giving instructions to the Telugu speaking students of other classes. They were trained to converse only in 'Tamil' among themselves as well as with the first standard children. They were told to explain 'things' to the first standard students in Telugu at the initial stage, gradually avoiding Telugu and explaining only in Tamil. The understanding ability and speech ability in Tamil of the first standard children grew faster when they conversed with the other students.

***Action 3: The contribution of siblings***

The brothers and sisters of the first standard students were instructed and trained to explain the Tamil and Tamil-equivalent Telugu words and speak in Tamil not only at school but also as far as possible at home.

***Action 4: Parents' contribution.***

It is essential for Telugu speaking children to get co-operation from Telugu speaking parents to attain adequate speech ability since the children spend more time with parents at home. Hence, parents were consulted and explained the root cause of the problem and instructed to speak in Tamil at least to some extent.

***Action 5: Training with the help of Tape recorder***

While teaching other children, the tape recorder was used to play pre-recorded subject matter explaining the words in Telugu and Tamil.

**Post-test**

Each exercise was conducted, for a week. In all about one and half months were taken for training. Then a post- test was conducted in the same way as the pre-test. It indicated a lot of improvement in the children's knowledge of Tamil.

**Current Status of the Activity**

This research was undertaken in 2003. It was very useful in enhancing the Tamil understanding and speaking ability of Telugu speaking children.

By following the activities listed in this research, the learning and understanding abilities of the Telugu speaking children studying at the Keezripalayam and Suranaickkanur schools was upgraded. Even today, the activities of this research are being followed by other teachers there. The cohort study conducted during 2005-2006 revealed that forty two percent of the students at Suranaickkanur and fifty percent at Kezeripalayam secured more than 60 percent marks by employing these methods.

## BIJENDRA KUMAR

I am a science teacher in the upper primary school, Jhal. My main objective is to inculcate a scientific temper among my students. My science teaching related activities are rather well known now; here I would like to share some of the things that I did at the beginning of my career. At that time I was stationed at the primary school Lillon, Muzaffarnagar. During my 2 year tenure, I taught Algebra, and 'Science, knowledge and our society' to the students of grades 4 and 5.

While teaching 'Science, knowledge and our society', I realized that some concepts were difficult for the children to understand. Those were: terrace farming, the states of India, eclipses, water purification, the skeleton, the science museum, our house.

I tried to explain these theoretically, but the students' body language seemed unsatisfactory to me. This inspired me to innovate, and the textbooks of the 4th and 5th standards were my source of inspiration. I tried to resolve their doubts by using different methods/models. Here I describe some of them:

### ***Terrace farming***

For the activity I chose a corner of the field. With the help of the students, I created a ladder-like structure with layers of fertile soil. The planting was done by the students. In this way, without going to the hilly area they were able to understand terrace cultivation.

### ***Water purification method***

For this method, I asked the students to get 3 plastic containers, chips and sands. I made a hole in the bottom of each container and put cotton in that. A rope was tied in the middle of 3 sticks. In the third bottle, I put clean sand, in the second one chips and in 1<sup>st</sup> bottle I poured dirty water, which dripped slowly into a bowl through all the bottles of chips and sand. Students had been instructed to boil and drink the water. This method was appreciated. The students demonstrated it in many houses.

### ***Skeleton***

Due to the unavailability of a skeleton, the students were not able to understand the size and location of the bones in the human body. To solve this problem I asked the students to get wax. I found the picture of skeleton and then transformed the wax in to the different shapes of human bones. The students had been given an explanation by joining these bones. It was easier for them to understand.

### ***Science Museum***

This was made of fruit cartons. The students were asked to collect the following things:  
*Natural*-bird feathers, mango, blackberry & *peepal* leaves, small stones, sand, different types of soil, iron, aluminium, bronze pieces, salt, sugar and different types of *dals*, black and yellow *dal*.  
*Artificial*-Different colours of plastic pieces, combs, spectacles, thread, rubber tubing, unused magnet.

### ***House***

A house was made using bamboos and a sari. The children were asked to choose a place where there were a lot of flies and mosquitoes. They cleaned the surface and used bamboo supports and a

sari for making a house. The purpose was to make a house for nomads. In this way they learnt the way to make a house.

**Outcome**

Due to the use of the TLMS the students’ performance improved. And their difficulties were rooted out permanently. The pass rate went up to cent percent.

Class	Prior the use of T.L.M. number of fail students	After using T.L.M pass rate
4	32	32
5	25	25

The students were evaluated through written and oral tests (like quizzes, small projects etc.) after the use of the TLMS. The students used to find opportunities to do the activity themselves and solve their problems by asking more questions.

Class	Test results before the use of T.L.M.	Test results after the use of T.L.M
4	40% students were keeping 30%	40% students keeping 95%
5	29% students were keeping 45%	29% students keeping 97%

After this, I was promoted and transferred to a U.P. school. Before leaving I elaborated all the information and the use of the TLMS to other teachers and inspired them to continue. Now they are using the same tools.



## S CHITRA

I became a primary school teacher in 1996. After a short stint of three months in my first school, I was transferred to Anichampalayam, where I have been for about ten years. The children in my school belonged to the socio-economically marginalized sections of society. Three principles I have followed are: make incremental changes to the environment of the school so that the children feel happy to come to school; motivate them to compete in events so that the recognition they get raises their self-esteem; and deal with children who would in a middle-class environment be labelled cheats and rogues. The last point is important because the cultural background of the children often provides the frame for their behaviour, and sometimes, teachers find it hard to deal with such children. Let me start with two examples of such children.

When Dhanalakshmi came to the village she was about 12 years old. I enrolled her in Class 4. Soon, her attendance became irregular. She was burdened with house work. We allowed her to leave the school early. I also taught her dance. She was a quick learner. She picked up speaking skills and even put up a play on the school's annual day. After the vacation, she did not turn up. Her grandfather was ill and she was required to take care of household duties. I made her compete in inter-school competitions and once again her attendance became regular. She entered Class 6. My daughter was studying in the same class. Dhanalakshmi gave her a sob story and made her steal Rs.500 from my house. She then told my daughter that someone had seen her stealing the money and blackmailed her into stealing another Rs.1500. I was very surprised. I noticed some changes in my daughter and confronted her. She gave me the whole story. I checked with Dhanalakshmi, who confirmed what had happened. This incident was a serious blow to me. I decided to forgive the child and decided to keep her for as long as possible, every day, in the school. Slowly, she developed confidence in my way of handling her; she is now studying well and I continue to counsel her.

Ramajayam was a bright kid. After completing Class 5, he went to a middle school situated about 5 km away. He started stealing money from home; once he stole money from his Class 6 teacher's bag. He and a few of his friends once blackened their faces and in the darkness of the night, broke into my school to steal whatever was available—books, charts and pens. For a couple of days I was in shock. Then I came to know about a government-run school, the Mahatma Gandhi School, that took in orphans and boys from extremely poor backgrounds. I decided this change of environment would do some good to the boy. I spoke to him and convinced his mother about the need to put the child in the new school. With the help of the village elders and the headmaster of the school where he was studying, I managed to get Ramajayam transferred to the new school. He is doing very well and wants to study as much as possible.

As soon as I joined Anichampalayam, I made a series of incremental changes to the school environment, with only community support. I started with putting up dustbins and setting aside a hygiene period after 3.30 pm. I arranged for bathing facilities and gave each child a two rupee soap (bought from my savings) which they had to use carefully. I introduced yoga and, inspired by a training program that I attended, took up preparation of TLMs in a big way. In 1998, a new headmaster took over. He was an expert in teaching children's literature. Initially, he thought my class looked like an exhibition, but after observing the children's reactions, he started to imitate my work. There are many examples of these incremental changes. A few are mentioned below. I set up a beautiful garden with bamboo fencing donated by one trader. A microphone and loudspeaker system was bought with the money contributed by 52 labourers, each of whom donated one day's wages to the school. I built a compound wall, with sections of it being sponsored by particular

parents. For instance some adopted 30 feet of the wall and others 20 feet. My parents-in-law saw this and 'adopted' 10 feet. One way of attracting community members to the school functions was to photograph the event. I bought a camera and started capturing the people on film. This single act has been a great motivator. An added benefit was that for the first time, the school had a record of the functions. Another motivating factor for the school was the reply from the Hon'ble President of India when two children sent him Republic Day greetings.

I have concentrated on preparing children for competitions. This gives them a sense of identity and raises their self-esteem. One event which had a great impact on the children was an event sponsored by a private school. We were a government school with very little money for banners. But we had prepared two songs and series of exercises. During the trials and screening in the morning, one of the judges told me that a large private school had prepared similar songs with a many more props. I was disheartened. But the children told me that they could put their yoga exercises (including *yogasans* on a 20 ft rope), *malkhamb* and a series of indigenous routines. I hurriedly prepared another song, *Vande mataram*, which all the children knew. What we did was to come up very quickly with various aids to accompany the song and dance. The performance was appreciated and we won only because our program was unique. Many of the district leaders came forward to help. A forest official immediately arranged for an exposure trip for the children with departmental funds. For the first time, the children travelled in a luxury bus and had a meal in an air-conditioned restaurant. There was also a boat ride. The respect with which the children were treated added to their self-esteem.

I conclude with one small innovation which has given me good results. The problem was how to make young children learn writing easily. After some experimentation, I found that three symbols had to be practised first. These include the Tamil diphthong 'ee', the English capital letter L and the number 6. I painted these on the wall blackboard and made the children repeatedly write over the three symbols. I also introduced competitions between two groups of children; they had to write the symbols correctly and had to write down as many sets of the symbols as possible in a given period of time. Then it was easy to teach letter recognition and writing. I have been doing this since 1998. Many other teachers have adopted my method. Since I had to teach two classes, I wanted some way of making the children work on their own. I found out that the letters could be scanned and converted into a stamp. I used this to print the letters and fill up some pages in the children's notebooks so that they could practice on their own. Soon I grouped letters based on the three basic symbols and repeated the exercise. This has been a productive and satisfying innovation.

## MANSUKHLAL K DAVE

I was HM in the Bhuva Girl's School, Chalala. Over the years, I had realized that despite all efforts, about 25 to 30 percent of all children remained weak in academic performance and this led to problems like stagnation and drop out. We performed an experiment to check this. We decided to create a separate class of such students on the basis of the annual examination performance. However, we had some doubts about, whether we would be sending negative signals to the parents and the students? I finally decided to create a separate class of about 25 girls who had been either promoted or had less than 45% marks. I took responsibility for this class.

The next question was how this class should be taught? I decided to check the existing base of their knowledge and then choose a teaching method. The primary test showed that most of the girls had knowledge of the language and EVS units and were able to express themselves orally but could not remember it for long. They had problems with written expression. As a solution I translated every lesson into performable plays and assigned every character to a pair of girls. This motivated the girls since they had to prepare small parts. For environment, I prepared pictorial charts to introduce the content.

The real problem was mathematics. For them, it was a dry and dead subject. I thought about how to make this subject interesting for them. Simple concepts like numbers could be introduced with concrete objects, but teaching addition, subtraction and geometry was a real problem.

Since our school had seven standards, the government had provided us with a carom board. When the girls of the upper classes (class VI and VII) used the carom board, the girls of the lower classes stood around and watched the game. I could make out that these girls also wanted to play carom. I allowed the younger girls to play carom for a few days. Initially we had some problems, but in three to four days, all the girls began to play carom. They became so fond of it that they often sought my permission to play carom. This inspired me to develop a mathematical carom board and I began to make a carom board based on the class IV syllabus: mainly addition, subtraction, angles, and triangles.

I prepared a carom board for 'addition' on chart paper. I had to keep in mind that the girls of this section had a belief that 'math' was very difficult and hence they would never be able to learn. So initially I introduced easier sums, to motivate them.

This simple carom board had 30 sums. To play it, the girls would sit around the board. One girl would throw the dice. If it showed for instance three, she would move three houses. Now she had to do the sum given in that house. She had to write the answer on a slate or in a notebook. Then the next girl would take a turn. The students keep counting sums and the teacher checked them. The children found this new and so liked it. A beginning was made with easier sums, yet they would make mistakes. Then the sums were explained in the group. This board was useful to teach simple addition and subtraction, but it did not incorporate geometry. For this, I put geometrical figures at intervals of four to five houses on the same board. These figures displayed different angles and triangles. The child who landed in that house was supposed to identify that figure. If the answer was wrong, she had to start afresh. Those who gave the right answer were given points. The experiment was thus introduced, but it had some problems too:

- Since the board was made on chart paper, it broke within a week. In order to make a stronger board, I used fibre sheets brought from the *Alang Ship Breaking Yard*, which were sold at low cost in the market.
- While playing, only one girl could be involved while the others sat idle. This made them lose interest, to some extent. So I made all the children do that sum in their own notebooks. Then they matched their answers with one another.
- While the students were doing sums, the teacher had to remain present to verify the answers. Secondly, as the class was divided into five groups, the teacher was unable to guide all the groups at the same time. For this, a leader was appointed in every group. She was responsible for checking answers and monitoring the game. The teacher would be involved only when the leader faced problems. This helped develop leadership qualities in the girls. Leadership became an issue for healthy competition. This led to academic improvement also.
- Initially, the parents felt that the teachers were busy playing games and carom instead of teaching. But when they noticed the improvement in their children, these beliefs dissolved.

The girls were allowed to play on the board as long as they wished. Sometimes they used to stay back after school hours. Then I allowed them to come before school hours if they wanted to play. This automatically eliminated the problem of irregularity. When the girls of the other classes saw them playing, they too were attracted to play. The class III girls also used to borrow the board to play.

Then I began to prepare TLMs for environment and language. These posters or TLMs were displayed during school hours in the classrooms. Since the children had developed the tendency to learn on their own, they began to absorb the concepts displayed on these TLMs also. As HM, I had to go out often for administrative reasons. In such cases, the girls of my class used to sit peacefully in class and learn on their own. This spared us the problem of adjusting them in some other class.

I had given these 25 girls of my class a test before introducing these innovations and the result was 47.6%. When I gave a post-test after using these TLMs, the average achievement of these 25 girls was 76.2%. Thus, my success was evident.

When my colleagues noticed my success, they also began to prepare TLMs for their classes. The success of one experiment created a new wave of joyful learning. The overall enthusiasm helped the weaker girls to improve their performance.

I retired after some time, but my TLM-based success did not let me retire from work. I continued my work and today I have more than 300 TLMs to teach different units. Further, I have started a free of cost TLM guidance centre, named the Shri Chamunda TLM Centre. Teachers from different districts visit my TLM centre and I provide guidance without any charge. I have seen such teachers preparing TLMs on their own for their schools and improving their teaching. Those who could not come used to write to me. I provided help by writing back. This in return developed me and my TLM centre also.

## DINESHKUMAR A DESAI

I worked in a private primary school in Himmatnagar between 1993 and 1995. In June 1995 I got an interview call for a job in the government primary school in Baroda district. I performed well at the interview and hence the Deputy President of the District Panchayat Education Committee, Shrimati Ilaben Jadeja who was an interview committee member, decided to put me in the school in her native village, Bhadarva Kumar Shala. When I was just preparing to leave after the completion of the interview, the lady told me, "I have put you in my native village. There are other schools also in the village. But you are supposed to join the school known as Bhatthawali School." I was simply dumbfounded, 'What does she mean by a Bhatthawali school?' It was easy for her to understand my confusion. She explained, "Before independence, there was a factory for making country liquor in Bhadarva state. The school runs in the same place". After listening to this, I was in a fix. My father was with me at that time. He explained that the interview panel had recognized my true calibre and had given me a challenging job. I agreed with my father and after a few days, I joined the school.

This school in no sense fitted any imaginary picture of a school that I had had while undergoing PTC training. The building had big halls to spread out the *madhuca indica* fruit, a big furnace in which to boil the mixture, big wells to crush the fruits. Temporary partitions had been erected to create classrooms. Thousands of students had studied in this Pay Centre School, which has been in existence for many years. But my mind was not ready to accept this place as a school.

The population of the village was 10000; the majority were Rajputs, reputed for their aggressive nature. The village had two District Panchayat-run schools: (1) the Bhadarva Kumar Group Shala, and (2) the Kanya Shala, Bhadarva. The difference in terms of school building and educational condition was very wide between these schools. Apart from these two schools, there is also a private primary school, which is associated with the High School. My school had about eight teachers. All the staff members were quite old and belonged to the village. I could make out that the teachers were good and talented. But all they had gathered, after years of service, was mere bitterness and endless negative experiences with the community members. They never missed the opportunity to describe their discouraging negative experiences with the parents of the children. This school was the only option for the children of classes I to IV. But there was a private school for upper classes. So most of the parents withdrew their children from this school and enrolled them in the private school. Only those children remained here whose parents were not capable of paying high fees or/and were not much concerned about their education. Addiction to liquor was a major factor for such behaviour.

I was confused about where I should begin. There were multiple problems:

- Problems related to behaviour and discipline among students
- Weakness in skills like reading, writing
- No concept of homework after school hours
- Total absence of English teaching
- Groupism in the staff members
- Students of upper classes struggling to do simple multiplication or subtraction
- Total absence of co-curricular activities

- Lack of basic facilities in the school
- The parents always tended to fight or argue and abuse whenever it came to school related issues
- The old factory structure was crawling with monitor lizards. In the initial days I was constantly looking around in fear of them.

I had started working in these conditions when I had a bad experience. It was after school hours that I was walking along with other staff members. We were on the village road, passing by the bus stand. There were some high school students sitting with some elders of the village. I heard a comment, when we passed, "These are the teachers of Bhatthawali school.... the handicapped animals of animal-keeping farm..." I stopped and turned back. There were some 30-35 students who were waiting for the bus. I was pained when I saw no regret on their faces at such a mean comment. The elders had also joined them. Beside this, the staff members of the high school also stood nearby, smiling, in support. The other staff members of my school took it very casually. They said a few words to the students and wound up the matter. I was deeply shaken by this incident. That day I decided my plan of action. For example, regularity in school, discipline, intensive teaching, creating an interesting environment, Maths and English teaching, co-curricular activities.

I started playing with the children after school hours. This helped me control the behaviour of most of the mischievous boys. Meanwhile another incident took place. In class IV there was a very mischievous boy from a *Rajput* family. Once I saw him with a packet of tobacco, I could not control my anger and I slapped him. He started crying and rushed home. After the recess, I heard our HM shouting at someone at the school gate. When I came out, I saw that the father of the child that I had slapped holding a sickle in his hand and trying to rush to the school. I wanted to go to him but my colleagues insisted I stay away. After some argument, I convinced them to let me meet him. Our HM literally held that person at a safe distance and let me talk to him, I explained, "Your son is a bright student. He can perform well. But he is unable to perform because of you. If you want to educate your child at all, stop encouraging him this way. I have no problem if he eats tobacco. He has been eating it since he was in class II. Nobody has stopped him. Can you imagine what his condition will be, when he has started it so young? How would you feel if your child died before you? It is you who should be worried. But it is I who am worried for your child. It makes no difference in my salary. If you say so, I will let him chew tobacco." He cooled down then. I told him to come and meet me at regular intervals. Initially he was hesitant and embarrassed. But later on, the same person became one of my strongest supporters.

After this incident other students stopped cribbing/complaining at home about school affairs. In fact the other irresponsible students got attached to me. I continued playing with them after school hours. This strategy was very useful to me. The mischievous students were now under my control. Many of them showed improvement just because they felt ashamed of behaving badly before me. Their feelings towards the older teachers also changed. My colleagues were relieved.

Then I asked the HM to assign me to grade IV ( I was given grade VI). Since the students used to change schools after grade V, my aim was to remove the learning weaknesses that had remained during classes I to III and to provide joyful learning in class IV. For this, I began with story-telling, giving them general information to arouse their curiosity, telling them about incidents in the surroundings. I deliberately created situations where the class did some activity. This built a personal relationship with the students. The students began to miss school if they had to stay at home.

Such changes in the students were noticed by the parents. They were surprised to see their increasing affection for the school. Initially in class, and then in the prayer assembly, the students of my class began to tell stories. This made a tremendous impact on the students of other classes. The prayer assembly was becoming more and more interesting. As a side effect, the latecomers became regular.

From this point onwards, I began my real work.

First of all, I started to become familiar with the learning weaknesses of my students. I jotted down the common problems they faced as well as individual problems and worked to remove them one by one. I used to probe the problem/question instead of giving them readymade answers. I thus wanted them to think about a particular problem. Instead of chaining myself down to the lessons of the textbook, I made learning a continuous process. As a result the students developed an interest in the subjects.

My colleagues were observing this very carefully. The biggest achievement was that, without their realization, the senior teachers changed their thinking and behaviour and now, the informal/casual discussions amongst the teachers involved academic aspects. It was as if depressed soldiers were preparing to fight again.

As mathematics is my favourite subject, I willingly helped every teacher teach math in any class. The students of classes V to VII were a matter of worry for us as they had missed a lot in math over the past years. I discussed the issue with the respective teachers and requested them to teach the important/basic concepts again whenever possible. I drew their attention to concepts which were important for the next standard. For example, algebra: divisible/indivisible numbers, GCM, LCM, cube, linear equation, factors, bracket, etc; geometry: line, ray, line segment, angle, triangle, area, volume, graph etc. My colleagues taught these concepts again and again but the students could not remember them. So I helped by taking extra classes. I used to sit with the students in a group along with paper, hard board, scissors, etc. I adopted the inductive approach by giving examples. It worked and the difficult concepts became easy. Thus I provided math-remedial to the students of other classes.

Such experiments were a matter of discussion in the village now. It took no time for this news to reach the private primary school associated with the high school, other children and their parents. The number of students joining the private school after class IV began to drop. This was exactly what I wanted. About one and a half years at Bhadarva School proved to be a laboratory of innovations for me.

I had asked for a transfer to my native place which I got and on 6<sup>th</sup> December, 1996, I joined Samsherpur the Primary School, Disa Taluka, Banaskantha as a teacher.

When I left,

The students' confidence had increased.

They had begun to learn on their own.

They were oriented towards studies.

Our school's prestige had improved in the village.

Our senior teachers felt pride in being part of the school.

## SHARADA Y DESSAI

I started working as teacher from 1973. I considered myself fortunate that my father managed to educate me and my brothers and sisters despite a financial crisis. While going to school (during my high school days) I used to see many children wandering here and there. I knew that they were not going to school. I always asked myself what I could do for such children. Due to their poverty, it was not an easy task to motivate parents to send their children to schools. This provoked me to try to enter a teaching career.

I was appointed in the Assolda V.P. area consisting of 4 villages. I saw that the community was poor, not aware of the outer world, education or cleanliness. The children did not go to school and their parents did not care.

I wanted to do something to make them economically better off. I motivated some ladies (mothers) in my panchayat /village to undertake self employment at home and they started earning within a span of 6 months to 2 years. Slowly this was accepted by many poor mothers. Through their help I ensured that all the children were enrolled in school. I remained involved with them till I succeeded. Finally the children started going to school. I tried my best to visit their houses once a week to find out or report on how a child was doing in his/her school and how the women's employment activities were going. I started collecting information on the attendance of children of poor families from government schools, in all the 4 revenue villages of Assolda village panchayat in the Quepem taluka. I started visiting these houses, often with my husband, to inform those parents whose children remained absent without any reason. We motivated them to send the children regularly. In case a child was found to be sick, the local doctors always extended help to these poor children. As a result no child in my village or neighbouring village is out of school and no child has dropped out of school before completing class X. Most of them regularly go to the library for access to the daily newspapers.

Then I found that the people do not have toilets in their houses. I sought the help of the panchayat to provide toilets to each house. Finally it was done. I used to inspect their cleanliness once a week. Gradually,

- I saw a drastic change in the living conditions of the poor families in all 4 villages in the Assolda V.P. area
- I observed improvement with regard to cleanliness
- I observed a sense of discipline in them
- I observed high morale in them and also their social involvement with all kinds of people in the area

### **Educating children of migrant labourers**

There were two families of labourers who had temporarily come for work to Assolda village. They had noticed my efforts towards the children's education. To my surprise, while leaving on completion of their work, they requested that they might leave their children behind at my house. I agreed and reassured the parents that their children would be in good hands. I informed the police of this in writing and submitted the children's photos to the police station. I have managed to give them a furnished room with an electric light and fan in my house and have admitted them into a government school in Bag Xelvona. Now these two children are part of my family. I wish to give them a better education and see them working at a good level after they complete their education.



**Outcome**

In the 32 years of my service as a teacher of the Govt. Primary school, my achievement is that, each family in my (V.P.) area is now literate & educated. The people are part of the mainstream. Most of these people now come forward to seek my guidance/help in their personal or social problems. Not only to the villagers but even to those people who come to these villages to work and stay for reasonably a long time every year, we carry the same message of providing education to children.

## **D DEVARAJ EDWIN**

### **Removing the difficulty in learning 'articles'**

Every language has its own unique features. As English is a foreign language, our students are very deficient in English Grammar. Anyone who aspires to mastery over a language must know correct grammar usage. So I pay special attention to teaching grammar. Here I am writing about a piece of research that I undertook to eliminate the standard VII students' difficulties in using 'articles'.

From the examination point of view, the use of 'articles' is an insignificant topic. It gets the student only 3 or 5 marks. But in day-to-day life, as it is a competitive world, we must attain mastery over the English language. We should bear it in mind that a small hole will sink a big ship. So proficiency in flawless English becomes essential.

I carried out this research with the aim of enabling 20 weak students (out of 39 in VII std.) to overcome difficulties in using 'articles'.

### ***The specific objectives of my study were***

- to make the pupils learn vowels sounds
- to make them learn the definite and indefinite articles
- to make them learn the countable and uncountable nouns
- to make them learn the exceptional usage of 'a' and 'an'
- to make them learn when not to use article

### ***How I identified the problem?***

I found out from the first mid term test that many of my students (std. VII section E) did not attempt the test item on 'articles'. Some wrote incorrectly. In all, 20 had a problem. Though I had taught them earlier, some students were confused about 'articles' and 'prepositions'. So I concluded that my students faced a problem in the usage of 'articles'.

### ***Probable causes***

lack of learning motivation  
failure to transfer knowledge under test situations  
poor memory  
the concept of 'articles' is taught in a day or two  
absence of follow-up work

### ***Tools***

I believe that experience is the best teacher. So the prime tool that I used for teaching was the Hindu newspaper.

For evaluative purposes I prepared a questionnaire comprising a set of 20 questions. Each question bore one mark. The questionnaire had two parts; the first part consisting of 'fill in the blanks', and the second part being 'insert articles where necessary' for a somewhat higher degree of intelligence.

Notebooks and pens were distributed to students.

### ***Method***

I gave notebooks to the 20 students and asked them to draw a line, which divided the page into two halves. On one half the title 'a' and on the other the title 'an' were given.

I gave one newspaper to every student and asked them to locate 'a' and 'an' in the newspaper and write the examples down in a notebook along with the word that appeared next to the article. Within 3 days they could understand which letter came after 'a' and which after 'an' in the succeeding word.

Thereafter I taught consonants and vowels. To explain this difference I drew upon Tamil grammar rules. Giving examples from Tamil language I was able to teach the accurate use of 'a' and 'an' for vowels and consonants.

Most of the students asked me, "Sir you have said 'an' comes before words which start with a, e, i, o and u, but in our notebooks (filled with newspaper exercise) 'an' comes before hour, honest, R.S.S., N.G.O., H.I.V., MP3. How is it possible sir?" That was an intelligent question and an opportunity to teach vowel sounds. After six days I found that they were well versed in using 'a' and 'an'.

Then I asked the students to draw a line to divide the page into two. Of the two, one denoted 'a' and 'an' and the other was 'the'. I asked them to write down the word that appeared after 'a', 'an' and 'the' and compare these words with one another. I gave two more days to the students. After that I gave an explanation about 'indefinite' and 'definite' articles e.g. 'A' and 'an' are called the 'indefinite articles', because they usually leave the person or thing spoken of indefinite: e.g. a student, that is *any* student. The 'indefinite article' is used for singular, countable nouns e.g. a school, a pen. 'The' is called the 'definite article', because it normally points out some particular person or thing. It is used for singular, plural, countable and uncountable nouns e.g. the apples, the milk.

Then I taught the following rules:

*The definite article 'the' is used:*

- When we talk about a particular person or thing or one already referred to
- When a singular noun is meant to represent a whole class
- Before some proper nouns
- Before the names of certain books
- Before the names of unique things
- With superlatives
- Before ordinals
- Before musical instruments

Thereafter I explained when to omit the article.

*The 'Article' is omitted:*

- Before names of substances and abstract nouns
- Before names of people
- Before languages
- Before names of meals
- Before school, hospital, college, university, market (When the places are visited for their primary purpose)
- Before names of relations
- Before transport

This was the procedure by which I achieved my goal.

***Effect***

Though students generally find grammar boring my students had worked eagerly since it was an action-oriented cum play method. Within two days the students began to ask me questions related to articles. I was happy. I believe 'questions' breed wisdom.

After 15 days they were able to employ the correct articles in the right places. They found new exceptional usages for 'an'; viz., an RSS, an MP3, and an HIV.

I noticed at the end of the research that the students were able to read an English newspaper. This was an unexpected positive outcome. With this method their reading and writing competencies also developed. The test showed lots of improvement with achievement being double the initial performance (score).

***Conclusion***

Given an opportunity and proper guidance students can prove their mettle. My method turned out to be a joyful 'teaching-learning method'. Though it was a time consuming one we know, 'Rome wasn't built in a day' – the students, will not forget the correct usage of articles. Slow but sure. I have completed the task with enthusiasm. My goal has been achieved in a pleasant way.

## MUNNA LAL DEVDAS

I was an *upsarpanch* with the Kopara gram-panchayat when I was appointed to the Kaundkera girls' school in 1987. The experience of working in a *panchayat* helped me mobilize resources for the school. While working as *upsarpanch* I had been involved in the management of the primary school of that village. At that time I had mobilized the community to donate 5 acres of fertile land to the school. After joining the Kaundkera School I suggested the same idea to the *sarpanch*. Since he had known me since my earlier days, he agreed. So, I got some fertile land transferred to the school and auctioned it whenever we needed money for the school. We were able to build a boundary wall, a stage, get electrification, fans and honorary teachers from the auction money. In 1994, we also had enough to set up a high school.

I also tried several interesting teaching techniques. Here I describe one which became so popular that I have published a book on it. I have given it the title "Three-in-one innovation".

The problem which inspired it:

Newly enrolled children were not able to hold slates and pencils  
They were not able to move their hands in the proper direction  
Some children used to move the slate instead of the pencil  
The children were not able to arrange letters and numbers in sequence

During a training programme, I created a letter out of a number, accidentally, and that gave me the idea for the "three-in-one innovation". It involves three things: making numbers by joining dots, making letters from numbers, making English alphabets by joining the letters.

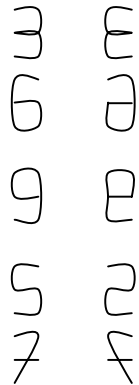
Steps:

Give practice in making dots (in sequence)  
Give practice in joining the dots to make a number  
Give practice in writing two numbers with a small space between them  
Give practice in making a letter by joining two numbers  
Give practice in making consonants and vowels from numbers  
Give practice in making six basic figures (for English letters) by joining dots  
Give practice in making 26 English alphabets (from the six basic shapes)

This method has proved very useful for the children of rural areas. I demonstrated it at the DIET and it was greatly appreciated. I have published a book about this method. It was released on 17<sup>th</sup> December 2005 by the Chief Minister of Chhatisgarh Dr. Raman Singh. The profits will be used to provide educational support to poor and physically challenged children. I have already been supporting 15 children (some of them are handicapped and some have lost their parents) for educational purposes. I shall continue to work for the betterment of such children.

## KRISHNA LAL DHIMAN

I started my teaching career in Rajkiya Primary School of Barsana in Kaithal district. I was asked to teach young children. When I started teaching numbers, I found students were making mistakes in writing. Even after teaching several times, only a few students could understand me. I wrote numbers many times on the black board, but they were writing them in reverse order:



Even after several trials, I could not find any solutions. One day I saw children playing cricket and trying to imitate the popular players' style. I was astonished to hear their discussion on players' batting styles (left or right- handed), bowling styles, walking style etc.

After this, I got an idea of teaching them through games. I wrote numbers in the form of a bat and a ball. I took the help of pictures.

- I made a picture of a bat on the black board and taught the students by writing "1" besides that
- I drew a picture of a half -ball, and a horizontal bat and wrote "2" near that
- I drew a picture of a half -ball twice and wrote "3"
- I joined pictures of 2 small bats and 1 big bat to form "4"
- With the help of pictures of 2 small- bats and a half -ball I made "5"
- One big bat and a half ball formed "6"
- One small bat and a big bat formed "7"
- 2 full balls were joined to form "8"
- One half ball and a big bat made "9"
- I drew one big bat and a ball to make "10"

After doing this exercise, students could understand the idea of left and right place, as well as the correct pattern of writing numbers. I gave a name '**bat ball ke ank**' (numbers with a bat and a ball). They practiced the exercises in their note books, and if anyone committed a mistake the other students corrected him. I got 10 bats of the dimensions 2" breadth x 4" height and ½" width made from the market. I also got 10 full and half balls of 2" diameter from the market. The students became interested and enjoyed the writing pattern. Now, without using the bat and ball, they are able to write correctly. I am using this tool for teaching the new comers and I have found that the pace of learning is faster.

## RAJESH KUMAR DHIMAN

I joined as an assistant teacher at the Parisadiya Primary school Elahabas in 1997. It was situated in the Vikash kshetra, Muzaffar Nagar U.P. I felt bad seeing the condition of the school. The villagers were difficult to deal with. I worked very patiently, used various methods for infrastructural growth and earned their respect. This was an achievement since the villagers had a bad image for the earlier teachers. Here I describe my experiences with two different schools; one was the Elahabas Primary school and the second was the Bhokerhedi Primary school. In both schools I strove for infrastructure development and quality teaching along with student enrolment and multi-faceted growth.

### Experiences at the Elahabas Primary school

There was only one room for teaching. There were about 2 acres of land adjoining the school, belonging to the Gramsamaj. Unfortunately the land was disputed. Half of it was a pond, the other was plane surface. The women of the village used the land to dry cow-dung cakes and had created a heap of cakes just near the classroom. The inhabitants of the village made their way towards the jungle through the school premises. They became ferocious and started arguments whenever I tried to stop them. Two leaders of the community were in conflict, regarding the ownership of the land. The children were also interested in such conflicts and lacked interest in studies. The villagers blamed the teachers for that. The total number of the students was 65, whereas it should have been 140.

Though the situation was critical, I did not lose patience. I thought of doing something which would solve all these problems.

First of all I tried to mobilize the students by polite behaviour, but they did not listen. I continued to teach the students with modern teaching aids. I emphasized English language learning. Whenever the situation demanded, I visited their homes and met their guardians. Gradually they started listening to me. Many of them attended the monthly meeting that I organized for parents.

During this period I met Lala Chudiyamal, a resident of Muzaffarnagar and a well-known social worker who often donated money for social welfare. I requested him to donate money for the construction of a room and a corridor in the school.

He agreed, but on condition that the school land should not be disputed. He promised to construct the boundary wall also, if I could make the land adjoining the school available to the school with the consent of the *pradhan*. The condition that he put was that the foundation should be dug without any conflict; only then would he send the bricks and cement for construction.

Being consoled by Lala Chudiyamal, I called a meeting at the school premises. I told the villagers, "If you help me shift the heap of dung-cakes from the school ground to another place I will get one room and a corridor constructed with the sponsorship of Lalaji. This will help your children to play and sit properly". I did not disclose the idea of making a boundary wall. All of them supported me and said *masterji, sarkar se mila tel, palleme mel* (meaning grab it, if it is free). This was my first success at community mobilization. The dung-heaps were taken a short distance away and the foundation for the room was dug. Lalaji also kept his word and the school got a room with a nice

corridor. Thereafter he made it a rule to visit the school twice a month and brought with him seasonal fruits, groundnuts and toffees for the children.

I could sense that the villagers were impressed by my sincere efforts. As a result more students were enrolled, and construction work was completed without any interruption. I had to let go my vacation time in order to supervise the construction. This impressed the Lalaji. As I said, I had not told the people about my intention to construct a boundary wall since this was a complicated issue. I was looking for an opportunity to tell them. Once I felt that I had built a good rapport I called another meeting. I told the people that if they moved the dung-heaps to the lakeside, Lalaji would sponsor the construction of a boundary wall covering the entire plane land around the school. I argued that, then, the school would have one acre of land, approximately, which could be used to establish a junior high school and a nice play ground could be made for the children. I emphasized that it was for the children's future. Most of them supported me but Kudi Singh and Prithvi Singh, who had always claimed rights to the land, opposed me. Kudi Singh said he owned some portion of the land, so he would not donate it. Prithvi Singh said that he had right of way towards his privately-owned land so he would not donate it. Patiently I told him, "Prithvi Singhji trust me you will be given a way towards your field, and you will not face any problem". He was very happy to hear this, and agreed to donate his part to the school. I continued to speak to Kudi Singh respectfully, "Choudhary Saab, please, do not put any obstacle in the development work of the village. Your name will be spoken with respect in future, if you donate your plot to the school". He was very pleased to hear such words and said 'yes'. After seven-eight days, the entire place was cleaned with the people's help. The village pradhan, Mr. Mahakapal called a meeting of the village panchayat at the school premises and transferred the land to the school. Then Lala Chudiyamal was invited with honour to visit the school. When he saw that the work had been done peacefully, he immediately sent the bricks, cement etc. and a boundary wall was constructed around the one-acre piece of land. I planted about 100 trees like Neem, Shisham, and some flower- plants. Now there is adequate space for the children to study and play. Student numbers also went up to 150 from 65.

All the villagers looked up to me as a successful and respectable teacher. They were so impressed that they put my name along with Shri Chudiyamalji's name on the foundation stone. I was transferred to the Bhokherhedi primary school in 2003. I joined this school on 02-07-03 and worked there till 11-09-05.

### **Experiences at Bhokherhedi primary school**

Though it is my native place I had not been in touch for a long time and hence was unaware of the village scenario. The school was 32 years old. There were five schools in this *kasba* and this one was considered to be the worst. Here, too, the village community had been misusing the school premises by drying cow dung-cakes. And there was a continuous flow of sewage water from the nearby *basti*. As a result the school land was muddy.

Though there were many eucalyptus, mango and *shisam* trees around the school, the environment was polluted. In fact, the mango trees did not bear any fruit due to the polluted environment. The children often fell sick. The registered number was 85 but many remained absent due to sickness. I came to know from the block officers that, if the school continued like this, it would be shut down one day.

But having been successful earlier, I was confident of solving these problems. First of all I scattered soil where the dirty water, released from the *basti*, had accumulated, and then made a drain which was ended in a distant pit (*gaddha*). After few days the accumulated water dried out and the premises became clean. Then I organised a parents' meeting and requested them to remove the dung-heaps, which had been piled up near the window, and were blocking the flow of fresh air into



the classroom. I convinced them and the dung-heaps were removed. Now the environment became clean and the effect was evident on children's health and their attendance. More children took admission into our school and the number went up to 155.

Then I approached various authorities to get financial aid for the construction of a boundary wall. Finally it was constructed by the Ram Ganga Pariyojna Department in June 2004. I supported them by not taking holidays during the summer vacation. I also developed a garden in the school compound. Now the school was full of greenery and healthy air. I was transferred to the Primary school at Rahampur on 5<sup>th</sup> of September 2005. By this time the Bhokherhedi School was being ranked second in the *kasba*.

## RAFIQ AHMED GANAI

I started my teaching career in 1999 at the Pethnoo primary school. This area was populated by the *mochi* community.

I have always looked to Al-Quran for my inspiration. That and my enthusiasm together played an active part in my effort at community uplift and enhancing the quality of education by introducing regional rhymes. My main aim was to provide a healthy and joyful environment for the children of this community.

### **Enrolment at Pethnoo**

I strongly uphold the view that the down-trodden should be pushed up using education as a means. As I said, at Pethnoo, the majority of the people belonged to the down trodden *mochi* community. The rest of them were marginal farmers. I faced the problem of enrolling the children in school. To solve it, I maintained close contact with the people; this brought them closer to me. I took the help of the community leader, Mr. Manzoor Ahmed Thokro, to call the parents to school; that made them feel that they were also an important part of society and capable of taking decisions about their children's future. Then I collected a small amount of money from the people on the eve of Idul-fitr and used it in 2003 to provide uniforms to some students of the *mochi* community. I also helped deserving students receive metric scholarships from the social welfare department.

### **Improving quality of education in Budroo**

During my tenure in the upper primary school Budroo I found that the children of grade one were not interested in learning English. To begin with I focused on co-curricular activities like cultural programs, morning assemblies, quiz programs, excursions, picnics, educational rallies etc. Besides that, I introduced regional rhymes in classroom teaching; my purpose was to generate interest among the children. Firstly I introduced Kashmiri rhymes and stories like the following in the regional language:

i- *Loktay Muktay Tarkoo, AchhWatan Mandchan chookoo*

ii- *Bistha Bishta Beyaru. Khutu Khoo wwan.Taru Kiya woolut babray pan.....*

I personally sang the rhymes with them in chorus. My next step was to introduce English rhymes like:

- 1- Twinkle twinkle little star...
- 2- Baabaa black sheep.....
- 3- Johnny johnny yes papa....etc

The results were very good. In fact, on seeing me in the corridor the children used to pull at my clothes and my arms and ask me to enter their classroom to teach them English lessons / rhymes.

Then I took a step further to establish this school as an ideal school by introducing the English medium in the 2002. I organized a parents' meeting and elaborated the problems faced by the children while studying in the Urdu medium. I gave them the examples of privately run schools. Thus with the parents' consent, I introduced English as a medium of instruction in the school and that has yielded fruit.

To impart knowledge, I have managed a non-profit based community school named; The Green Land Public School at my residence from 1991. The infrastructure has been raised with the help of community support. Students' tuition fees are collected only to run it smoothly. The only purpose of this school has been to serve the community by providing quality education at the lowest cost. The school is run by a locally established trust named The Green Land Welfare Trust Chandpora. I have personally played an active role in the management of this school, but purely on a voluntary basis, without any monetary gain. It has earned me a good name among the people of the area.

Hence, I conclude that community involvement is a necessary step for Universal Elementary Education and the introduction of rhymes and stories in the local language is an activity which creates interest among the children.

## VIRAMBHAI B GOYAL

I joined the Kharaghoda station prathmik shala on 24.6.99. I worked in this school for about six years. Teaching children with joyful methods has been my approach from the beginning. Whatever may be the subject language, social studies or Hindi I teach the children using various techniques like games, drama, dialogue, acting, songs and rhymes. I taught classes 5, 6 and 7. I often used group methods to teach, for instance, classification. I used to give different tasks like collecting leaves, thorns etc. to different groups. In this school I undertook action research to improve the reading and writing skills of the students of classes 4 and 5.

After working for about six years I was transferred to the Triveni school of Sayala Block in April 2005. After another four months I was shifted to the Bhaduka prathmik shala of the same taluka. I was asked to teach class four. There were 36 children in class four. I took some days to test the children's knowledge. I realized that their reading, writing and arithmetic skills were very poor. Only ten students were good at studies. The remaining were not even able to recite the numbers 1 to 100. I recalled the method that I had used for teaching the name of planets; I had made cards, which were hung around the children's necks till they remembered all the names. I thought of using this means to teach various concepts of language, arithmetic and environment studies. I discussed the idea with my colleagues and friends and they too were interested. First of all I tried the method to teach the numbers 1 to 100 and I called the activity "*Sankhya haar*" (number necklace).

### **What is *Sankhya haar*?**

For this I took a medium-sized card and made a hole on one side to pass a string through it. The length of the string should be such that the child should be able to pass it around his/her neck. Thus the card would hang like a necklace. A number would be written on one side of the card and a word on the other.

How I used it?

I used it for 35 children of class 4. One day I told them that I was giving all of them necklaces to wear. The children asked me, "Sir, are you giving us a gold necklace or one with beads?" I asked them to wait till 5 o'clock. At 5 o'clock, when school timings were over, I gave all of them the necklaces made of number cards. I asked them to wear them and go home. Many of them felt shy and awkward but when they saw the others wearing them their hesitation was removed. The next day I adopted a new method for roll-call. Once a child's number was called he/she was asked the following three questions:

1. what is the number on your necklace?
2. what number comes before it?
3. what number comes after it?

The child was applauded if he/she could give the correct answer. If he/she made a mistake or could not answer the correct answer was sought from other children. Then the cards were taken back and hung on the wall. I noticed that the children eagerly touched the cards and talked among themselves about the cards during recess hours. In fact after a few days the children of classes 5, 6 and 7 also started coming to our class to see the cards. The regular use of this activity showed results in about two months. By then about 25 children had learnt to identify the numbers 1 to 100.

Sometimes the children forgot the cards at home; sometimes the string broke. But overall, there were not many problems. The children enthusiastically wore the cards while going home in the evening and came to school wearing them. Often they were seen asking each other the details of the

numbers written on their cards. One thing I observed was that they took longer to learn numbers 61 to 99. Though I have not studied the problem in detail, this is what I experienced.

Then I introduced one more step. Each child was asked to write all the other numbers of the tens series, e.g. if a child had card 47, s/he had to write 41 to 50 in figures and words and then draw a square around 47.

As I said I got results in about 2 months. Thus I was able to teach in a way that was not boring for the children and resulted in concrete learning.

I tested their learning through games like *Saathi Shodh*.

After ensuring success in number learning I taught them arithmetic operations, especially addition and subtraction of small numbers, with the '*sankhya haar*'. Example: four children wearing cards of 14, +, 6, = are asked to stand in a row. Then I tell the other children that a child having a card that completes the operation should come forward and stand next to the child with = card. Thus a child with a card of 20 will come forward. In this way I developed the activity further.

Then I tried the same activity as an '*ABCD haar*' (to teach English letters), *pakshi haar* (to teach about birds), *prani haar* (to teach about animals) and '*karigar haar*' (to teach about artisans/ various occupations)

#### **ABCD haar**

For this activity cards with letters on one side and a word and a picture on other side were prepared e.g. for B, B would be on one side and the picture of a Bat and the word 'Bat' on other side.

#### **Pakshi haar**

These were cards of pictures of birds on one side and the bird's name on the other side. I used them to teach the unit titled '*pakshi jagat*' (the world of birds)

To use it I would point at a child and ask questions about his/her card like:

- what is written on the card?
- whose picture is it?
- what sound it makes?
- what does it eat?

Like the *Sankhya haar*, I used to give a card to each child at the end of the day. The children on their own used to collect information in order to be able to answer my questions. Thus they tried to learn enthusiastically and joyfully on their own. I used to provide them with additional information.

Similarly, I made cards of animals, of artisans. Every evening I used to give one card to each child to wear and the next day I used to ask questions related to it. This method became very popular in my school. A colleague who teaching in class 6 adopted this method to teach synonyms and antonyms and got good results. This activity has helped achieve the goal of 'learning without burden'. I have also created some *balgeets* to help the children learn without burden.



## YOJANA M HONRAO

I completed a B. Ed in 1999 and was appointed at the Akola Zilla Parishad school of Mulashi taluka in 2002. The village people were agriculturists. There were few students in school. The work I am describing here pertains to the problem of attendance.

The Maharashtra Government had introduced the Poshan Ahar Yojana in 1999. The idea was to increase student attendance by giving them an incentive. Moreover it was thought that the scheme would help parents provide food to their children. Accordingly, each child who attended school for 80% of the days in a month was to get 3 kilos of rice. Though it did have some effect on attendance, it did not exactly help the children receive nourishment because many parents sold the rice. So, in 2002, an alternative way of providing children with cooked rice at school was introduced by the government. According to the new scheme, the children of classes 1 to 5 were to be given *khichdi* or cooked rice.

This new scheme posed a problem for me. None of the inhabitants, members of the Village Education Committee or Mahila Mandal were ready to take on the responsibility of the cooking. The Maharashtra Government had sanctioned 50 paisa per student for cooking purposes. Since the number of students was small in our school, there was no scope for paying the cook more than Rs. 20-30. Working women earned about Rs. 50 as daily wages. None of the informal groups/committees was ready to help us financially to pay the cook's salary.

In this problematic situation, I realized the need for a strong social network and interpersonal relationships. I called a meeting of the people and put a request before the mothers of the students in our school asking them to take responsibility for the cooking. I told them that there were only 30 to 35 students in school; if they agreed, each mother would have to devote just one day a month to this cooking. I argued that by devoting only one day a month they would be able to provide delicious food to the children. They agreed. So we made a timetable and decided a procedure by which the rice would be sent to each mother the day before her turn at cooking.

Gradually the mothers developed competitive spirit among themselves. They brought in lots of variation in simple activity of 'cooking rice' in order to make the food tasty. The main motivation was that they were preparing it for their own children. Many of the families were agriculturists and hence the local varieties of rice like Indrani, Mogra available at home were often used instead of that provided by government. Sometimes they added some *dal* and other ingredients like ground nuts, potatoes etc. to make it tasty and nutritious. The students also enjoyed it since they got to eat different tastes everyday. As a result, students' attendance grew up. Now the students were often heard praising each other's mother.

Another benefit was that the children of poor community like Adivasi and Katkari, who didn't get to eat proper food at home, enjoyed the tasty food provided in school. Another advantage was that of developing community spirit. The students ate together; moreover they were eating the food prepared by women of different castes.

Moreover the money provided by government for cooking cost was saved and we used it to purchase utensils and books. By taking the help of women, interpersonal relationship grew strongly. This process is on till today.





## P S IRAI ARUL

I have been working as a teacher for the last ten years. The students need a learning environment in which they can enjoy learning and share their thoughts and dreams freely. This perception along with the problem posed at Gudalore School made me innovate in order to generate a new atmosphere.

The Panchayat Union Middle School, Gudalore was upgraded to High School, leaving behind the Elementary School with strength of 250 children and two teachers. This situation paved way for poor learning, disturbed classroom management etc. It became a challenge for the teachers and the community to cope with the situation. We consulted the DEEO, the AEEEO and faculty members at the Ranipet DIET. We received plenty of ideas. Then along with the headmaster, I made a plan of action according to which improving the physical environment of the school, improving the learning environment of the school and involving the community in these tasks were to be our focus areas.

To improve the physical environment of the school, we created a pond, an imaginary forest, an artificial mountain and a natural garden. To improve the learning environment we made every space in the school communicative of a good learning environment. We paid special attention to making many teaching-learning aids and created a permanent space for their display. The Headmaster, the teachers and the public worked together to implement these strategies. The teaching staff of Gudalore School decided to contribute Rs.600 regularly at the rate of Rs.100 per head towards the development of a high school. This practice still continues. As a result there has been a lot of development.

Some examples are as follows

- The environmental education concepts are painted on the walls of the classroom at the height of the students, so that they can touch, feel and enjoy all the pictures and enjoy learning.
  - The outer walls of the school bear concepts related to the lessons and competencies. These act as a resource for the students and also as a way of indicating that the school is a learning corner.
  - The seven wonders of the world are painted on top of the school building which when viewed along with the school garden looks very eye catching.
  - Photographs of international disasters and population explosion concepts are exhibited in a classroom to create awareness about our living world and our environment.
  - The path of life from the stone-age to the present in terms of food, shelter, dress, weapons and communication were painted on the wall to explain the continuous changes that have happened on the earth so far.
  - A pictorial representation of India from a bird's eye view is on the northern wall of the school.
1. The students use the classroom walls as blackboards and practice writing simple and difficult Tamil words through a WORD TOWER.
  2. The children use hand-level copy boards to learn writing
  3. Bilingual equivalent phonetic systems are used by both teachers and students. This method is more useful for children living in remote rural areas.
  4. The classroom is designed specially for basic mathematical activities.

5. A special stage has been devised to learn the ascending and descending order concepts in mathematics.
6. A Simple Experimental Activity Board has been devised to make the students learn the basic activities in mathematics.
7. An Aquarium is maintained by the students.

The public contributed in several ways like providing for slides, pit filling and digging artificial ponds. The public contributed the manpower for white washing, painting, cleaning the garden, carpentry etc. Because the teachers were interested a good collection of teaching learning material has been gathered for our school. When the Joint Director, Elementary Education, visited our school, he appreciated our TLMs and initiated the **permanent exhibition**. Now the school acts as a permanent exhibition of TLMs for other schools, it has been awarded the first prize for the development of Teaching Learning Materials. The students of this school have full liberty to operate any TLM at any time. As a result of all these changes we have achieved the target of cent percent enrolment, attendance is very high and students' achievement levels have gone up.

Schools activities like the celebration of Independence Day, children's day etc. are telecast through a local network. This school is a model for all other schools in terms of its approach, facilities, teaching methodologies, learning through games, and all other activities. Teachers of the PUM, the PUE, and the Matriculation Schools visit us along with their children to study the daily happenings in our school.

## N JANAKI

While teaching English in upper primary classes I saw that the children found it difficult to memorise poems. The poems are difficult to spell and are not in the rhymed. During exams the children were not able to recall hard words, spelling and punctuation marks. So I decided to develop "self learning material" using a computer and other TLMs and tried it out on ten students of class VII. I took the poem "*A Nation's Strength*" for my activity.

### Steps

#### Use of letter and word cards

Activity 1: The poem's words were taken from the alphabet. The students were asked to use the letters to make words. Such words were arranged in an order to make a line of a poem.

Activity 2: The cards with the words of the first line were spread in a tray.

The students were required to take the words, read the words, arrange them and form the first line.

Activity 3: The words were introduced in the form of missing letters on a board.

The students were to select the letters and fill up the gaps.

Activity 4: Once the students became familiar with first- line words, only the last word of a line was given and the students were required to fill up the gaps with three words.

#### Use of Audio Cassettes

Activity 1: The poem's lines were read word by word with the proper stress, intonation and phonetic spellings. The students repeated them with audio cassettes.

Activity 2: The cassette read the full line and the students repeated the line with the cassette.

#### Use of VCD

Activity 1: The students were seated before a computer. The lines of the poem appeared on the screen along with the sound when they play a recorded CD disk. The students were to observe the lines and listen to the sound.

Activity2: Again the computer CD displayed the same matter. The students were to spell the letters when the letters appeared on the screen.

Activity3: The computer asked the students to erase the first- line words by using the mouse and asked them to type in the same letters / words. If the word was correct it displayed words of praise and if it was wrong it displayed "try again".

Activity4: On the computer screen the poem's lines were in a "BOX" type image. The words appeared out of the 'box' when some one clicked on it. Students had to arrange the words and make the correct line. The computer gave points for correct arrangements.

#### Outcome

About 80% of the students could memorise the poem in first practice; 20% needed more practice. The spelling and punctuation marks were well remembered because of "Self Learning through the Computer".

The students could monitor their learning since the computer gave feedback and hence they enjoyed the practice sessions.

I have developed my activity further to make CDs for the poem with the necessary pictures to identify the words as clues and I have tried to mix sound.

I am also trying to use the same method for letter writing.



## J JOHNSON

It is the ultimate aim of a teacher to develop the students' language skills in primary grades. Language is meant for communication and it is through 'words' that concepts and ideas are put forth. The teaching of vocabulary is, however, a difficult task. Different methods should be used at the various stages of acquiring proficiency. The children should be familiar with a common core vocabulary, generally known to the members of a large community. But English being a foreign language, proper environments for learning this language do not exist in primary school classrooms. I observed that the students of standard V got poor marks in English. So I undertook a piece of action research "Enriching vocabulary in English at V - Standard through Activities". Through my preliminary observation I realized that teachers do not know the correct methodologies for teaching vocabulary. Another aspect relates to the number of words that ought to be taught to second language learners so that they may have a basic competency in listening, speaking, reading, and writing. Teachers generally do not pay attention to this aspect. Moreover, the translation approach ignores the cultural and idiomatic aspects of the collection of words. The translation approach reduces vocabulary teaching to issues of teaching of meaning. Moreover the teachers do not know how to use gadgets like radio, tape recorders etc. Thus boring classroom methods and lack of study support at home, finally lead to poor learning in the children.

Bearing all these aspects in mind I undertook my research with students studying in Standard V at the CSI Primary School at Siraikulam, Kadaladi Range and Ramnad district in Tamil Nadu state.

The hypothesis for my research was:

The following games and activities may improve the children's English vocabulary:

- a) Flash cards
- b) Treasure hunt
- c) Word ladders
- d) Arranging jumbled words
- e) Matching discs
- f) Blackboard race
- g) Use of tape recorders and audio-cassettes

In order to find out the children's level of learning at the beginning of the study, I conducted a test; the average score was 50. I had used a test with the following items: match the following, fill in the blanks, make words from listed letters, rearrange the letters, write the feminine form of masculine nouns, choose the correct answer etc.

Then various, carefully planned games and activities were used for vocabulary building e.g.

### **Flash Cards**

Usually the teacher considers a flash card as a separate entity to teach a word. The correct way of using a flash card is to show it to the students for a few seconds. Each flash card must have a note. For example, the flash card bearing the names of an animal may have a sentence describing its nature.

- a) The Lion is a majestic animal.
- b) The Tiger is a ferocious animal.
- c) The cow gives milk.
- d) The lamp signifies innocence.

While implementing my ideas I noticed that the children showed much interest in games and activities. They participated with great enthusiasm in classroom activities. They used to wait anxiously for English classes so that they would get a chance to explore more activities. They were able to master the words very effectively. This was evident in the post test result, the average score for which was 80.18, with a clear difference of 29.68.

My suggestion to teachers is that they must first prepare a category-wise checklist of words to be used: e.g. 1. Structural words 2. Substitution words 3. Grammatical words 4. Content words. Once these words have been introduced in class, the same words should be reinforced through different play way techniques. These techniques will also help promote several other language skills.

## DIKSHA JOSHI

I joined the Okhalkanda primary school in 1999. The school used to have a deserted look. The classrooms (there were two) and a playground were unattractive. Such an environment together with problems like the care of siblings and other household responsibilities kept the children away from school.

These reasons motivated me to beautify the school. I used Rs. 2000 from the school grant to bring coloured flower-pots, playing kits like bats, balls, carom sets, and rings, and oil paints to paint the school walls with different pictures of animals and birds. To do all this I chose the convenient time before and after school.

I introduced a prayer from one of the Hindi movies in the prayer assembly. This was followed by the recitation of *Shlokas* and 2 English prayers (with *tabla*) which attracted the children very much. I taught them 20/22 poems and devotional songs and stories which attracted them to school.

But I was not satisfied with this; I wanted to do something new, which would bring all the children to school. I tried to find out about their interests. I came to know that these students drew with coal and pencils. I thought of giving them a new direction. There was no electricity in the village so we used to put on a lamp for our daily work. One day I noticed that my fingers were taking different forms of shadows in the light, and this inspired a new activity. I taught the children to make different shapes/drawings like toads, crocodiles, birds, peacocks, hens, camels, giraffes, dogs, rabbits, etc. through finger prints. I also applied sponge painting, thread painting, spray painting, and potato, onion, lady's finger impressions which were so appealing that the children tried them all the time.

### **Developing stage of innovation**

First of all, at home, I made different forms in shadow by outlining my fingers and palms.

Then, I taught the children to make such shapes using their palms and fingers and outline/trace them in their notebooks in pencil.

Then I put colour on the students' palms/fingers and taught them to print/press it inside the outline

Finally I touched up the drawings using coloured sketch pens to make beaks, legs, tails etc.

### **Application of the innovation**

By doing this they started a comparative study of the picture-chart (which was hung in the classroom) and their hand-made prints.

Through these pictures, I taught them *language* like sentence making, knowing different words etc.

Then I started teaching *numbers* in the lower class by asking questions like:

How many ducks are there?

How many peacocks are there?

Which duck is bigger?

Which one is smaller?

Which one is sleeping?

How many are flying?

How many peacocks have you made?

How many legs are there?

I found that they were learned very fast. Then I started using pictures to build **science** lessons, like asking the children to collect information related to animals and birds.

### **Evaluation**

When the different drawings were being made, evaluation also followed; to check how they put in colour, how they imprint their fingers, how they discussed things in class and how they answered my questions. This is an evolving process which continues with the teaching.

When the children were able to make figures like toads, peacocks, ducks, giraffes, dogs, rabbits etc. they were surprised and very happy that they could make pictures which seemed very difficult. This was my success. Now small children did not cry in school, they seemed to be happy everyday and stayed longer in school.

I had undertaken several activities like singing, games etc simultaneously. But the children enjoyed the activity of picture making with palm/finger-outline the most. As soon as they came to school they asked me “*Ji Art Banaye?*” These were the things, which made me feel my success. The students were happy to show the drawings to their neighbours and family members.



## PRAMOD P KASTURE

Dharmapuri is a small village in Solapur district in Maharashtra state. After being awarded the degree of B.Ed., I joined as a teacher in the Panchayati School of this village. The village-population was about 2000. Here I observed that people were apathetic towards school education and hence the attendance of the children was very poor.

On the first day, I witnessed the chaos during the prayer assembly. Some of the students sang songs, poems, and the prayer. The teachers looked at them without much interest and some of the students used the benches and empty *dabbas* as *tablas*. Later on I realized, that though the situation had appeared to be chaotic, that was probably the only part of school hours that the children seemed to have enjoyed. Another positive thing that I noticed was that the students had good voices. That gave me an idea. I thought of giving them training in music.

I further thought that the event of the annual- gathering (known as the *kendriya sammelan*), which used to be organized at our school, might provide a platform to demonstrate the children's skills. I came to know that the *sammelan* never began with an opening song, since none of the teachers could play musical instruments or sing. Sometimes a child may have been asked to sing a song as the opening event, but beyond that the function had never had proper opening ceremony. I decided to change this.

I carried out a kind of informal test to judge the children's skills in music and then started training them. I also spoke to those parents whose wards did not come to school. I told them that their children would enjoy the 'music' activity at the school. Some of them said, the children were taking care of their siblings. However, once I started the training at the school, I observed, that gradually the number of students present increased.

I generated a passion for music among them. My personal interest in writing inspired the students further to pay attention to the development of their special talents (I wrote poems, songs, play for the children. These were used for the literacy mission and also published in *Jeevan Shikshan*). The students liked my songs, plays and poems.

Gradually, the music training helped me bring the non-attending students to school and also divert their attention towards studies. My purpose in teaching music was to attract parents and educational officers as well. I did not have any instruments to teach the students. I spoke to the parents and the educational officers about this. I told them that I wanted to train the talented children in instrumental music, that I would make a group of such talented children and train them in the evening at my home. The people contributed and I was able to get about 20 instruments like *theTabla, the Dholki, a Casio, a Dhol, a Khanjiri, a Taal, a Thal, a Padham, a Halgi, a Tarang, a Ghungroo* etc. I named the group '*Sargam Bal Vadya Vrund*'. Now the students were prepared to play instruments according to their special talents. They could sing the prayer, songs, nursery rhymes, poems, welcome songs, national songs, Marathi songs, and Hindi songs etc. using musical instruments. They performed programs at our school functions like the 15<sup>th</sup> August and 26<sup>th</sup> January celebrations. They also played the *dhol* in the Samuhik Kabayat (physical exercise).

Seeing their talent, the parents of their own will provided a special uniform for the music group. Our school won the first prize in the singing competition organized at the district. Now the students

were invited to perform at special events organized at the district education offices. The BEO Shri Rajendra Patil and the DEOP Smt. Suman Shindey organized and relayed a *Bal Sabha* at Akashvani, Solapur on 1<sup>st</sup> February 2002. That programme was wonderful and proved to be very encouraging for other schools. Many schools obtained recordings of the programme to show them to their own students.

Then I found the courage to take the children for a test to the Akhil Bhartiya Mahavidyalaya Mumbai. Ours was the only school whose students were taking that test. In the year 2001, 19 students of my school appeared for the music test conducted by the Akhil Bhartiya Mahavidyalaya and cleared it with a good score. The trend continued and 22 students in 2002, 35 students in 2003, 17 students in 2004 and 15 students in 2005 appeared for the test and passed with good scores. This examination proved to be a good way of motivating the students.

Seeing the Bal Vadya Vrund's talent, many parents and individuals gifted the group a variety of things. The group mobilized the huge sum of Rs. 1,44,00; out of which we spent Rs. 53,000 for school benches, Rs. 63,000 for instruments, Rs. 2000 for a school board, Rs. 3000 for *Khel Sahitya* (games/sport material). The rest of the amount was set aside to help the poor children.

Along with music, I laid emphasis on academic learning. I give special training from 8 am to 10 am and from 6pm to 8pm for the scholarship exam. The previous year 11 students had appeared for this test and succeeded.

Due to this innovation not only has the attendance of the children improved but also the registered number has gone up, since the children of the neighbouring school also take admission in our school. Moreover, I am sure that the children would be able to use their special skill in future for their advancement.

## SOPAN G KHAIRNAR

I started my teaching career in 1998. This school was situated in a tribal village of Kalpa Taluka in Nasik District. It had classes from standard 1 to standard 4. The villagers usually took their children along with them when they went out for daily wage work. As a result poor enrolment and absenteeism were major problems.

I met the parents and counselled them regarding the importance of education, and why they should enrol their children in school. They understood my view and enrolled their children. But I found that the children kept crying in school, because they were in the habit of going to the jungle with their parents. Collecting logs and root vegetables (*kandmul*) while wandering in the jungle was more fun than being in school. In school, they felt imprisoned and were scared of other children. So they were unable to concentrate on study and kept crying and finally vanished during the recess.

To attract them to school I did two things: I started an Anganwadi so that children would become familiar with the idea of schooling at a very young age. They were provided with notebooks, pencils, pens, lunch boxes etc. They were taught to play games and sing songs. Gradually they overcame their fear and were motivated to stay longer in school. Another thing that I did was to decorate the school to make it look attractive. At the beginning of the new session (June), I made a *Rangoli*, and distributed flowers and balloons to the children. To make them feel important, I made a circle with yellow paint, inside the classroom. The students enthusiastically settled themselves inside the circle and participated in studies. I carried out various activities like story telling, singing songs, playing games, mimicking birds and animals. I decorated the class with charts of animals, birds, trees, leaves, flowers etc. I used word cards and picture cards as TLMs for teaching; as a result the students enjoyed my classes.

In class 1, most of the children were *Adivasi* (tribal); their mother tongue was the *Bhilli* dialect. I started learning *Bhilli* and used it while talking to the students. They were very happy. While interacting with the children I came to know that they were fascinated by songs. I could play the harmonium very well and the other teacher was good at playing the *tabla*. So we made a *Geet Manch* with the help of the students. We chose a group of students with good voices. We trained them in solo songs, group songs, poems, cultural events etc. They performed in school on various occasions. Gradually they became confident enough to present programs outside school and won many awards.

**Our** school program was relayed through Jalgaon radio, where the main participants were *Adivasi* students (members of the *Geet Manch*). The students rejoiced their participation.

I also introduced an innovative method for writing. As I said earlier, this village was populated by *Adivasi* and backward classes. Their financial condition was poor. They could not bear the cost of education for their children. So, instead of asking the children to write in notebooks, I used to collect waste cloth from the tailor and kept them in classroom for the children to write on. They enjoyed this novel approach. Sometimes they brought things on their own, like 'leaves', to write in the classroom. Such incidents exhibited their creativity and interest and gave me the confidence that my experiment had worked.

For science teaching I did a project with the support of the VEC and the BEO. I tried to encourage the students and increase their interest in science. I made TLMs in science for class 1 to class 7 which included recognizing herbs, animal world, business world, information about science etc. Our

students are able to give demonstrations on these TLMs. By doing this, they developed interest and scientific bent of mind.

## NASEER AHMED KHAN

I have been working as a teacher since 1985. At present I am a head master with the *purba madhyamikvidhyalay*, Naglanatthu, Aligarh. I have always emphasized quality education, for which I have invented various methods and materials.

Use of *Chutkula*

Use of TLMs

Attractive paintings

These methods were unique and different, and the children found them interesting.

### **Use of *Chutkula***

This happened when I had just resumed duties at the Shiv Bal Vidya Mandir Junior High School. One day, my class appeared to be never-ending, and the students looked bored and inattentive when I was teaching mathematics in standard 8. Meanwhile, Sri Shesh Chandra Gupta, who was the school manager, came to my class and told the students a *chutkula*. All of them laughed and enjoyed themselves. After that he told me to continue. I realized that the students were energized and had become attentive.

This incident was the source of my inspiration to use the *chutkula* in class.

From that day I assimilated this art of teaching and used it in several ways. This was reflected in the enrolment and retention of the students. I used it while teaching different subjects in the same class, in a multigrade situation, in *Balsabhas* and in the celebration of national festivals etc.

*Chutkulas* played an important role in entertaining the students as well as the people around.

Moreover my *chutkulas* were humorous and educational and were based on day to day life. Most of the teachers and officers invite me to perform my *chutkulas*, thus my fame has spread. This use of the *chutkula* has continued. One example is given below:

To encourage children to study:

### ***Anpadh Gawar* (illiterate villager)**

There was a Panditji, whose wife Panditayan, was Anpadh and Gawar. There was a neighbour with whom Panditji was very friendly. They passed the time by sitting and gossiping together. Panditji went to the office daily.

One day Panditji went to his office after having a bath and his lunch. Soon after his departure, his friend came to his house and knocked at the door and said.

Friend: Is Panditji there.

Panditayan: Panditji has gone to the office, tell me what you want?

Friend: Nothing as such. There are some guests at my place. I wanted a *Rajai*. If you have one give it to me.

Panditayan: There is a *Rajai*, but I cannot give it to you. Take it from Panditji, once he comes back from the office.

The friend said, "Ok, it doesn't matter" and left the place.

When Panditji came back from the office, Panditayan served his food and said softly:

Panditayan: *A suno ji*

Panditji: *Haan Kahiye*

Panditayan: Your friend had come to our house after you went to the office.

Panditji: *Achha* what did he say?

Panditayan: He said he had some guests at his house, and wanted a *Rajai*.

Panditji: *Achha*, Did you give it?

Panditayan: How could I give it without asking you?

Panditji: What did you say?

Panditayan: I said we had a *Rajai* but I could not give it. I told him, "Let Panditji come from the office, you take it from him".

Panditji: *Hatteri*, why did you say that?

Panditayan: What would I say then?

Panditji: You could have made any excuse

Panditayan: What kind of excuse could I make?

Panditji: *Aree bhai*, when he said he had guests in his house and needed a *Rajai* from us, you could have said immediately, '*Een...Rajai*, we had only one. That was also dirty, no thread, no cotton inside. It is worn out'.

Panditayan: Ok

Panditji: Yes, you should make excuses like this and never put things on me. If he comes now, he will positively take it from me. You manage it.

Panditayan: Ok, all right.

The next day Panditji went to the office after his bath and food. After some time, his friend came and knocked at the door, and said 'Panditji'

Panditayan came out and said, "Tell me what did you want? Panditji has left for the office".

Friend: There was no work as such. Today I have to do some work. For that I need a lantern, if you have one give it to me.

Panditayan: *Een...* lantern? We had only one lantern. That one was dirty. There was no thread in it, no cotton. It is worn out

The friend put his hand to his head, and thought about her words (what was she saying?) Then he said, "no problem" and left.

When Panditji came from the office, Panditayan served him his food and said softly,

Panditayan: *A Sunno ji*.

Panditji: Yes tell me.

Panditayan: Your friend came today also, after your departure.

Panditji: *Achha*, what was he saying?

Panditayan: He said, he had some work to do today so he wanted a lantern from us.

Panditji: *Achha* did you give it?

Panditayan: How could I?

Panditji: What did you tell him?

Panditayan: I made an excuse

Panditji: What excuse, did you make?

Panditayan: When he said, he needed a lantern because he had to do some work, I told him bluntly, lantern? .....Where was the lantern? Only one lantern we had, that one also dirty, there was no thread, there was no cotton, it was cracking and breaking.

Panditji: *Hatteri*, why did you say that?

Panditayan: You told me to say so.

Panditji: *Aree bhai*, when he asked for a lantern, you should have said: *Een....* lantern, what lantern, only one lantern was there, there was no *mohra*, no *batti*, no glass, no oil, lantern was ...This type of excuse you could have made.

Panditayan: OK now I understand. I will not forget.

Panditji: Yes you should make an appropriate excuse.

Panditayan: OK all right.

On the third day Panditji left for the office after having his bath and meal. This time also his friend turned up and knocked at the door.

Friend: Is Panditji there?

Panditayan came out and said, "Tell me what did you want him for? He has left for the office".

Friend: Nothing much. Today we have a party. I came to invite Panditji to the party. Send him for dinner.

Panditayan: *Haan* Panditji, where is Panditji? There is only one Panditji, that Panditji does not have any *mohra*, no *batti*, no glass. Panditji does not have oil.

The friend was stunned and tried to figure out what she was saying about Panditji. He touched his forehead and said, "Ok no problem".

In the evening Panditji come from the office, she served him food, and said softly

Panditayan: *A Sunno ji*.

Panditiji: Yes tell me.

Panditayan: After your departure, your friend came again.

Panditiji: *Achha* what was he asking for?

Panditayan: Today he came to take you.

Panditiji: what did he say?

Panditayan: He said, today they have a party. He wanted to invite you to dinner.

Panditiji: Achha what did you say?

Panditayan: I made an excuse Simple.

Panditiji: What was that?

Panditayan: *Are baba*, when he said, he had a party and Panditji was invited, I said immediately, "Panditji, where is Panditji, I had only one Panditji, that Panditji did not have any *mohra*, *batti*, also he did not have any glasses, Panditji did not have any oil.

Panditiji: *Hatteri*, Did you say that? You have spoiled my image ...you illiterate *gawar*.

After ending this joke I tell the students, "Your brother and sister, who do not study/go to school, will behave like this. Not only your children but your grandchildren will be like this. Now I advise you to start your study from tomorrow. I'll teach you".

### Use of TLMs

After attending a TLM training session in mathematics, science and geography at a DIET, I was inspired to make TLMs for difficult concepts. I started making different types of T.L.M at my house, school & B.R.C. and involved others as well. One day I was teaching algebra to class 8. One student told me to explain  $(a+b)^3 = a^3+b^3+3 a^2b+ 3ab^2$  with the help of a drawing. This was a big problem for me because I did not know how to work it out with drawing. I diverted the children by promising that, "I would prove it, but not today". Then I pondered over the situation. I had an idea that drawing would not be the solution. I made a plan to make a model.

I made a cube of wood. Each side of the cube was denoted as being the sum of length 'a' and length 'b'. Then I cut it into 8 different pieces in such a way that each one of them could be described by the lengths 'a' and/ or 'b'. To make the parts clear and notable, I painted them in different colours and wrote 'a' and 'b' on all the sides. The students measured the sides of each piece and calculated the volume. They found that two of the pieces were of the volume  $a^3$  and  $b^3$  respectively, three pieces were of the volume  $a^2b$  and another three were of the volume  $ab^2$ . Thus children could understand that  $(a+b)^3 = a^3+b^3+3 a^2b+ 3ab^2$ .

After doing it for several times children were happy.

This model was kept in my school, I presented before teachers' meeting at a DIET. The teachers complimented me for my effort.

**Attractive paintings**

I had a passion for drawing from my childhood. When I was in class-2, at primary school Gagori Buzurg, Aligarh our headmaster Sri Sardarsingh Yadav made different drawings of political leaders of our country, animals, birds and importance of cleanliness etc. on small pieces of paper, which were hung on walls. I liked those drawings very much. I used to watch his style of making. Gradually I imitated him. I continued to paint during leisure times. At college my teachers noted my skills and encouraged me. From that time, I was inspired to draw and paint. I have made many paintings of flowers, fruits, vegetables, trees, plants, animals, birds and scenery. I use drawing as an alternative to class room teaching in arts.

**Outcome**

Teachers call me as *Khan Saheb Chutkulawale*. I am known and respected for my special talents at two DIETs. Students enjoy being in my class and remain attentive. They discuss my TLMs and *chutkulas* in the village, and this encourages other children to come to the school.



## M KRISHNA MURTHY

For the last eight years, I have been teaching stds. 1, 2, 3, 4 and 5. I faced mainly two problems in applying innovative ideas.

- How to make the children *attend their classes regularly* and on time. Since they are new to formal education, it becomes necessary to take steps to encourage them.
- How to make all the students *understand the concepts* and to make lessons easy.

### *Improving attendance*

The junior students are still not accustomed to leaving the domestic (homely) atmosphere and their parents. At this tender age, they do not know anything about the necessity of education. Most of the children show great joy at a school holiday. When parents have to go out of station for some urgent work, the students also join them. Therefore, motivating the students to attend school without taking leave becomes crucial. First I tried to persuade the parents by saying that the studies of their wards would suffer if they took frequent leave and that they must send their wards to school on continuous basis. Yet 'leave-taking' (absenteeism) continued. So I decided to motivate them through incentives. Here, I used an incremental approach; without saying that they should come to school continuously for one year, my suggestion was that they should come to school every month without taking leave. I announced that such regular students would be given prizes. Every month, I give prizes to students who attend school without taking leave. I give them articles like pencils, erasers, pencil boxes, sharpeners, etc. These prizes which provide essential materials free of cost, maintain their enthusiasm. I have tried to provide all possible assistance for physically challenged students also. Gradually the number of leave taking (absentees) students reduced, and, attendance recorded a notable increase.

### *Making concepts easier through self written songs*

Another problem was that of making concepts interesting and easy to learn. I had an aptitude for writing poems. In college functions and annual day celebrations I used to write songs myself and sing them and participate in all festivals. I had also written and acted in plays, during our native festivals and Pongal festival programmes. "*VazhnthuKattuvonm*" (We will show life) and "*Chiriththa Mullai*" (smiling Jasmine) are titles of plays I have written and staged. I realized that this talent might be and beneficially employed. I had already written songs on "sweetness in learning", "easy learning" and often sung in primary class programmes. So I started writing songs to teach various concepts. A booklet titled "*Azhaku Nila*" (Beautiful moon) has earned me a reputation among teachers and the general public.

Though writing lessons in musical mode was easy for me, supplementary devices were required for teaching purposes. For the 1<sup>st</sup> and 2<sup>nd</sup> standards I made supplementary devices for many lessons. I use them along with my songs while teaching. As I teach easily and sweetly in song-mode, students of all classes are enthusiastic, eager and inquisitive.

While writing lyrics (notes of song) I include all the concepts and content of the lesson which are constructed into a song. Then I teach it over a prolonged period. The reason for this success lies in our experience with movies. Both children and grown ups, enjoy movies. Even after many years, though the story of a movie is forgotten, the lines of its songs lie hidden, in our memory. Therefore,

a song cannot be taught as a one time end-song, it has to be taught while taking the relevant lesson throughout the week. Then I ask questions related to it. In this context, to show an example, in the Std. 3 social sciences lesson, a song from the lesson captioned "Stop! Observe! Go!" is given here below:

"In School in a danger-zone road  
Morning and evening both times  
Walk on the left side foot path  
Your future beauty is in your walk  
Don't play and run on to the road  
Don't walk like cattle  
Don't cross over carelessly  
Don't run on to road without looking  
Accidents don't occur on their own  
If accidents occur it's very troublesome  
If you walk carefully there is no fear  
Thinking after an accident is of no use"

Teaching the themes of the songs, with relevant supplementary devices makes learning interesting and long lasting. Generally, in the normal method of teaching lessons, when a question from the crux of the lesson is asked, the number of answer-giving students was low. Now, while teaching in song-mode, I have observed that 65% to 75% of the students knew the answer. I also noticed with a sense of gratitude that my songs were written down, by other school teachers and used.

My co-teachers (colleagues) say that, if my songs are recorded on C.D. and distributed, they will be appreciated and my ideas can be disseminated to all schools. I hope that I shall be able to do so one day.

## MEENAKSHEE A KSHEERASAGAR

Takli village is situated in the southern part of Sholapur District close to the Karnataka border. I joined the school here in 1997. The place being close to Karnataka state, the children spoke *Kannada* more comfortably than Marathi.

I had been teaching mainly lower grades, but in June 2004, I was assigned to grade 5. They were the same students, whom I had taught previous year in standard 4. So, I knew them. I found that the total number of students was smaller because some of them, who were good at study, had gone to the in high school. The ones who stayed back were weak in reading and writing. Most of them did not know Marathi properly and their mother tongue was *Kannada*.

I felt that, if I could generate an interest in Marathi they would enjoy their study. So I came up with the idea of a self-made library using daily newspapers. For that it was important that children be able to read; so first of all I provided them with remedial in June and July. I made three groups: children good at reading, children with poor reading skills, children who could not read at all. I inspired the children, who could read well, but paid more attention to those who were weak. I arranged hour-long extra classes after school hours. First, I gave them newspapers to read. Different newspapers had different columns for children, like "Balchitra", "Ankur". I observed that the children not only read, they also discussed the content among themselves. For two months newspapers were accumulated. Then I thought of using these papers. I started cutting out some portions and pasting them in a note book.

Then I made subject-wise groups of students cut the newspapers and paste them in a note book. They made many books out of waste paper. They took an interest in reading and discussing these new books. As a result their reading ability and power of expressing their own views, developed.

These newly made books had different chapters:  
*Collection of good thoughts, Day Special* (each day had some speciality on account of events taking place; recollecting the previous year's days by their events was called 'day special'. Doing this, the students increased their general knowledge), *Bodh Katha, Legend Information* (information about the myths and legends of India)  
*Games, Art and creativity* (pieces of Rangoli, Mehndi and drawing were compiled; because of this, many were attracted to art and participated actively), *Friendship with the Birds, Collecting information on the environment*.

With the help of the students, I made 136 books by cutting out pieces on various subjects. These books are kept in the library. Accessibility is not limited to the students of my class alone; it is available to the whole school. The students' interest in Marathi has developed. They are inspired to read the books made by their own cuttings. They learnt to make something out of waste. Now they read Marathi quite well.

## **K V MAHENDIRAN**

### **Teaching EVS through action songs in rural primary schools**

I work at the Union Middle School, Mullvadi of Arcot Union in Vellore District. Here I describe my efforts to provide an EVS education in a joyful manner. The goals of Environmental Education, as endorsed in the Intergovernmental conference organized by the UNESCO/UNEP in Tbilisi USSR in October 1977, are to provide every person with opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment.

The target group for my work consisted of learners who fall under the pre-operational stage (3 to 8 years of age). At this stage the curriculum is at best an indicative guideline and to put it across calls for a fine sensitivity to local situations. In order to impart environmental dimensions to the children's learning, the opportunities available in and around the school should be used, thus backing up all learning with the daily life experiences of the children.

Keeping these views in mind, I have developed the channel of teaching Environmental Education through songs. Like the textbook content the songs were also developed on the basis of competencies. They were sequentially arranged in an attractive way. For this I classified the Environmental Education concepts in a sequence, in such a way that the students would enjoy a journey starting from the sky and ending with society, by way of a passage through the planets, the sun, moon, rainbow, plants, birds, animals, human beings, their professions, celebrations and society as a whole. These self-developed songs made the children aware of their environment in a very simple manner and also created an interest in understanding the environment around them. The songs are very simple and rhyming.

### **Salient Features of Song Collection**

The words are very simple and rhyming

Since the words used in the songs are common in the daily life of the students they do not find them difficult.

This collection is accompanied by an audio CD. Free hand and body movements also accompany the songs. The students feel a great self-satisfaction while singing the songs.

The songs are based on the competencies envisaged by minimum levels of learning.

They acquire knowledge, without knowing that they are learning.

Since the songs are accompanied with music, the students easily memorize them along with the concepts.

These songs develop the students' imagination and creativity. The songs stimulate the search for knowledge.

The interest created among the students encourages them to remain present in school and deals with the problem of absenteeism.

There are thirty songs; one song is given here as an example. This song, under the title 'birds', helps the students attain different competencies at different ages in different classes. E.g. std. 1: knowing the names of the birds, std. 3: knowing the morphology and food habits of birds.

This song is taught with proper rhythmic and body movements, so its concepts remain in the minds of the students. These become deeply rooted as the years pass. Moreover, this song can be used for multi-grade Teaching.

## PURAN LAL MALI

I was born in a village in Chhatisgarh state. Nobody in my family had been able to complete school education due to poverty. I was very interested in studies so despite all odds I continued. I tried to bear my own expenses like school fees, expenditure on stationery etc. by doing part time jobs. Being a bright student I managed to do a BTI with the support of a scholarship.

### **Community mobilization at Petechuva**

My first appointment was at the Petechuva primary school of Gurur block in Durg district. It was a small village in the forest area. There were 35 families and 220 people residing in this village; 90 % of them were from the ST community, 5 % were SC and 5 % were OBC. I took charge on 15<sup>th</sup> July 1981. The school had been sanctioned just recently and hence did not have any building. I gathered 22 children of school going age and registered their names. We began our classes on a veranda in Shri Punaaram Kunjam's house. Since the number was small I could teach them very well. Soon, the abilities and skills of the children became evident to the community and they felt very proud. We established good relations with each other. Then I requested them to help me construct a school building. They agreed to donate 1 quintal of wheat per family. The money obtained by selling the wheat was used to purchase building material. They also agreed to provide labour. Thus, with community support we got a school building with two classrooms. Meanwhile word of my efforts reached the authorities at the district office and after a year, a grant for the construction of a school building was sanctioned. Soon we got a new building and the old building was converted in to a residence for the teacher. Community support continued; the people took the responsibility to provide uniforms to children of poor families and the women took the responsibility of maintaining the cleanliness of the school. I realized that these people had no knowledge of letters. They were quite illiterate. I started teaching them letters in the evening. I taught about 60 adults (male and female) and after some time they learnt to read and write. In a short while a literacy programme was initiated by the state government for the entire state. As part of the programme we received three books. Since I had already taught the people to read and write they could read the books proficiently. The news reached other places and the Education Minister Shri Premprakash Pandey visited our school on 15<sup>th</sup> August 1990 and congratulated me. He declared our village first to achieve the target of cent percent literacy. The news spread through the entire region and the teachers of other schools became competitive.

In this place I also focused on the cultural development of the community. I encouraged them to form a Mahila Mandal, a Navyuvak Mandal, a Lila Natya Mandali, a Ramayana Mandali etc. In this way I added a new dimension to their lives and in a way continued the literacy mission further. These informal organizations learnt to carry out the cultural programmes for the celebration of festivals like *Hal Shasthi*, *Ganesh Chaturthi*, *Kartik Purnima*, *Rushi Panchmi*. The Ramayana Mandali and Ramdhuni Party's fame reached other places. Simultaneously I continued my study and acquired an MA degree (Hindi: 1987-88, Economics: 1989-90, History: 1991-92).

### **Quality improvement in Gurur School**

Looking at the success of my work, I was given a transfer to the Gurur primary school at the block headquarters (Gurur) in 1995. Time management was a crucial problem here since there were only two teachers for about 130 students. So I assigned various responsibilities to children like:

#### ***Cleaning the school***

Children studying in classes 3 to 5 were put in charge of cleanliness. Groups were formed and day-wise responsibility was given to each group. Each group had a leader. Their job was to come early and clean the school premises, arrange the cloth- mats in each class and empty the dust bins (which were kept in each class).

### ***Opening/closing the school***

Again the responsibility was given to children studying in classes 3 to 5. They were required to open the school gates at 8.30, then ring the bell during school hours and finally close the school gates at the end of the day.

### ***Gardening***

This was also a problem area. The usual practice was to do the planting once a year. This was done by teachers or by some invited guest from the community. The plants often dried up during the year thereby making the entire effort a total waste. So I changed this practice by giving the children the responsibility of planting and nurturing plants/trees. Each child was asked to plant five trees at the beginning of the academic year (which is monsoon) and look after them through the year. If the plants remained alive and green throughout the year the child was given a prize at the annual day function. As a result the school premises look very green now. The visitors often ask me the secret of maintaining the greenery.

Other than these administrative problems we also faced the problem of maintaining the quality of teaching. Due to a high teacher pupil ratio it was not possible to pay individual attention. So I made lots of charts for all subjects and hung them in the classrooms, e.g. Maths: a place value chart, geometric shapes, formulas, measurement etc. There are about 100 charts in class five alone. Whenever the children see them they can revise what they have learnt. If I am busy I ask the monitor to teach with the help of the charts. He generally asks the questions related to the charts and makes the class revise. Every year we celebrate a '*pariksha parinam utsav*'(celebration of achievement of school exams) by inviting the parents. The first, second and third rankers are honoured and given certificates.

The outcome of such activities is that, for the last three years, 95% of the children have passed the annual exam with first divisions.

## E MALINI

### **Teaching Science as Inquiry**

I think that in the early years of school, all students should develop

- The abilities necessary to undertake scientific inquiry
- An understanding of scientific inquiry

In the early years of school, students can investigate earth materials, organisms, and the properties of common objects. Although children develop concepts and a vocabulary from such experiences, they should also develop inquiry skills. As students focus on the processes of investigation, they develop the ability to ask scientific questions, to investigate aspects of the world around them, and to use their observations to construct reasonable explanations for the questions posed. In this way, guided by teachers, students continually develop their science knowledge. Students should also learn, through the inquiry process, how to communicate their own and their peers' investigations and explanations.

With this goal in mind I undertook a piece of action research. I conducted a test for 45 students to assess their scientific inquiry skills. Then a single group design was used and the same group was given experimental treatment.

I describe this procedure below.

### **Statement of problem**

Primary school children lack scientific inquiry skills and an understanding of scientific inquiry.

### **Listing of probable causes**

- a. Students do not get the opportunities to ask, answer questions and compare answers with already existing knowledge
- b. The students are not exposed to good explanations based on evidence
- c. Teachers do not provide opportunities for exploration in a focused manner using simple tools such as magnifiers and measuring devices

### **Formulation of an Action Hypothesis**

If students are given the opportunity to learn and use the scientific method to learn concepts, scientific inquiry skills will develop.

### **Testing of Hypothesis: Why Onions Make Us "Cry"?**

Begin this experiment with a discussion of onions; ask the students "who has ever eaten an onion"? "Who can tell me the different colours of onions"? "Can anyone name different types of onions"? "What are onions used for"? Allow the students to discuss their knowledge of onions fully. After they have had scope to discuss what they know about onions, pose the following question, "What frequently happens to people's eyes when they cut onions?" Hopefully, at least one student will answer that people cry when they cut onions.

Now take a moment to introduce the scientific method. Explain that all scientists use this method when conducting experiments. You may discuss why scientists need to conduct experiments and why they need a specific way to gather information, devise a hypothesis, design an experiment, make observations, record and analyze data and then come to a conclusion. Explain to the students that now they will use the scientific method to examine why people "cry" while cutting onions and whether there is a way that onions can be cut so that "crying" can be eliminated.

### Action Programme

Using a teacher-made lab sheet and with the assistance of the students, come up with a name for the lab. Next, guide the students to state the problem:

**Problem:** *Why do onions make us "cry", when they are cut? Is there a way to cut onions so that we won't "cry"?*

Have the students (with teacher guidance) come up with a hypothesis.

**Hypothesis:** An onion can or cannot be cut without "crying".

At this point emphasize that a hypothesis is not a guess, but rather a testable solution to a problem based on gathered knowledge and information. Next design an experiment (introduce the concept of a control and an experimental group). Discuss different ways and conditions in which onions can be cut.

**Experiment:** Different ways and conditions in which onions can be cut:

1. *theregular way*
2. *while holding one's nose*
3. *under running water*

Guide the students to try two ways of cutting an onion.

The two ways selected are:

1. *theregular way*
2. *under running water*

Enlist the students' help to come up with a specific procedure. Remind them that sequence/order is very important. Have the students list the materials that will be needed. Perform the experiment, and have the students record their observations. Record, organize and analyze the data.

Now, with the students' assistance come up with a conclusion that *'When onions are cut under running water, you don't "cry"'*.

Further, depending on the intellectual level of the students, we have to go into a detailed discussion of the onion's cell structure. If the students can handle it, we have to make them to look at an onion cell under a microscope. If the students are able to understand the cell structure of an onion, we have to explain to them that when we cut an onion, we tear its cell wall and when that happens a gas **syn-propanethial-S-oxide**, which is a volatile gas is released; the gas turns into Sulphuric acid when it hits the air. This acid irritates the nerve endings in the eye, making them sting. When we cut an onion under running water, we dilute the gas before it can get into the air and into our eyes.

A test followed the above treatment. The difference between the pre-test and post-test mean grades of the group was tested for its significance.

The results are as follows:

	No. of Students	Means	SD	SED	CR	Level of Significance
Pre-test	45	17.00	6.34	1.148	3.15	0.01
Post-test	45	20.62	4.43			



## Conclusion

This study has strengthened the hypothesis that developing scientific inquiry skills are very suitable for the current scenario. The children engaged well with all the activities. They were able to benefit more from such techniques used in the classroom.

## RAJENDRA R MANE

I was appointed at the primary school of Koutholi village of the Solapur Zilla Parishad. This was about 40 km away from Solapur town, situated in the North Solapur Tehsil.

Our school was the only one in this village, but still incapable of attracting students due to lack of a proper academic environment. Neither was the community much interested in educational activities nor did the school provide a suitable environment.

In this critical situation, I came to work in this school. To generate interest in studies I adopted joyful approaches like games, e.g. “*Shaikshanik Takdhinadhin*”, “*Jo jitha wohi Sikandar*”. To improve attendance I introduced several cultural activities, and an activity called ‘*Upasthiti Dhvaj*’. With the help of the Sarpanch, I organized a meeting with parents to inform them about the school-activities.

Due to such activities the students’ attendance went up to 90%.

Now I thought of doing something to help the children deal with the pressures of competition in the modern world. The idea of making the students scholars by adding more inputs like preparing them for the Intermediate scholarship exam, the Madhyamik scholarship exam, the Jawahar Navodaya entrance exam, the Shashakiya Vidyaniketan exam, the Sainik school entrance exam etc. to their regular textbook studies came to my mind. A good teaching environment had been already created in school. So, I encouraged the other teachers to emphasize quality teaching to prepare the students for various external exams. I consulted various experts to find out their views. Then I made a daily time table for the children in 2002:

### Daily planning

#### Morning

5.30 to 6.00	- physical exercise
6.00 to 7.00	- studies
7.00 to 8.00	- bath
8.00 to 8.30	- prayer/recitation of <i>shlokas</i>
8.30 to 9.00	- studies
9.00 to 10.00	- solving a question paper
10.00 to 10.30	- food
10.30 to 11.00	- discussion
11.00 to 12.00	- solving a question paper
12.00 to 1.00	- games
1.00 to 2.00	- clarification of doubts
2.00 to 2.30	- lunch

2.30 to 3.00	-	recess
3.00 to 4.00	-	solving a question paper
4.00 to 5.30	-	games
5.30 to 6.30	-	introduction of new questions
7.30 to 8.00	-	entertainment
8.00 to 9.00	-	dinner and watching news on T.V.
9.00 to 10.00	-	clarification of doubts
10.00	-	lights out (go home to sleep)

This time table was shared with the parents. The students were allowed to go home for food and baths. The rest of the time was spent in school. By putting this plan into action, the students were encouraged to participate in games, dancing, play, and singing according to their interests and aptitudes. Finally 25 academically brighter students were selected for the exams. They were given special attention for exam related studies. They were given 3 question papers daily. About 75 question papers were prepared per subject. Some of the readily available question papers were also used. The children spent most of their time in school during the *Diwali* vacation. The exam related preparation was completed by 15 November. I had to spend my own money for this experiment (like buying stationery, question papers, taking the children on short picnics). I devoted all my time to this, since I am single and I have no other commitments in life.

Seeing the changes the villagers began to donate to the school. We have received about Rs. 3,00,000 so far. Of this I have spent Rs. 50,000 to build a boundary wall, Rs. 30,000 on a computer, Rs. 10,000 on a speaker set, Rs. 10,000 to develop a garden and Rs. 1,00,000 to construct of a room and a furnished corridor.

The outcome of the extra coaching was that the number of students receiving scholarships increased. Earlier very few used to qualify for such exams.

- In 2002, 5 students of class 4 were selected for the J.N. school, 1 student for the Sainik School, 1 student for the Vidya Niketan and 3 students received class 7 scholarships.
- In 2003, 5 students were selected for the J.N. School, 2 students received class 7 scholarships.
- In 2004, 5 students received class 4 scholarships, 7 students were selected for the J.N. School, 3 students were selected for the Vidya Niketan School, 6 students got through the class 7 scholarship exam, 1 student got through the MTS (Maharashtra Pragyashodhak Pariksha) examination and 1 student was selected for the Suyash Gurukul.
- In 2005, 2 students got through the class 4 scholarship examination, 5 students received admission to the Jawahar Navodaya School, 3 Students to the Vidya Niketan School, 17 students got through the class 7 scholarship examination, 2 students got through the MTS examination, 2 students were selected for the Suyash Gurukul.

So far, I have personally spent Rs. 20,000 for the preparation of the class 4 scholarship examination, Rs. 10,000 for the Jawahar Navodaya Examination and Rs. 20,000 for the class 7 scholarship examination. It has paid dividends. Now the students are taking competitive examinations seriously. Their inherent qualities have developed. Their confidence has grown and they have learnt to put their time to the best use.

## **RAFIA NIKHAT**

I was appointed headmistress in a newly built Upper Primary school in Raja Nagar in the region of Kwarshi, Lodha division in 2003. It had been set up under the Sarva shiksha Abhiyan.

I found the place full of problems. To begin with, it was inhabited by labourers with very poor socio-economic backgrounds. They believed that girls would be ruined if they went to school. The village pradhan was very corrupt; I found it difficult to deal with him. I would like to cite my experience here. One day I and my husband went to him to get his signature on a scholarship form. Though my husband was present he tried to get personal with me. When I discouraged him, very bluntly he tried to scare me away. One day, somebody hung a dead owl on a tree in the garden where I used to run the school (since there was not any school building). Then the village people started tying animals in that garden. Village youth started gathering there. When I informed the village pradhan of this, he said "why do you like to sit there; come to my house". Despite all these problems I did not lose hope and courage. I did not even bother about these incidents because I had to survive there and demolish the wrong notions about girls' education.

First I tried to get a school building. Though it was planned on paper, it had not been completed because the land was under dispute. Moreover the pradhan was asking for a share in the school building fund. Despite such problems, I started getting the building constructed. Meanwhile, we all sat under a tree in the mango garden, putting bricks around us. The school building was completed in a year and we moved to it. But the students did not have pencils or note books. I paid for them and encouraged them to study. Once the school was established I made efforts to bring the girls to school.

I started visiting the village in search of girls. Once I saw a girl, who was sitting in the corridor of her house and stitching something, I asked her to join the school. Suddenly her mother came out and started scolding me. She told me "if my daughter were to go to the school she would be spoiled". I replied her, "am I spoiled?" She very bluntly said "yes, that is why you wear new dresses everyday and stay out of your home". I explained to her at length and tried to persuade her. Finally she agreed but said that she would have to ask her husband's opinion. But when I went next day, she told her daughter to go inside, and told me that her daughter had gone to her aunt's house. So I came back. But next time I went straight into the house and asked the girl whether she was interested in study or not. She said yes. Then I persuaded her mother by saying that she should try to fulfill her daughter's wish. I took the mother along with me also to enrol her in school.

After great effort and a trial of 2/3 weeks, 35 students were enrolled. I did not charge any fees. I provided them with pens, pencils, note books etc. free of cost.

I kept strict eye on the attendance of the children, once they were enrolled. There was one more lady named Haseena, whose three sons were studying in my school. Suddenly I observed that all of them had stopped coming. When I called the mother, she was scared to answer me. At last she said, her husband had married a second time and provided no money for the family's survival and the boys were, therefore, working in a restaurant for Rs.20/- per day. I advised her to send her sons to school during the day and let them earn at night. I also told her that I would support them with study material. She agreed and those children came back to school.

Likewise I realized that one girl, Ku. Sarfaraz, had been absent for a long period. When I asked the other students, they replied that she was being married off the very next day. I was stunned to hear this news because she was a *naabalik* (minor). When I reached her house, I spoke to her father and told him that she was too young. He replied that the surroundings were insecure for girls and he had 3 more daughters. Then I threatened him with the police. He got scared, and then he told me that their relatives had already come and to save his face in front of community he would at least have to perform her engagement. I agreed and made him promise that he would not marry her off till she was 18. He agreed and gave me his word.

Likewise, one more boy of class one stopped coming. I knew that he was mentally challenged and was not comfortable in school. But with love and affection I made him come regularly.

### **Outcome**

As I said the major drawback at Rajanagar was socioeconomic backwardness. When I did not charge any fees rather gave pens, pencils and note books. I observed that student numbers increased to 135 in one year. They had started coming to school but in a very dirty state. I instructed the mothers to send them after a proper wash. But they did not have extra sets of clothes. So I provided them with clothes. Then the students started coming to school after having a bath and proper cleaning.

I am proud that 350 students come to school in a village where children were scared of coming to school and parents were reluctant to send their wards. Today the school is 3 years old. All the parents are attentive to their wards' education. More girls have been enrolled. Now I have classes up to the 4th in this primary school. I promised those children that I would try my best to bring in a junior high school, so that the girls could continue to study. I have also promised that I will finance the good students to continue their study up to the 10<sup>th</sup> class.

Today Raja Nagar primary school is considered an ideal school in this circle. All the officers praise it and its students. I am sure that one day these students will prove their worth to their parents and to society.

## BALWANT V PADHALE

I was born and brought up in a rural area and hence I am familiar with the socio-educational backwardness, poverty, superstition, and habits of the people in hilly and village areas. I began my teaching career with all this in mind, and whenever I was transferred, I did social work relevant to each situation. My most noteworthy work has been in a village of Jaonli taluka in the western part of Satara. This is a completely hilly area.

The whole taluka faces problems of electricity and water supply. There were problems like the unhygienic and unhealthy climate of the village, dirty water storage tank, lack of a proper drainage system, and no roads connecting the village. I planned to help this village by doing developmental work.

To put this plan into practice, I thought of taking the help of the villagers. I conducted a meeting with the agenda of village cleaning. I made them aware of the importance of cleanliness and encouraged them to build a clean and ideal village, and they all agreed. We took an oath that day, to keep our village clean. I explained what was to be done, methodically. I made three committees to rebuild the village: the *Village Panchayat committee*, the *Swachhta Abhiyan committee*, the *Paani Purvatha committee*. Three chairmen were nominated and everyone was expected to assist them.

I began a campaign with the help of the school children. Every morning, the children took out a rally with slogans on cleanliness. The students participated in different competitions on cleanliness, which I organized in school. Then we started the cleaning process. One person from each family came forward to clean the village every Sunday. We accumulated garbage in one place to form compost, which was, then, to be used for planting.

The next target was the road. The road connecting the village was muddy and dirty. Heavy vehicles could not enter the village. I proposed that we build a road and all the villagers helped. As a result, a 3-kilometer road (from the main road to village) was built. Some village women were assigned the task of keeping the road clean by sweeping it daily.

Another problem was that of drinking water. There was a water tank to cater to the needs of the whole village. But in summer and winter the water became unhygienic and dirty because of moss. People, especially children, frequently fell sick by consuming this water. We began the tradition of cleaning the tank and putting chlorine tablets into it on a regular basis.

Then we white washed and painted all the houses in the village including the school. As a result, the village had a different look and the children were attracted to the school.

There used to be another serious problem related to drainage. In winter and in the monsoon, water logging was a major headache. Garbage used to float on the water, breeding flies and mosquitoes. I made a proper drain with the support of the villagers. Now the drain water flows away to a distant place, where a beautiful garden has been planted.

Then I made toilets in the school as well as in each house. I emphasized the personal hygiene of the children. Once a week, I conducted a program of cleaning every child.

I informed the people of the usefulness of sun light, how it could help with getting solar energy for domestic cooking. Now many people have made their life easy by using the solar cooking system.

Then I explained the importance of trees to the villagers. They followed my idea and planted trees. They also helped me put 450 plants in the school premises. Herbs were included. Then we made a park for the children to play in.

I requested the women-folk to keep the grounds and the corridors of their houses clean and they followed me. I also took care of the animals' cleanliness.

Now the village looks beautiful. It is clean, healthy and ideal among all the villages in this area. People visit to see this village. The Deputy Chief Minister made us feel proud by visiting our village and appreciated our efforts. Now the students' attendance has increased.

## NEELAM PARASHAR

I am an assistant teacher at the primary school in Elampur, Aligarh. I stepped into teaching profession on 09-12-1999 at the Primary School Kaliyanpur. I believe that primary education is the key factor in the all-round development of children anywhere in the world; a country, which gives equal weight to the primary education of girls and boys, is likely to be more developed than others.

Unfortunately, the scenario in our country is saddening. When I got to the village school for the first time, I was very upset to see its unhealthy and unhygienic surroundings. My over all picture of the school is one of a *katcha* road connecting the school, where rain water had accumulated followed by bad odour, flies and mosquitoes. It had no boundary wall; the villagers stabled their animals over in the school building. Above all some village ruffians sat in front of the school making nasty comments.

The parents were not attentive to their children and hence they came to school in a dirty and filthy condition. When I entered the classroom, I felt like vomiting and was unable to sit there because of the children's uncleanliness. The classroom itself was full of bad odor. Their arms, legs, eyes and teeth were so dirty that I could not look at them; teaching was out of question. I spoke to the headmaster Mr. Saheb Singh, "Sir, How can we make these children clean? I don't feel like looking at them, teaching is quite impossible". He answered me "*Behenjijaito aised rahilo, inko koi naa badal sake*" (teacher, they would remain like this, nobody can change them). Listening to this, I thought that I could not sit idle; I had to teach the students. At that time I was inspired most by my mother, who herself was a teacher and always told me to 'do justice to your job since you are paid for it'. I decided to address the issue of cleanliness first.

### Students' Cleanliness

I instructed the students to come to school after brushing their teeth, having baths and cutting their hair. But the next day I found that no one had followed my instructions. I said this to them twice, thrice but nothing happened. Suddenly an idea came to me, and I worked upon it. I thought of "*kajal*". In our culture there is a practice of putting *kajal* in the eyes of the children to protect them from *buri nazar* (evil spirits). But it is put only after a bath. Now some students' mothers had come to me to ask about scholarships. I talked to them about the use of *kajal* to save the children from evil effects. This caught their attention because mothers in rural areas are always concerned about such things. I told them that if they put the *kajal* in their children's eyes they would be healthy, study well and get a good reputation. Perhaps this was my first step towards success. The next day I found that 4 students had cut their hair, brushed their teeth, put *kajal* in their eyes and were wearing clean clothes. These 4 students were from grade 5. I felt that my goal was not too distant. I made 3 of them class monitor, and the fourth a girl named Madhu a school monitor. I assigned her responsibilities like checking the children for *kajal* at 9.30 in the morning when school opened. Those who came without it would be sent home to put it and come back to school. This girl had leadership qualities. When I reached school the next day, 15 students were clean. That day I was very happy. Within a month, the scene changed and all the students developed the habit of coming to school neat and clean. I was close to them and continued to teach in a cleaner environment. In between, Madhu lost her mother. Without my realizing it she had developed a strong emotional bond with me because of my affection. Till today I receive letters from her.

The second problem had to do with 'school surroundings'. I had contacted the village pradhan to deal with this. He promised to do something for the school. As a result a concrete road was made. Animals are no longer tied in front of the school and there is no water logging near the school.

I am really proud of this work because no such effort had been initiated earlier. I was able to do what I had planned because of my perseverance.

*“Ugta hua suraj roshni de, desh ke bachhon ko  
Mehnat unki roshni ban kar bikher do.  
Sikshak to unhe sanket kar sakte hain .  
Mehnat se naam roshan kar de.  
Apne maa – baap aur vidyalay ka”*



## BALVANTSINH M PARMAR

My first appointment on 14.9.79 was at Lalpuri Parimary School, located in the difficult forest area about 35 kms far from the Godhra district headquarters.

Lalpuri village is situated on the banks of the Kun river, at the western end of Godhra district. The village is connected only by a foot path. There were no facilities like a telegraph or post office. There were about 800 residents belonging to the *Parmar, Chauhan, Vankar* and *Pagi* communities. Their mainsource of earning was farming and labour. The community had no interest in education and, therefore, there were severe enrolment, retention and drop out problems.

After years of independence, untouchability was still practised there. The people of the *Baxi* community would not visit the *Vankars*. The members of the latter community used to carry their footwear in their hands while passing through the village. These practices also affected the school children. They used to run to the village well after school hours and wash their big toes. I was told that they need to clean themselves since the children of all communities sat together. Stealing was also prevalent in the village. Such conditions initially scared me. I realized that if I wanted to make a difference, I would have to settle down in the village. I tried to find a place to live in the village, but in vain. Finally I approached the then Panchayat member of the village, the Late Shri Gulabsinh Kuberbhai Parmar, who gave me full support. He offered me accommodation at his own place till I got accustomed to the environment.

The school was a single room building. The room had not been painted for years. The tiles on the roof had broken. The roof leaked heavily in the monsoon. Very few students came to school which demotivated me further. There had been no teacher earlier; teachers working at the pay-centre school took turns to teach at this school. Teachers from distant places always tried to go back early and hence the school closed early sometimes. As a result there was no communication between the teachers and the parents, and the children used to stay at home most of the time.

As I had decided to live in the village, I thought of orienting the community towards school and education. As a strategy, I started to gather the elderly people of the village in the evening and tell them folk tales. Since this became very popular, a large audience used to gather at the centre of the village every evening. Then one day I proposed before them the need to develop the school. They agreed with me and assured me support by sending more and more children to school.

They really fulfilled their promise and now more and more children have begun to come to school. However, the children of other communities displayed dislike when they had to sit with the children of the Vankar community. I also observed this in the parents. I focused on this problem and by empathetic and persistent persuasion I succeeded in changing the environment of untouchability and created an environment of equality.

Now I had to focus on academic aspects, and here the real problems began. The biggest barrier was the local dialect. I tried to investigate the matter with the help of the elders, some literate people and teachers working in other schools. I found that in earlier times, the district had been divided into two parts, namely East and West. Different communities resided in these two parts and spoke different languages. Gradually I realized that the communities that lived in the Eastern part spoke the dialect with words like *hu, ter, vali, kaan, charki, nahi*. Whereas, the communities living in Western parts like Kankanpur, Ratanpur (Kantadi), Tuva, Timba spoke the language with words

like *shun, shan, kangher, nahi, ta, kaan java na ho*. This dialectic variation was a challenge. While thinking of a way out, I had an idea.

I began by explaining the difference between a dialect and a language. I told the students that what we spoke was a dialect, and what we were supposed to study was a language. I began by explaining the content (of other subjects) in their dialect in simple terms that they could understand easily. Translation of the content into the local dialect was not free of errors on my part. But I learned their dialect gradually with the help of the children and the parents. I also introduced prayers in the local dialect. Thus, for the children, the day began in dialect. I obtained permission to introduce stories and songs in the local dialect. I used to listen to them carefully and gradually I taught them how their ideas could be expressed in the standard language. Further, I used to note down the local words used by each child. Then each child was given individual feedback and guidance to replace them with standard words. Beside this, I prepared a chart of synonyms of the dialect terms. It included the words used by the children. I also added the terms that I had collected. Then I put their equivalent from the standard language. This chart was displayed in the classroom. I used to give them reading practice everyday; I used to listen to them carefully and point out their mistakes in pronunciation and teach them the correct pronunciation. Copy writing and dictation also followed the same method. The exercise was helpful in teaching the children the standard form of the language.

Finally, the presence of the students in school began to increase. When I joined the school, the strength was around 10. It increased to 60. Then I increased the use of songs, stories and play-way methods of teaching to enhance their interest in the learning process. I conducted written and oral tests to ensure improvement in performance. And the results showed improvement.

The success of my efforts motivated me to write songs and stories in the *Bhili* dialect. I used them for teaching. The DIET Panchmahal took notice of my work and with the intention to provide help to other schools of the district, my works were published. The dissemination process continued further. Akashvani, Godhra facilitated a program on radio to present my songs and stories. It was the realization of my work when these songs and stories became a supplementary source of learning for the children of this community (Bhili speaking) in the entire state. Since my songs and stories primarily focused on shifting children from a local dialect to a standard language, the teachers of this region also began to use them in their schools.

Thus, my efforts to improve the educational standards of my school culminated in the stories and songs that are widely used now. And I wish to continue with further effort to improve the standard of these *Adivasi* children.

Note: Boston University, USA has accepted the songs written in *Bhili* and they are being produced in English.

## RAMAKANT K PATIL

I started my teaching career in an *Adivasi* village of Pashim district in 1972. The school went up to the 4<sup>th</sup> grade. These children belonged to poor families. This prevented them from attending school regularly.

To improve the situation I did several things. First of all I focused on their attendance. I organized various competitions and distributed awards to promote attendance. I organized a meeting with the parents and counselled them about their wards' education. My aim was to make them aware of education. I organised many celebrations, festivals in the school and invited the parents to participate. Besides that I organized cultural programs and meetings, where I discussed school problems before all the parents. As a result the school received funding. I used the funds for distributing notebooks, pencils, lunch boxes etc. to the students. After receiving these, the students wanted to come to school regularly.

Then I focused on improving their academic achievement. I arranged extra classes for the academically weak students, daily after and before school timings. I also adopted various teaching methods and TLMs to teach them. I started making small scientific models to generate interest and make the learning of concepts easier.

For example, I made a model of an aeroplane in 1975 to provide thorough knowledge about the take off and landing of flights. I made this model from scrap.

First of all, I took a toy wheel from scrap. By cutting a metal sheet, I made the model of an aeroplane. I took a metal rod and fitted the plane on to one side; on other side I put a battery cell for balance. Then I attached a 1 volt battery and unused bearing. When we increased the voltage, the propeller started whirling and threw out air at rear, and the plane moved toward and took off. Due to the balance, the plane's weight decreased, so it flew high. When you minimized the voltage, the propeller moved slowly, as a result plane landed slowly.

Now, any student of my class can give information about flights taking off and landing. If we can make this model on a larger scale with a large motor and propeller the students may be able to sit inside. I have presented this model in many science exhibitions including the one at the NCERT, New Delhi. My effort has been greatly appreciated. I used to take classes in other schools regarding this model and its scientific base. I have covered almost all the schools of our districts.

## IVETTE LOIOLA PEREIRA

I was the headmistress of the government primary school Soda in Mormugao Taluka. I retired on October 1997. While working as teacher I had realized that simply reading, listening and explaining would not help children internalize learning. Moreover my intention was to uplift the academically weaker students. I found the solution in 'competitions'. That is, I began organizing various competitions for students. Later on I extended the idea to competitions among teachers to **enhance the quality of education.**

At that time there were 26 teachers covering classes I to IV in my school. Each class had many divisions. In order to improve the standard of education, I used to organize various competitions like handwriting, drawing, reading etc. But I noticed that the same students used to participate several times; i.e., that the teachers were not putting in any effort to prepare the remaining students. They only chose the best students.

So I decided to organize competitions among the teachers as well.

**Handwriting competitions:** I conducted these only to find out which teacher had the highest student participation with good handwriting.

**Drawing competitions:** To find out which teacher had the highest participation of students who could draw well.

Competitions in reading, sums, tables etc. were organised in the same manner.

The teachers of standards I and II were judges for teachers teaching in standards III and IV and vice versa. Prizes were given to the best teacher in each grade and the teacher who got the highest number of prizes was given a special prize.

My idea was successful. Thus finally the teachers were motivated to teach the weak students and to improve the standard of education in the school. But unfortunately the practice was discontinued after my retirement.

## VILAS W PRABHU

I am headmistress in the GPS Bazar Kundai (Ponda, Goa). Here I share two of my activities: 1. Expressive school 2. Developing an interest in learning EVS

### **Expressive School**

The purpose of this activity is to offer the children a continual exposure to important content, irrespective of the grade that they are studying in, in order to facilitate learning–retention and revision. The outer walls of the school have been used for the development of the expressive school. The concept of expressive school focuses on the use of walls for presentation of important content areas in two major forms.

1. In the first form content of permanent nature is depicted on the school walls. This includes the National anthem, the pledge and the map of Goa state.

The map is for multi-purpose use as it shows the political boundaries of 11 talukas in the state with their names. The students are assigned tasks to fill in the outlines showing details of the production, mining, plantation of the state and its physical features. Thus the board facilitates student exposure to as well as involvement in learning. The other boards enable them to read and remember the national anthem and the pledge so that they can recite them correctly at the time of the assembly.

2. Besides these boards, the walls are painted with plain blackboards that are used to write important content points of the ongoing portion being covered in the classroom. The content written on these black boards facilitates revision and consolidations of the points learn in the classroom. These boards are at a height suitable for the learners of stds. 1 to 4. Space for learner-response is also provided at the bottom of each board so that they can respond to the questions asked, on the board.

Content written on these boards is kept for a period of a week or so as per difficulty level. Care is taken to write the content in a simple and visible manner.

Besides getting the walls painted with plain blackboards and the boards with the pledge, national anthem and the state map, the expressive school involves different tasks like:

1. Selecting the place for the boards, considering space-visibility and the frequency of (children) passing by the wall
2. Selecting the content areas which need revision, retention and reconsolidation of learning
3. Presenting such content at regular intervals on the blackboard for the learners
4. Encouraging the learners to read, revise and carry out the assignments given, in the space on the blackboard.

### **Impact**

We have observed that the boards prepared in this project have been very effective in keeping the learning process alive. The children read the content and find solutions to their difficulties with the help of their teachers and peers.

The success of this experiment is evident in the consultative learning activities that take place among the peers of different classes as and when they read and revise the content material from the wall–boards.

### **Developing an interest in learning EVS**

The goal of teaching EVS is to develop the skills of discrimination/ differentiation, classification, description, observation, application, experimentation, collection etc. According to me, classroom teaching and books are insufficient to develop these skills. So I undertook the project of observation of the environment through field visits, during June 2002 to February 2003. 65 children studying in grades 1 to 4 participated.

Stages of project:

1. To identify units/topics related to the environment
2. To collect information related to the people/organisation/place to be studied
3. To make a schedule (day and time) for the visit
4. To interview the people concerned.

The project created opportunities for learning through the following activities:

**Knowing the environment:**

Collecting information about plant-life like their names and usefulness, methods of plantation, touch and smell.

**Collecting information about industries:** The people involved in fisheries and making boxes were contacted and interviewed. Their methods of working, the tools required for their work etc. were observed.

**Visits to various institutes:** Places like banks, *gram panchayat*, coir mills, etc. were visited. The children talked to the people working in these places and collected information related to the nature of their work by talking to them, observing them and reading their documents.

**Interview:** An interview with a freedom fighter was arranged. The children collected information about the freedom movement, the struggle of the freedom fighters etc.

**Social survey:** Standard 4 students were sent for data collection to find out about social groups: their names, their occupations and their daily routines. The children did the following things:

1. Visiting the houses
2. Asking questions (related to name, age, occupation etc.)
3. Noting down answers
4. Compiling information in report form

The outcome was that the 50 students developed EVS related competencies well.

## **N MUNI RAO**

My work has been concerned with improving the standard of education of students in Kalikoil village. Kalikoil is a small remote village in the mountains on the Tamil Nadu – Andhra border, Kuruvinyanappalli post, Parkur Onriyam, Krishnagiri District. The number of persons who have had an elementary education is very small in this village. Most people live below the poverty line and are occupied in cattle rearing/ grazing, cultivation of pulses, paddy, millets, maize, etc. or are daily wage workers. The houses are scattered. The Hindu, Muslim and Tribal community reside here. When I joined the school, the students' enrolment and attendance were very low. The children of some well to do families went to the English medium school. Since there was no Anganwadi school here, teaching in grade one was more difficult.

To begin with I introduced the use of TLMs. The TLMs were made with discarded/used-up articles from households like (soap-box, powder tin, shampoo bottle, and like articles, collection), hard-board/card board boxes from provision stores, used-up glucose bottles, tubes etc. from hospitals, bearings from work-shops, magnetic rings in amplifiers/loud speakers etc. from repair shops. Puppetry was used to teach the various lessons of classes 1 to 5. The children were encouraged to learn to read the newspaper at very young age and made to pay special attention to handwriting improvement. As a result the handwriting of almost all the students is beautiful.

The teaching of English received special attention, to attract the children studying in the English medium school. For English, the drama system, the play-game method, discussion methods were used and lessons were taught with the help of supplementary devices. Students' participation in classes was given emphasis. Students were taught to handle some of the devices.

I encouraged and guided my colleagues in preparing and using TLMs. We also prepared a question bank for English containing about 200 questions for the class 5 students. As a result 75% of the students study English easily.

Our school timings are from 8.30 a.m. to 5.30 p.m. The school is open on Saturdays and Sundays also. We teachers try to restrain ourselves from taking leave as much as possible. I myself have not taken any leave in the last six years.

As the days passed, seeing the methods in my school, students came to be enrolled here. At present, no one from our village is enrolled in the English medium schools. All the children have joined our primary school.

For about 16 years I have been giving uniforms to poor students studying in Kalikoil School and I also try to fulfil their other needs for pens, pencils, erasers, notebooks, etc. and thus provide them with an umbrella protection. In the class room, a first-aid box is provided. Every year, I buy the required medicines. This year, about Rs.10, 000/- have been deposited in an F.D. with the Indian Bank, Varattampalli, towards the medical expenses of the students.

I have taken the necessary action to introduce a town bus to Kuruvinyanapalli village. By making efforts like starting a Higher Secondary School, we have become successful.

As a result, over 90% of the students attend school daily. We receive appreciation from visitors from outside places and outside states.





## SUCHITRA R RODAGE

Yavatmal district is an *Adivasi* area. Babhulgaon is one of the more backward villages of this district. I work in the primary school of this village. When I began, I found that the children were unable to attend the school regularly on account of poverty. They found the traditional teaching methods uninteresting and hence performed poorly in exams.

That is why I thought of a new method of teaching. While teaching in class 1, I felt that the children liked flowers. The colours of the flowers fascinated them. I collected different flowers and gave the children information about colours and names of flowers. They were very happy and remembered the flowers' names. So I presumed that the children would study other subjects well if I taught them through flowers. I started collecting pictures of flowers and also instructed the children to do so. They collected many pictures from magazines, books, newspapers etc. I showed them the pictures and gave them information like the flower's name, its colour, where it was normally available, etc. Numbers, addition and subtraction were taught by asking them to count, add/subtract beautiful pictures of flowers. To teach the arts, I made flowers by putting thumb impressions of different colours on paper. I also made flowers from coloured paper.

I also wrote poems and songs, which the children enjoyed singing in class. Here is an example:

### ***Kamal ke phool***

*Kitne sunder phool kamal ke*

*Paani me hi khilte hain,*

*Pile our safed, gulabi*

*Kai rango me milte hain,*

*Sab phoolon ke raja hain yeh*

*Kitne bade bade dikhte,*

*Kichad se unche uthkar yeh*

*Kitne sunder hain lagte.*

To evaluate the children's learning I formulated a questionnaire and collected their answers orally. From this test, I came to know that the children had liked this method of teaching and had learnt well. Now they take an interest in learning and study by themselves. They also participate actively in classroom teaching.

## MAHESH CHANDRA SARASWAT

I started my career as a primary school teacher in the Bishanpur upper primary school, Aligarh. For me teaching was the best occupation of all. Since through education, we can develop ourselves, our society and nation. When I joined this school, it was in a very filthy condition. Though the registered number was high, there was a severe problem of the irregular attendance of girls because of the persistent gender bias in the community. I wanted to achieve the cent percent attendance and education of all the girls in this village.

### Girls' education

I shared my goal with my colleagues. We decided to discuss it thoroughly in a meeting and formulated a strategy. The agenda of the meeting was 'how to make the girls come to school and ensure that they stay in school till end'. The parents were informed that the teachers had organized a meeting for their daughters' education.

#### Establishing a routine

Before implementing any idea, I ensured the security of the school surroundings for the girls. Then I got the school premises cleaned up so that the teaching process would not be hampered. I laid emphasis on the quality of education and simultaneously engaged the students in various activities like sweeping and beautifying the school.

I made a duty chart for all the students to clean the school and its premises. They were instructed to come by 30 minutes early and complete the cleaning before the school began. This was necessary since no sweeper had been appointed for the school and I think that in a clean environment we feel 'fresh' and motivated to study. This was followed by a prayer, national songs and the teaching of morals. One novel thing that we introduced in the assembly was a 'ceasefire session'! We know that, there are usually fights/quarrels among the children. So during this session the previous day's fights were resolved in front of all the children and the teachers. This schedule showed results and worked very well.

While establishing such an ideal routine for our school we also paid attention to gender biases. We observed that many parents were discriminated between boys and girls; the boys were sent to school, whereas the girls were held back for household chores.

We were alert on this point that there should be equal participation of boys and girls. We planned the following:

#### Parental contact

*Padhi likhi ladki, roshni ghar ki:* I used this slogan, when I found girls were absent after their enrolment. I personally contacted their parents by visiting their houses and explained the value of girls' education. I emphasized the importance of education for becoming a good housewife. I explained that by remaining occupied with household tasks alone, they would accuse the parents one day: *kuan main mandhach ke saman?*

Every month I scheduled a meeting and asked to the parents to attend it. Special attention was paid to the parents of the absentee girls, to ensure that they attended the meeting. I told them that the secret of getting good marks in examinations lay in being present in school regularly.

#### Games for the children

These tactics got me some results but the major breakthrough came from improving the quality of school activities. Sport was one of them. My efforts to generate interest through classroom teaching methods had had lots of impact in drawing the girls to study. By God's grace and my special efforts, a girl named Kumari Babita, (daughter of Bhudev Prasad Sharma, a permanent resident of Bishanpur), won several sub-state level competitions and had the chance to participate in shot put, javelin throw and long jump at the state level competitions. She became a source of inspiration for other girls. Seeing her inclination towards athletic games other girls were inspired and participated in the games at school. This helped retain them in school for hours and gradually their interest in study also increased.

#### Group study

One problem that I had noted was that the girls of poor families were psychologically demoralized, which had negative effect on their studies. I made a group of these poor students with a 2/3 proportion of students who were good at reading and writing. After grouping them, I started teaching them. I observed that they had developed a team spirit; that they were doing their studies together and trying to solve their problems on their own within the group. As a result they started coming regularly and taking an interest in study.

#### **Outcome**

After introducing these activities, I observed that the irregular girls and absentees became regular and developed an interest in studies. Now none of the girls of this village in the age group of 6 to 14 years is illiterate. Our work has also influenced two nearby villages and the gram sabha.

## MOHIBOBSAB N SAWAR

I joined the Zilla Parishad school of Hilli Village Akkalkot, Solapur as a teacher in 1998. I belonged to a poor family and I had an opportunity to show the way to the poor children of this village, which made me happy. The villagers were more attached to sugarcane cultivation than their children. I served here for 3 years and tried to teach them well.

Then I was transferred to the Zilla Parishad School of Devikapeth in 2001. This school was small, but I had ample opportunity to work and received co-operation from all my colleagues. I developed my innovation for the Kannada speaking children in a Marathi medium school.

I made the teaching method and prayer more entertaining, which was the prime reason for the increase in attendance. I gave proper guidance for student scholarships. I organized of *rangoli* and musical chairs competitions among the girls and their mothers. The motto was to involve them in school activities. Besides this, students' picnics, handwriting competitions were also held.

### Improving the learning

In 2005 the headmaster assigned me class 7. This is a senior class and I thought I would face no problems. I started making the students practice through home work, questions and answers and reading assignments etc. After one week when I evaluated the students, I found that they did not remember anything that they had studied. They could not understand the themes properly and repeatedly committed the same mistakes. They were not studying the subject matter seriously. They had problems in all subjects, from English to general knowledge.

### Extra classes through a new timetable

To resolve these problems, I thought of an innovation, I made a new time table to teach them:

	Month	Week	Time (PM)	Subject
1	August - 2005	1 <sup>st</sup> week	4 to 5	Marathi
		2 <sup>nd</sup> week	4 to 5	History
		3 <sup>rd</sup> week	4 to 5	Geography
		4 <sup>th</sup> week	4 to 5	G.K.
2	September-2005	1 <sup>st</sup> week	4 to 5	Maths
		2 <sup>nd</sup> week	4 to 5	English
		3 <sup>rd</sup> week	4 to 5	Civics
		4 <sup>th</sup> week	4 to 5	Hindi
3	October-2005	1 <sup>st</sup> week	4 to 5	G.K.
		2 <sup>nd</sup> week	4 to 5	Marathi
		3 <sup>rd</sup> week	4 to 5	History
		4 <sup>th</sup> week	4 to 5	Geography
4	November-2005	1 <sup>st</sup> week	4 to 5	G.K.
		2 <sup>nd</sup> week	4 to 5	Civics

With this new time table I started teaching the students. But I felt, if something more could be added to the teaching process it would be more interesting for the students. I pondered over the content. At that time the Star Plus channel was running a television show called *Kaun Banega Croorpati-2* which was hosted by the most popular actor Mr. Amitabh Bachhan. While watching it an

idea struck me. I thought if materials could be developed on the computer, the student would enjoy learning.

***Shaikshanik Prashna Manjusha for evaluation***

By trial and error I developed an electronic device. I called it the “Shaikshanik Prashna Manjusha”. It has three parts: The first part has 6 indicators and one buzzer. The second part consists of questionnaires and blank spaces for options. The last part has 6 switches.

When the question appears before the students, they read and see the options, and press any of the A, B, C, D, E, F buttons. If the answer is incorrect a red light goes on; if it is correct the buzzer will sound. In a way, it works like a computer and generates curiosity among the students.

Once the device was ready I incorporated its use into my new timetable. According to this, every Thursday from 4 pm to 6 pm, the students were to be tested on their weekly learning through this device. So I prepared questions in all the subjects. On Thursday, all the students gathered in school for their evaluation. Then I ran this program in front of the class, and the students answered the questions. Through this method the students themselves could rectify incorrect answer, and remember correct answers. Another advantage was that they were motivated to study at home.

The instrument requires a few switches, indicators, a buzzer, feed wires, a plug, hard board, nails and a photo frame. Thus, by spending less than Rs. 300, I was able to revolutionise the students’ study habits.

Earlier I used to take questions from the text books only. But then I used other reference material. As a result the students do not restrict themselves to textbook reading, rather try to read additional books. All the students and teachers participated in these programs; not only that, the Sarpanch of village panchayat, other educated citizens also came to see this program. Other teachers also followed this technique. Now all the students are attentive in class. As a result, the students’ passing rate has gone up substantially.

## **RITA SEMWAL**

I started my teaching career in the Sonla primary school of Chamoli district. The teacher pupil ratio was adequate in school so I did not face any problem. Then I was transferred to the Farashu primary school of Chamoli district in 1997. It was a multigrade school. There were 45 students in school. Though there was one more teacher, I was required to teach all of them since the other teacher had taken up the responsibility of doing administrative work (for which he often had to go out). I found it difficult to complete the course. Moreover some of the topics were difficult for the students.

For example, I found that they had difficulties in learning the grammars of the three languages – English, Hindi and Sanskrit. They could not pronounce and write correctly. They knew a little bit of Hindi grammar but the other two subjects were problematic for them. They did not find grammar interesting. So to make the grammar easier and interesting for the students I thought of making a Roll-over Chart.

Besides this, the students were unaware of current affairs. When they were asked to tell moral stories or recite poems or make speeches on festivals, they used to repeat the same story/poem/speech. To solve this problem I developed the idea of a Bal Akhbar.

### **Roll-over Chart cum Board**

I made a plan to make a roll-over chart to write the grammar rules of the three languages i.e. Hindi, English and Sanskrit on a continuous sheet of paper to avoid extra labour for each subject. It is a roll-over chart cum black board.

I collected a few things:

I visited many houses to collect old books and cut out pictures from them. I brought a full bag of cuttings to school to paste them on to the charts. From the market, I got some coloured sketch pens, chart paper to write these texts. The chart was made in such a way that one topic/subject was visible at a time.

Some space was left vacant for the students to write on. Charts were laminated and prepared using markers. But exercises could be done on the outer side and could also be erased. I wrote definitions, pronouns, verbs, adverbs, genders, tenses in a simple and attractive way with pictorials.

After making these charts, the students were asked questions with picture clues, to judge their knowledge. They had to write answers on this chart cum board. If any student belonged to a poor family and could not afford pens, pencils, this roll over black-board was the best solution for practice. I wrote some words like here, there, this, that, these, those and gender based words, in English, Hindi and Sanskrit. Some English poems, prayers, were also written beautifully.

Gradually, I developed the chart further by adding several topics from different subjects, e.g. numbers 1 to 100, addition, subtraction, division and multiplication, concepts of geometry. For all of these topics I had provided space for doing exercises on the roll-over board. As a master trainer I was often involved in the training of teachers; the problems they faced also gave me the idea to develop the roll over chart further.

At a time the students could see only one chart, so from curiosity they rolled the charts and wanted to know what came next? When they saw new subjects, their interest level went up.

This board was useful for both primary and upper primary students. It turned out to be a handy tool for poor learners since they could easily roll over the chart to see the concepts that they had learnt in previous years.

### **The process of making the board**

I took a piece of (2 X 2.50 feet) plywood to make a board and fixed hooks on the back at the top corners of the board in such a way that a rod could be easily attached to /removed from it. On top of the board, there were two pins to hold the rod, so that the roller could be operated.

### **Usefulness of rollover chart**

1. It was laminated so that students could operate easily and there was less chance of destruction.
2. I have provided blank space for student exercises; if they commit any mistake, they can erase and rewrite.
3. Students did not require extra pencil and note book for practice.
4. At a time three subjects were covered.
5. Students used to be eager to know what would appear next in the roll-over chart.
6. It was attractive because coloured sketch pens were used for writing and edges were sealed by cello tape.
7. Now so many topics have been covered that we don't require any text books.
8. It is portable.

Once I started using this roll over chart, I found that students were facing fewer problems in the language class. They were replying faster. A healthy competition was created among the students. If they found any question difficult they look at the roll over chart and correct themselves immediately.

### **Bal Akhbar**

The children did not have any magazines or news papers available at home to develop their general knowledge. So I thought of the *Bal Akhbar*. I adopted the calendar idea and made 12 *Bal Akhbars*, one for each month. All the important events or news published in a particular month were cut and pasted on a chart paper. Other things like poems, stories, scientific information, news about festival celebration, jokes, fault finding games, questions of general knowledge, weather information etc. which appeared in that particular month were also pasted on chart paper. Children enjoy reading the articles like: why should we wash our hands before and after taking food?; how clouds are formed?; why eggs move faster in a bowl while they are being boiled?; why stars do not fall down from the sky?

It proved out to be very useful to the students. During prayer assembly they came up with new stories, poems etc. everyday.

The indication of success of my innovations is that the children of my class are well versed with the use of roll over chart and *Bal Akhbar*. They use it on their own, which leaves me enough time to deal with the time pressure created due to multigrade teaching.

## **BUDAN A SHAIKH**

I am a retired primary school teacher. My teaching career began in Goa in the year 1966 in a non-government school. Then I was appointed as a Govt. Primary School teacher on 7<sup>th</sup> August 1970. I was teaching in the Urdu medium Govt. Primary School at Khariwada in Vasco. Meanwhile the A.D.E.I of Vasco came to know that I had a good command over Kannada language, so, he deputed me to the Kannada medium section at Govt. Middle School Baina-I (presently Govt. Higher Secondary School Baina).

### **Education of children of backward communities**

This school was full of migrant labourer and *dalit* children. I faced the peculiar problem that the students did not have birth certificates, which were needed for enrolment. Moreover the parents did not remember the dates of birth of their children. In consultation with their parents, I got affidavits made and enrolled the children in school.

But due to poverty many children worked in restaurants, shops and houses and hence remained absent from school. I told the parents that their children could manage to study along with the work since school remained open only for few hours. To help them eliminate their problems, I made them utilize the Govt. of Goa's scheme which entitled each scheduled caste student an opportunity cost of Rs. 500 and rations of 3 kg of rice. Then I approached local well wishers and NGOs and arranged for slates, pencils, books, raincoats and uniforms for these children. In this way I succeeded in getting more than fifty students in to the classroom.

But the educational system in Goa, from standard V onwards, provided a curriculum only in the English medium. The *Kannada* medium students, especially those coming from poor socio-economic backgrounds, found it difficult to cope with English, resulting in a large number of drop outs in class V. At this juncture I approached the higher authorities to grant us permission to start a 5<sup>th</sup> standard in our *Kannada* medium school. After several discussions the Directorate of Education granted permission to start standard V at the Govt. Middle School Baina (at present, the Govt. Higher Secondary School, Baina). This effort created a revolution in June 1976 in the History of Goa.

### **Adult education**

To create a better educational atmosphere, it was necessary for me to work after school hours. Since both parents in most families were working, and were uneducated, they could not provide much attention and assistance to their children. Hence my first attempt was to build cordial relationships with the parents and get them interested in adult education. I commenced an Adult Literacy Program. These classes included games, plays, devotional songs, etc. which brought the parents to school even after their working hours. The narration of stories from the epics Ramayana and Mahabharata was one way to help them develop mentally and spiritually.

### **Promoting cleanliness and good habits**

Personal cleanliness and hygiene were part of daily lessons. After prayer, I always checked each student's nails, hands, face, teeth, eyes, ears, nose and hair before starting the academic lessons. If the students did not maintain their uniforms and not keep their bodies clean we called the parents or guardians to advise and explain the importance of cleanliness. We also had a slot in the time table for school cleaning; the children of class 5 were assigned this responsibility.



As they came from the lower class and an illiterate background, many were addicted to bad habits like smoking, alcoholism, tobacco chewing etc. I pondered over the situation and explained the bad effects of these habits. They respected my words and most of them gave up the habits. Now many live a healthy life and are imparting the same virtues to their children.

### **Working for community**

Beside this, I strove for the construction of streets, lanes and roads with the help of well-wishers and the students of the MES College, Vasco-da-Gama, Goa. The purpose was to serve people and provide proper commuting facilities.

Most of the backward and uneducated people lacked information about the government schemes that had been created for the betterment of their lives. One such scheme was the 'Niradhar Yojana' sponsored by the Social Welfare Board, Govt. of Goa, which helped poor widows. Along with this there were several other schemes for the students. I tried my level best by engaging with NGOs to help these people avail themselves of the benefits.

### **Providing the opportunity for all round development**

Competitions always proved to be an inspiring source for the students; hence I always encouraged them not only to be active in academics but also to be at the forefront of co-curricular activities. On behalf of the Mormugao Taluka Officer, I organized a Bal Anand Mela in which various primary school students from Mormugao participated in drama, drawing, fancy dress, folk dance, mimics, singing, and story telling competitions. I had been successful in organizing competitions in my school and also in taking students to participate in functions organized in other places.

For social integration, important days were celebrated as a means to get the children from locality and the taluka together. The Directorate of Sports and Youth Affairs, every year organized the "*Sadbhavana*" race in which thousands of students from various schools, higher secondary schools and colleges participated. Besides students, freedom fighters and eminent personalities of the town also participated in the race to encourage the students and be a part of the large gathering. Every year I anchored the programme in Hindi, which was appreciated by the public at large.

Initiatives were taken towards religious harmony among the members of the community by celebrating various occasions like Dr. Bhim Rao Ambedkar Jayanti, Mahatma Gandhi Jayanti, Bhau Saheb Bandodkar Jayanti (Goa's First Chief Minister), Bashaveshavar Jayanti (Lingayat Community), etc. Many people were invited to take part; it was a means to prevent religious conflict and class conflict and accept one another with Love.

### **Outcome**

I take immense pleasure in the present situation. Once upon a time the dream that I had of being able to educate all the children living in slums and huts has come true today. Large numbers of students belonging to the schedule caste or backward classes are now acquiring primary education. Many of my students live a prosperous life and look upon me with respect. I think my hard work borne fruit and the generosity of my students is the greatest gift.

## SHAHIN R SHAIKH

Mohal village of Solapur district is populated by socio-economically backward groups. The school in the village provides education up to grade 4. I work here as a primary school teacher. I have found that the students are more fond of playing than studying. I have also observed that the students of grade 4 participated actively in Marathi, History, Geography, & Science during classroom teaching, but maintained silence in the Math classes. Only 5 or 6 students used to reply during the math class because they thought that mathematics was a very difficult subject. So I decided to free them of this fear. I had observed that the children were fond of playing cards. So I invented educational games using cards. I collected two sets of playing cards.

### ***Making students familiar with numbers***

First of all I changed the Ace to one and selected the numbers 1 to 10. Thus I took 40 cards from one set and 40 from another set. These cards were distributed to the children. Each was asked individually to identify the number that he/she had received. In this way I taught them to identify and pronounce numbers. I introduced various games, like, *Jodi banao*. That is, if the teacher wrote 15 on the board the students would form the "Jodi" with 1 and 5 from each division, spades, hearts, diamonds and clubs. The four pairs would stand together in a row. The students corrected each other in case someone made a mistake.

### ***Explaining units and tens***

I told the students to assume that the numbers 1 to 9 of hearts were tens and those of spades were units. All the students were given two cards— one heart and one spade and then were asked one by one to call out the number that they held. This was tricky. But two bright students were able to answer immediately and gradually all of them were able to read out their numbers. This enhanced their knowledge of double digit numbers.

### ***Addition and subtraction***

To explain addition, I invented a game. I made all the students stand in a circle; each was given a card with a number from 1 to 9. I stood in the centre of the circle and asked the students to run around me. Then I announced any number, e.g. 27— the students would join together to form 27 like (4, 3, 9, 7, 4: these numbers add up to 27). These students would form a separate group. If a student was unable to form/join any group, the 'odd man out' formula would be applied and the game would start again. Here I added one more step: the '+' side and the '-' side. When I said make +17, they would form of groups of numbers adding up to 17, like 3, 4 and 5, 5 and these two groups would stand side by side. If I said -11, they would form 2 groups so that the subtraction of one from the other resulted in 11, like 8,7,6,4 and 7, 7.

Likewise, I have made 72 games out of these cards. I have observed that, now, the students wait for Math classes, where they play as well as learn from these games. When I evaluated them, I found that 85% of them were able to solve numerical examples easily. Now they focus more on my class than of other subjects.

## GHULAM MOHMMAD SHEIKH

I worked in the primary divisions of the Department of Education in Jammu and Kashmir for eleven years, usually as a single teacher, up to 1991, when I was transferred to a distant village in a hilly area of my own educational zone. This school had been started in 1965. When I took charge, I was amazed to find that there were only eight students there, of whom three had passed the fifth standard and were due to go to a middle school in another village, three kilometers away. My main concern now was to increase the number of students in the school. Although there were many children of school-going age in the village it took great practical effort and determination to persuade the parents to send their children to school. Most of the adults were themselves illiterate.

Since I was a stranger it was difficult to establish contact with the people. Since I used to go to the *masjid* for prayers during the school lunch break, I started meeting some people there after the prayers. I talked to them about the importance of education and culture from the Islamic point of view. This gave me an opportunity to talk also about sending their children to school. Around this time, when the daughter of one of the village elders was about to be married, I received an unexpected call. The bridegroom had arrived with his "*baraat*" and the *nikah* was due to be performed. But the *maulvi saheb*, who was to come from another village, could not oblige, as there was a security problem in his area. The elder sent a person to the school, hoping that I would accept to perform this duty, since there was no one else in the community who was capable of doing it. I agreed happily, and was rewarded with the wholehearted appreciation of the whole community. For the next eleven years I performed the *nikah* at every marriage that took place in the village.

From then on, I used to read and write every application and other material for the people, and took every opportunity to talk to them about the uses of literacy. Before joining the Education Department I had had some practical training in animal husbandry. Some people used to come to me for advice about their animals. I made it a point to talk to them to about their children and those of their neighbours. Gradually, people become so friendly with me that if they did not see me at the school for a couple of days (during official holidays), they would show up to meet me when the school reopened. Even very small children started to land up at school. The result was that in one year the number of students rose from five to 32, and the parents began to take an interest in the activities of the school.

In spite of this success, the fact remained that there were only four girls in the school. So my next effort was to encourage more girls to join us. One day, when passing along a lake next to a graveyard, I saw some girls playing in a small field where some cane grew. There were eight or nine girls, aged between six and fourteen years old. They had made a stove of sand and some of them were busy grinding grass and bits of discarded bricks and earthen vessels. I stood for a while and watched them. The next day at school, I asked our girls how the other girls spent their day. I was told that they looked after their younger siblings and then played in the field where I had seen them. I asked our girls to make a similar play area in our school compound where they could play more safely. I also told them to spend a day playing with them in order to familiarize them with the new place. The next day I found a large group of girls playing with our own girls. I sent the amused audience of boys back to their classrooms and let the girls continue with their play. At lunch time I told the girls to go home, and to come again the next day. I had learnt their names and several personal details by talking to them. The next day I started to show them how to count the number

of pebbles they were playing with. Gradually, the girls began to take an interest in the school, attended classes. And then I registered them as students. As a result the student's strength rose to 39, of whom 11 were girls.

We were now faced with the problem of caring for the small kids in their homes. When our *chowkidar's* little son developed problem in his stomach after eating some raw apple given by his sister, I felt the need to provide some care. I asked the *chowkidar* to send his son, when he was better, along with his sisters to the school, so that I could take personal care of him. When the child was brought after a few days I provided a piece of sacking for him, and his two sisters took turns to stay with him. Seeing this, other girls started bringing their little sibling to school, and I provided a piece of sacking for each child. When the little ones soiled them, the sisters washed the sacking cloth. There were now 45 students in the school.

At a short distance from our government school and on the other side of the stream which ran nearby, there was an unrecognized private school. It functioned on donations and students' fees. Several children from our village were studying there. Times were bad. I contacted the parents of those children and asked them why they sent the children to a distant school and paid fees, when their own village provided free education. I was told that apart from providing the normal curriculum the other school also gave religious instruction. I decided to start the same at our school and after some effort found that some boys had left the other school to come and join us. The result of all this effort was that our school's strength rose to 65 and the school came to be considered one of the most successful schools in our zone.

There were some learning problems as well. After learning to recite numbers, when the children started learning to write them, they made many mistakes. For instance, they wrote numbers the wrong way. For instance, they wrote a mirror image. Or, instead of 10, they placed the zero to the left and wrote 01. Another example would be 05 for 50. These were corrected by means of a demonstration with a stick and a small stone or ball. I made children observe a slope while standing at one end with the higher end of the slope to their right. I stuck a stick into the centre of the slope and rolled a stone down from the top so that it was stopped by the stick. Then I placed the stone on the other side of the stick so that it would roll to the bottom of the slope. The lesson was that a zero on the wrong side had no meaning, whereas on the right side, it created a new number.

Some children, accustomed to Urdu being written from right to left thought that English letters should be written in the same direction. For example, ABCDEF would become FEDCBA. They were taught the difference between the two by holding their notebooks in each hand alternately.

Capital letters, written on the black board, were used to teach children that the English letters, like the human body, had a main "trunk" to which "limbs" (appendages) were attached. But in a letter like "A", which was symmetrical, there was no need for "limbs". In the case of the letters like B, D, E, F, and so on, the "trunk" should be made first and other strokes added as required, but always to the right of the trunk.

Some children were weak physically, which made their writing unsatisfactory. Others were lacking in exercise. I made them exercise their hands and fingers daily for ten to fifteen minutes; sometimes giving them sand to knead (like dough). I also gave special attention to children with defective vision and hearing.

## GANESH V SHINDE

When I joined the Zilla Parishad Marathi Primary School of Jeyurfadi, I experienced certain difficulties in teaching the students. For example, in explaining the concept of “Surya mala”, “Chandramala”, “the different spheres of the Earth” and different geographical aspects etc. To teach such concepts a teacher needs excellent drawing skills along with teaching skills, which nowadays are missing. Such subject matter needs to be illustrated very carefully. The pictures which are used in the book are usually black and white and of very little help.

I realized that many of my colleagues in the other schools of our cluster also had similar problems. So I thought of making TLMs for difficult content, since teaching learning materials help the teacher make teaching more interesting and understandable.

I had an idea about the kind of TLMs that I should make to explain these concepts, but finance was limited. Also, it was not possible for me to prepare the material alone. So, I put a proposal before all the teachers (40) of the cluster schools to make TLMs, which would be beautiful, cheap and innovative. I asked for their views on the difficult concepts and noted them. I told the teachers to contribute Rs.300 from the grant that they received for TLMs under the Sarva Shiksha Abhiyan. Forty teachers contributed and I collected Rs.12,000.

Four or Five of my teacher friends agreed to help me plan the activity. I organized all the raw materials like – hardboard (cardboard), tools, oil paint, primer, brushes etc. Then I organized a workshop at Somlutada Kachabgreen for the 40 teachers. The intention was to teach the process of making the TLMs. After 10-15 days’ hard work, 30 to 40 different types of teaching aids were made. They were all unique sample pieces of our hard labour and talents.

We demonstrated these aids in an exhibition of the Kendriya Sammelan “Masik Sahabichar Sabha”. Our TLM on the Suryamala was praised a lot. This model has not been available on the market up to now. Some of the other TLMs that we made are: the spheres of the Earth, waves and tides, *Chandrakala*.

The TLMs have helped all the teachers who participated. Earlier they used to teach the concepts by drawing pictures on blackboards, which did not help the students much. But now at a glance they can understand concepts like the solar system.

Moreover, the teachers were able to utilize the money of the Sarva Shiksha Abhiyan in better ways because of my innovative effort. Almost all the teachers of the school of our centre have access to these materials. We advertised in the newspaper in Hindi, English and Marathi. Many teachers come to enquire about this work. It also gave me the opportunity to exercise my hobby which is painting. Now the students’ performance has improved.

## HEMA G SHINDE

I completed my diploma in education in 1992 and joined as an unpaid teacher at the Vistar School, just to gather teaching experience. Then I became a primary school teacher at the Solapur Primary School. I was assigned class 1. I noted several problems. The Students could not read when I asked them to read. They could not speak properly when I asked them any question. I gave them practice in public speaking. Gradually they developed skills and gained confidence in presenting speeches at our school functions and also at different other functions.

In 1993, I was appointed to the Navindagi village of Akkalkot Taluka. Here I tried to attract the students to school through joyful teaching methods.

I was transferred to Kurgaon in 1994. Though there was a lady teacher in school, very few girls attended school. I sought the help of my colleagues and contacted the children's guardians. Then I conducted different competitions to attract the girls. And gradually they came to school. After that, I emphasized study. I also stressed personal hygiene.

Then I was transferred to the Nandani village school in South Solapur. I was assigned class IV. Here I found that the children were not interested in study, because these students helped their families in their daily chores like taking care of siblings, taking food for their parents to work sites and helping in household work. Due to the pressure of such responsibilities these children could not concentrate on study. I felt that if, I gave them knowledge based on their past learning and trade, rather than giving them textbook-centred lessons, it would be easier to hold their interest. I taught them how to make different types of things from coir- strings, jute, cotton string, card sheet, paper, colour, used up invitation cards, old news papers, old books, pictures. They learnt to make different types of toys, masks, kites etc. and started earning while studying. I organized an exhibition of toys, paper toys, kites, masks, flowers, cards, wall-pieces, post boxes etc. Children from other schools visited it and were encouraged to do similar things.

The girls' presence increased due to introduction of such work experience in school. They competed among themselves to perform. Due to such activities the children understood the value of their labour and got interested in studies. As a result they performed well in the examination.

On account of my perseverance, I was asked to train other teachers in similar activities. I also modified the local games to teach subject-related concepts.

***Dhup - Chhaon*** To play this game, the children would hold each other's hands and make a circle. One student would stand in the middle to instruct (i.e. to say Dhup or Chhaon) the rest. Here, *Dhup* implies coming forward and *Chhaon* implies being in the original position. If the instructor said *Chhaon* the students would not move from their original positions, and if she said *Dhup* they would come forward. I modified this game to teach synonyms, antonyms (language), even/odd numbers (math), names of fruits, flowers, village, city (EVS) etc.

### ***Arre Bhai Zara Dekhke Chalo***

This game was invented to give knowledge about traffic-signals. It is played in a way similar to the game of snakes and ladders. Once a child moves her coin on the board after throwing the dice, she comes across traffic rules/indications that she has to follow. For example, if she reaches a house of "no parking", she gets 3 bonus marks and hence move further by three houses. If she finds "R" the

Red signal, then she would have to move back by one house. Thus the players move across the board following traffic rules.

Some of the indications/rules written on the board are:

Turn right (indicated by an arrow)	Turn left
Horn please (cross over to one more house)	No horn (come back by one house)
Green signal (don't stop, go ahead by 2 houses)	Red signal (stop, come back by one house)
Parking (misses three chance to throw the dice)	Speed breaker (misses one chance to throw the dice)
Bridge (don't stop, go ahead)	No entry (skip that house)

### **Ride a vehicle**

This is also based on 'snakes and ladders'. The purpose of this game is to teach the children the names of various vehicles/modes of transportation and also give them an idea of the speeds they can reach. Each house on the board has a picture of a vehicle. When a child reaches a particular house after throwing the dice, she has to either move back or go ahead according to the direction of the vehicle. The following are the rules/indications:

Cycle or horse carriage: one house ahead or back	Bus, truck, tempo: 2 houses ahead or back
Motor car, Jeep: 3 houses ahead or back	Train: 4 houses ahead or back
Catamaran: 1 house ahead or back	Boat: 2 houses ahead or back
Ship: 3 houses ahead or back	Submarine: 4 houses ahead or back
Parachute: 1 house ahead or back	Aeroplane: 3 houses ahead or back
Helicopter: 2 houses ahead or back	Rocket: 4 houses ahead or back

Several other popular games like *Vish Amrut, Bolo Bolo, Snakes and Ladders* etc. are modified to teach various maths, language and EVS concepts.

By playing these games children receive pleasure and knowledge simultaneously.

## JAGVEER SINGH

I was educated at the primary school Chhidawali, U.P. After completing my education I joined as teacher on 9<sup>th</sup> December 1999. I remember my first day, when I stepped into the school; it was a bit emotional for both, school and students. The reason was that I had studied here and come as teacher to the same school. The most impressive thing was that one of my teachers was now headmaster. Hence I was engrossed in thoughts of repaying my debt to this school. I dreamt of doing something different for the school which would make it the best place to study in. I captured my emotions in poetic form like this:

*Vidyalay mein kadam rakha jab  
Dekha mitra lage ye bhole  
Jor jor se ye sab chillaye  
Kuch mithe swar mein bhi bole.*

*Pehle diwas jab sath bitaye  
Prasno ki bouchhar hui tab  
Navoday tyag yahan kyon aaye  
Kaise mahoul laga yahan aab?*

*Shikshit kar bidwan banaunga  
Uncha karunga desh ka naam  
Aisa kuchh thaan ke mann mein  
Prarambh kiya shikshan ka naam.*

*Dhanya hai ye chhatra-chhatrayein  
Jinhone esme pravesh paya  
Ab un sabse khushnaseeb hai hum  
Jo adhyapan karya paya.*

Once I started teaching I realized that the standard of English was poor as compared to other schools. The students were good and efficient in other subjects. Despite their efficiency, they underestimated themselves by comparing themselves with English medium students. Being a post graduate student in English literature, I immediately decided to remedy the situation. I made a plan which was not only new to me but also to the students.

### **Methods of teaching English**

I made a combined time table for the students of classes 4 and 5. There were 53 students in grade 4 and 46 in grade 5; a total of 99 students. All were encouraged to write a word beginning with the 1<sup>st</sup> alphabet of their names and learn it by heart by writing it several times.

Then the 99 students were divided into 19 groups on the basis of alphabets, like:

A,B,C,D  
F,G,H,J  
K,L,M,N  
O,P,R,S  
T,V,Y



Each group was given 5 new words. Like this each group had a stock of 5 new words. For 3 weeks, these students were given practice to make them well acquainted with these 5 words. They were given practice in reading, writing and correct pronunciation.

**Group letters**

<b>A</b> –Apple	<b>B</b> - Bat	<b>C</b> - Catch
Ass	Bet	Camel
Ask	Bad	Correct
Admission	Bed	Cotton
Ant	Beautiful	Cough
<b>D</b> - Deer	<b>F</b> - Food	<b>G</b> - Good
Dear	Foot	God
Doe	Feet	Goat
Dough	Fight	Gold
Dove	Feel	Great
<b>H</b> -High	<b>J</b> - Jump	<b>K</b> -Kite
Heat	Juice	King
Hand	Jar	Knife
House	Jeep	Keep
Hate	Jackal	Kill
<b>L</b> - Lion	<b>M</b> - Monkey	<b>N</b> - Night
Loin	Money	New
Long	Mouth	News
Light	Month	Never
Life	Mango	Nose
<b>O</b> – Orange	<b>P</b> - Parrot	<b>R</b> - Rose
Owl	Peacock	Road
Out	Place	Right
Over	Poster	Ring
Open	Polite	Race
<b>S</b> – Sheep	<b>T</b> - Toe	<b>V</b> - Village
Shape	Teeth	Value
Servant	Tell	Very
Save	Tough	Van
Sell	Tight	Valid
<b>Y</b> - Yellow		
Yarn		
Yes		
Yet		
Yard		

In this way, all the students had a collection of 5 words with them. Once they were confident in the reading, writing and pronunciation of these words, they were asked to interchange their words

with other groups. The students also showed interest in teaching their words to their friends. I had to make special efforts to encourage the children to remain present in school. Within 2 months each student had a small dictionary of 19 X 5 = 95 words.

I am proud of my perseverance, because I have prepared the ground for teaching English in a village area and have succeeded to quite an extent.

### **RAJ KUMAR SINGH**

I started my teaching career in 1999 as an assistant teacher at the primary school Jirouli dor, Aligarh. This area was dominated by the Thakur community. I spend approximately 6 years in this school. I dreamt of making a perfect school. But illegal encroachment on the school premises, lack of enrolment, the liquor shop near the school, my colleagues' addiction to smoking were hindrances. What follows is my first experience, in this school.

#### **My first experience at the school**

When I reached this school after receiving my appointment letter in December 1999, I saw that its four teachers were sitting on chairs under a big banyan tree. They were busy gossiping. The students were playing games. They started looking at me with curiosity when I stepped in. When I introduced myself as a new teacher, they resumed playing.

The other teachers helped me complete the formality of taking charge. Then the teachers made a chair available to me near them and said "Masterji there will not be any problem for you. Just pass your duty time calmly, and mind your own business". At that moment some people's growling reached my ears. I wanted to know what that was? I was told that they were the *dabang* of the village. Drinking alcohol and playing cards inside the classroom was their daily routine. Another teacher narrated a bitter experience which he had had to face while trying to stop these people. I was advised to ignore them.

That experience was entirely the opposite of what I had expected. I was not mentally prepared for this. A wine shop was situated just 50 yards away from the school and it was legal. The Head master closed the school by 2.30 pm instead of the scheduled time of 4.00 pm. I also left for home, but I was pensive about the condition of this school. 'How would I work here as a teacher?' this question troubled me all night. The school was situated in a village where the *thakurs* were dominant. Fortunately I am from the thakur community. My father was a retired government employee. He asked me 'how was the day?' He anticipated that something had gone wrong. I told him the whole story, he consoled me by saying, 'if you truly want to you can change your surroundings but your perseverance should be true and genuine'. I was inspired by his words and made up my mind to change these surroundings. The question was how it would happen. I took 2/3 days to observe the situation. Then I started to put my plan into practice.

#### **My struggle to free the school**

After spending 1 to 2 weeks at the school, I visited the village *pradhan's* house with my head master. The Head master introduced me. After formal talks, I told him about the mismanagement of the school. He showed his helplessness by saying that he knew what was going on in the school

premises, but the people responsible for converting the school in to gambling den were of his own community. He clearly refused to intervene in the matter since he didn't want to lose his hold over his people.

Then I realized that I should look for a solution on my own without depending on anyone. That day I went to the police station, Lodha, Aligarh, after school-hours. To my surprise the person in charge of the police station turned out to be my childhood friend. Fortunately that village was under his jurisdiction. He morally supported me by saying, "don't worry; henceforth none of these anti social people will enter your school premises". Then he made a plan which was to be executed on a particular day. According to it, on a specific day I was supposed to prohibit those anti social elements from gambling or drinking in the school compound. My friend told me that I should start an argument at 11.30 am sharp and should continue till 1200 noon, by which time he would enter the premises in a police jeep along with his assistants. The crucial task was to keep the *gundas* busy in argument or verbal fights and not let them hurt me till the police came. I agreed to his plan and requested him to note down the time in his diary. He ensured me that he would be there without fail.

The scheduled date came after two days. I started according to plan. At 11.30am, I initiated a conversation with the anti social people. I told them that they should stop coming to the school premises. They all laughed at me and started saying whatever came into their minds. The Police Inspector came with his force. He carried out a mock-search of school and took action against the drunkards. He pulled out a chair and sat there. All the villagers were gathered and were whispering. They were curious to find out why the police had come to their village.

After that the Police Inspector announced to all the villagers that I was his friend and anybody who tried to interfere with my work would have to face the consequences. Then all became very quiet. Some of them begged pardon by touching my feet. As we had planned, I requested my friend to release them.

The impact of the threat was so great that from the very next day none of them was seen in school. Then I wrote to the collector about the proximity of the wine shop (as per the rule it should not have been within 500 meters of the school) and requested him to move it. The wine shop was demolished. This was my big success and generated confidence among my colleagues.

Then I strove against smoking. This was not easy either, since I had to fight against my own colleagues. All of them were smokers. I had to use different tactics for this problem. I told them that we, being teachers, must be ready to punish wrong conduct and reward good conduct. Then I elaborated that if anyone smoked he had to get me sweets or a juice because I didn't smoke. After hearing this, one senior teacher reacted by saying that he could not do without smoking. So I provided a relaxation by allowing them to do so outside the school premises. This worked and the teachers were saved from setting a bad example to the students.

### **Improving enrolment and attendance**

After these two steps, I worked to improve enrolment, attendance, and retention. I went with the headmaster to all the villagers to collect data about 6 to 11 year old children, I prepared a list, personally met all the parents and inspired them to enrol their wards in school. The result was positive and the number of children in school went up by 20 for the new academic session beginning in July 2000. The obstacle to achieving this was the two private schools which were also being run in the same village. I informed the parents and the students of these schools about various schemes/facilities provided by government for our school. The changed environment, along with the attraction of government facilities drew them towards our school. The private school

students were molded towards our school by the help of facilities offered by the government. So the teachers of private schools started complaining that I was misguiding the parents since I wanted to close their private schools. I explained that I had no such intention; rather I was doing my job sincerely as a government servant. I told them that I did not have any grudge against them. Then they all kept quiet. We maintained a cordial relationship.

The result of my efforts is that all the children in the age group of 6-11 are in primary school. Many of the students of private schools have moved to my school. Today there are 180 students in my school, attendance is almost 95%, and retention is 60%. My goal is to raise the attendance to 100 % and retention to 90%. When I achieved this, I would be able to say proudly that I had done my duty perfectly.

As a teacher I had changed the evil system which had been followed for years and was killing the future of both the society of that village and the nation. Now it has become a thing of the past and the same people who used to say bad things about me are often heard saying words of praise. The result that I achieved will be an inspiration for incoming teachers and that thought makes me feel proud.

I conclude with a quote:

“Rukna na tum jab tak  
Tumhare swash ka lablesh hai  
Himmat na haro hai hriday  
Yah sadhna ka desh hai”

## SURESH PAL SINGH

### ***“Vidya bechari per hai upkari”***

The primary school Bhogpur was established in 1982. From 1982 to 2002 more than 100 students were enrolled, many dropped out and took admission to the nearby private Montessori schools. I joined as this school head master on 19<sup>th</sup> April 2002. I was pained to see the pitiful condition of the school and the small number of students. The compound had been encroached on and abused by the villagers. The total number of students was only 55 though it could have been much larger. About 48 were SC, 5 BC, and 2 were from the general category. Two expensive private Montessori schools also existed in the village.

I took a child census and found that about 180 children of 6 to 15 years of age were being deprived of education. They were busy with household work and in taking care of siblings.

In June, I organized a rally on the literacy mission, with the help of the village *pradhan* and the students.

**“Shakshar bano sunhara mouka  
Jeevan mein nehin hoga dhokha”** was my slogan.

On the same day I also formed the 3 committees for the school.

1. Vidyalay Shiksha Samiti (The School Education Committee)
2. Vidyalay Vikash Samiti (School development committee)
3. Parent Teacher Association

The purpose of forming a committee was to root out all the problems and make an ideal school. First of all, I dealt with the issue of dumping garbage in the school, for which I thought of taking the help of the Vidyalay Vikash Samiti. I explained the situation to them and wanted to take the necessary measures, so that such actions would not be repeated. But no one bothered about my request to clean up the school premises. Then I decided to take the help of the Janta Darbar Tahasil, Gavana. I visited the S.D.M Shri Ashutosh Warneyi along with the *pradhan* Shri Kailash Nath, on 8/7/02 to make an application regarding the cleanliness of the school. Immediately he instructed the Tahasildar Shri Harshvardhan, to use the police force from the Chandous police station to free the school of encroachment.

Mr. Harshvardhan helped us clear the school and warned the villagers not to dump any garbage on the school premises. He supported me in front of everyone by saying that if anybody repeated this, I should lodge a case against that person without any fear.

After achieving this success, the next day, the school boundary was fenced in with cactii. I took the help of the Vidyalay Vikash Samiti to put in fertile soil. Each student planted a flowering plant at one meter's distance from other plants.

After that I established a tradition of conducting an Education Committee meeting twice a month. The members of this committee people were established in the education field. I assured

them that their children would be taught wholeheartedly and made them aware of the facilities being provided by the Government, for instance

1. 3 kg of wheat
2. Free books
3. Scholarship to each student

Seeing school's impressive environment and the quality of teaching, students were gradually attracted towards the primary school. Some of them had not gone to a school earlier, but the change of environment attracted them and they got enrolled in school. Some others were part of a private Montessori school. Being fascinated by the entertainment programs introduced on Saturdays, they started persuading their parents to let them come to my school.

### **Padhneki koi umar nahin**

**Padhne mein koi sharam nahin**" using this motto I tried to bring all the out of school children to school. I succeeded. In 2002, there were only 55 students in this school. But now it has 365.

Here is the year wise picture of my success:

2002- 55 students

2003- 180 students

2004- 182 students

2005- 318 students

2006- 368 students

I saw to it that none of the children between 6-14 years was exempted from education. To achieve 100% enrolment, I received a lot of help from the mother-teacher association. In the entire village, 40 sectors were made and each sector was headed by 2 educated persons. They helped me in various mobilizing and monitoring activities. Only 3 children were left, on account of their physical disability. Two of them have severe disability but the third child, a girl Rajbala is now successfully enrolled. The incentives provided by the government helped me to convince her parents. She is good at studies; recently she surprised the BRC coordinator with her reading skills. He was so impressed that he gave her a prize of Rs. 50. She is very active, so I have put her in charge of the cleaning committee. I was inspired by the efforts that Helen Keller's teacher had made to teach her. Her autobiography has been a great source of motivation for me.

Gradually number of children in the other school decreased and it became necessary to close it. I evaluated the remaining children of that school and admitted them into suitable grade in my school.

Today I am also known for providing quality education. But ten years back I did not have much idea about different methods and materials. I was guided by the DIET principal while I was working in the Tejpur primary school. During one of the routine invigilation, on 24<sup>th</sup> Dec, 1997, she came to my school. After observing my teaching, she asked me to show my TLMs. I was totally blank. Seeing this she clarified that she wanted to see things I had made using the grant of Rs. 500. I showed her the books that I had purchased. She was furious. She, then, demonstrated the TLMs available at the B.R.C Chandous and instructed me to prepare TLMs in one week or else face punishment. The journey that began to save myself from punishment continued and today I am known for activity charts and TLMs. Likewise many have contributed to my work by giving me ideas and I am thankful to all of them.

I will conclude with my favourite slogan:

**"Mehnat woh sunhari chabi hai**

**Jo kismat ka dwar kholti hai”**

## VINAY SHARAN SINH

I am a teacher in the primary school of Pipariy of Khiaragadh block in Rajnandgao district. While teaching numbers to the children of classes one and two, I realized that there were several problems. To begin with, the children were not able to write a number if I called it out randomly. Though they could recite numbers 1 to 100 in sequence, they were not able to identify a number if it was shown to them randomly. The children of class two had problems with learning increasing and decreasing orders. There were several other related problems. To solve these I introduced number cards made like identity cards. I made cards for numbers 1 to 100. I laminated the numbers cards with plastic in the shape of identity cards and stuck them on the pockets of the children's shirts. There were 32 children in grades 1 and 2. As soon as they came to school I fixed the cards on their pockets. I took help of the children studying in classes 3 and 4. Then I asked younger ones question like:

Teacher: "Which card are you wearing Ramesh?"

Student: 49

Teacher: Who is wearing the one which comes before 49?

Student: Mohan

I also kept asking them such questions at regular intervals during the day. It looked like an informal chat, between teacher and students, carried out to break the monotony of teaching-learning. The cards were not changed for three days. Initially I focused on number identification. Then I asked them several questions to reinforce their knowledge of bigger, smaller, order and place value. This experiment worked well and now the children are able to write any number I call out.

Actually, earlier, I had taught them letters with the help of their identity cards. So I modified this pattern to teach numbers. Later on I extended it to class 5 to teach them antonyms, synonyms and word meanings. The children of the higher classes also enjoy it.



## N SIVAGAMI

While teaching Math to students of grade VI in the Panchayat Union Middle School, Neermullikkuttai, I realized they found it difficult to solve questions related to arithmetic. So I undertook a piece of action research to improve their learning of arithmetic.

### **Details of the research**

#### ***Problem identification***

For the academic year 2005- 2006, the quarterly examination was conducted in September 2005. While correcting the grade VI students' answers for Math, I found that all of them had done geometry problems correctly, but only a few had solved arithmetic problems. So I realized that they were very weak in arithmetic operations. To ascertain this I conducted a test which showed that the students found arithmetic operations difficult. My Headmaster Mr P. Govinden helped and motivated me in this research. The co-operation of my co-teachers, parents and students helped me to complete it.

#### ***Teaching Learning Material: (TLM)***

Chart balls, Napier Multiplication tables, Puzzle collection, stones, and sticks

#### ***Self Learning Materials: (SLM)***

Programmed Learning material, Rotating disk, Matching board, Self Learning cards.

#### ***Main features/steps***

1. Motivating the students
2. Teaching mathematics using the play way method
3. Practicing easy ways to memorize tables
4. Conducting a test daily
5. Giving continuous training and individual attention to every student.

#### ***Implementation***

During the programme, the classes were not held in an actual classroom situation but in a natural environment so that the students could enjoy the new environment. Also, the arrangement of the classroom was modified everyday to create curiosity and interest among the students. During the commencement of the class, the students were motivated by being asked to solve easy puzzles. Students who solved the puzzles were encouraged by applause so that the other students participated actively in the programme.

The following four basic operations were taught with the following innovative methods.

#### **Addition and Subtraction**

The students were taught to add two numbers using stones and small sticks. Students were divided in pairs. To each pair, sticks were given. All pairs were asked to add the two numbers and the pair which added up first was appreciated. This created an interest and a competitive spirit among the students and they learned addition in an easy manner.

The same method was practised for subtraction.

#### **Multiplication tables**

In order to memorize the multiplication table easily, students were arranged in groups and each group was asked to memorize the tables by spelling them from top to bottom and from bottom to top. Evaluating cards were used to check the students' achievement.

In every activity continuous training and individual attention was given to every student.

#### Multiplication

Multiplication was taught through the play way method. For this, a market like situation was arranged by dividing the students into groups. Every group was asked to buy things from other groups. In this way, each group's members became efficient at multiplication.

#### Division

Division was taught through continuous drill and practice. The students were taught that "continuous subtraction is division". Individually every student was asked to solve division sums.

Finally, a departmental store was created by the teacher and the students were asked to make various kinds of transactions and calculate the prices of things. Those students who calculated prices correctly became efficient in arithmetic operations. For other students a remedial programme was undertaken.

#### ***Assessing the effectiveness***

A post- test was conducted on arithmetic operations after the action programme. The pre- test and post test marks are tabulated below.

S.NO	Name of the Student	Pre- test marks	Post- test marks.
i	Vimala	12	20
2.	Mahindran	8	18
3.	Sankar.V	5	15
4.	Ayyannar	6	14
5.	Sankar	10	20
6.	Tamilkani	5	18
7.	Meena.C	6	19
8.	Meena.S	7	15
9.	Mohana	11	17
10	Mahalakshmi	15	24
11.	Dhanalakshmi	8	20
12.	Lokanathan	5	18

13	Manikandan	7	17
14	Mayilvel	6	15
15.	Neelameghan	9	20

It shows that the activities given to the students were effective and the programme was a successful one. The activities undertaken in the action research are followed by my co-teachers in our school with fruitful results.

## **S SURESH**

I began my career as a teacher in 1999. But my real work, I feel, started in 2004 when I was transferred to the Nathamedu P.U.P School (Moroppur Block) in Dharampuri district. Here I faced two major challenges: relating to punctuality and drop out. I think the problems related to learning can be sorted out if a teacher tries various teaching methods, but addressing the issue of drop out is more challenging. When I joined, the school had five teachers and 260 children registered. I realized that the students in this school were very quiet and their learning capacity was high. But many of them came very late in the morning session and some students had dropped out of school though their names were still on the register. The reason for coming late was child labour. As for drop out cases, I realized that there had been many factors responsible, including some school-related ones.

So I was motivated to address two issues: Child Labour and Dropout

### **Child Labour**

First of all I talked to the late-comers about their routine. They explained that they woke up at 4 in the morning and went to pluck flowers for their parents (who then sold them). This was a very serious problem because of the parents' illiteracy. So I went to each student's house and talked to the parents about the importance of education. After persistent attempts all parents agreed to send their children on time. Now our students come on time. In this process, step by step we changed the parents' behaviour and attitude towards their children's education.

### **Dropout**

In our school I found 22 students had dropped out and they were still of school-going age. From my past experiences I had realized that the parents' cooperation and change of attitude would help. So I planned to visit all drop out children and their parents. Every day at 11.00 am, I travelled a distance of about 3k.m around the village to scan the area. I found that many of the drop- out students were occupied with cattle-grazing and some were idly wasting their lives without any work. So I decided to, first, meet the drop out children and then their parents.

I counselled them by sharing their problems. I tried to find out their strengths and weaknesses, their family situation and then I explained the problems that people face due to lack of education. Most of the students accepted my invitation to rejoin the school. After that I persuaded the parents. My colleagues had also joined me by that time. Through this process 17 students rejoined the school. Thus we achieved an 80% success through rapport building and awareness creation.

The next crucial step was to ensure their attendance and retention till they completed their primary education. We took the following steps:

1. We selected drop out children as leaders in class, so they might have the chance to develop leadership qualities.
2. They were allowed to lead the prayer assembly
3. We never punished them if they made mistakes, because they were special in our eyes
4. We paid special attention if they had any problems
5. In case any of them had to remain absent for genuine reasons, we gave them special attention on the following day
6. All of the teachers contributed financially by giving pencils, pens, uniforms to needy pupils
7. We shared stories and proverbs about great popular personalities to increasing the students' courage and confidence
8. They had the opportunity to participate in all the activities planned on various occasions like the celebration of republic day, independence day, children's day

I did not stop at re-enrolling 17 students. I kept trying for the remaining 5. When persuasion did not show results I went on a one-day fast in front of their houses. As a result, now only one child is left out. I am still thinking of some way to get him in to school.

We regularly organize PTA and VEC meetings to ensure that no child drops out. We also educate parents about various government programmes and incentives and guide them on how to avail themselves of the opportunity. We have a first aid kit for the children, so that fevers, wounds, cuts can be dealt with. Due to our efforts the student strength is now 360.

### **Teaching Tamil**

I pay special attention to developing the children's public speaking skills in Tamil. I emphasize the learning of phonetics. I make them practise unseen writing. For this, very familiar words are taken: e.g. '*amma*'; I am sure about 80% of the students would write this word correctly. Next, the teacher can take a word like 'Milk' ('*Paul*' in Tamil) 30% of the students would be able to write this word correctly. The other 70% would write "*pal*". The third word could be '*ozhi*' in clear pronunciation. But, 90% of the students make the mistake of writing "*Oli*" or "*oli*". Most teachers would agree that students go on making this mistake up to higher levels. Therefore, at the very initial stage, we should train them in the use of soft sound pronunciation. I have compiled over 500 phonetic words, about 800 consonant words, over 75 one-letter words from various kinds of books and I give them lots of practice. Through this, I am confident that the students' pronunciation of letters and words will improve.

## GURUSIDDAYYA S SWAMI

I was born and brought up in a poor farmer's family. I studied in the Kannada medium school in my village. I completed my B.Ed. at Solapur in 1992. After that I tried some jobs and later on, with a reference from my friend got a job as a teacher in the Balsang Jansheva Marathi Shala. After serving for one year I was appointed at the primary school of Mehsalge village at Akkalkot by the Zilla Parishad. I joined this school in December 1995.

It was situated on the northern bank of the Bhima River; the region on the other side of the river was part of Karnataka state. This village consisted of 2000 people. The village community was known through out the taluka, for liquor addiction. Sights like quarrels and people beating each other were common here.

Though the mother tongue of the people here was Kannada, many of them preferred Marathi medium schools for their children's education. So we had to make extra efforts to retain the children in our school. Initially I taught class 6, but from the following academic year I took charge of class one since the students of class 6 were poor in reading and writing skills. Due to my hard work, the children of class one easily learnt to read and write. They also learnt arithmetic. The parents were happy with our activities. After few days the parents started coming to school for solve interpersonal problems. That was the happiest time in my life.

I thought that if the foundation was strong the students would not face problems in future, so I decided to teach class 1. Earlier there used to be 30-35 new enrolments in class one, but that year I moved around the village and enrolled 75 students.

The school teachers were persevering and hard working. We always looked forward to doing something new. We used to go on a picnic twice a year and regularly celebrated (15<sup>th</sup> August, 26<sup>th</sup> January) national festivals. On such occasions the students used to participate in cultural events and other activities. The villagers were delighted with these and often stepped into the school to reward the students.

Soon we cleaned up the ground by clearing the bushes and made a beautiful field for the school. Then we whitewashed the school-walls. I painted the school walls with maps of village, tehsil, district, state and nation. The inside walls were painted with pictures and photographs. This was appreciated.

After 3 ½ years, was transferred to Karajgi in 1999. This village was much more developed than the previous one. But educated people were in favour of Marathi and the Kannada medium school was getting weaker. The students of the Kannada medium school were mostly from backward communities.

Here I introduced several activities like the '**Best Girl**'. This was introduced to improve the behaviour of the back-benchers. Groups were formed and leadership was assigned to the best of the girls. The performance of each group was measured on behavioural and academic dimensions. The leader of the best performing group was given the title 'best girl'. Likewise another award 'best group' was also introduced.

Another problem was that the students were scared to speak publicly. I started a "**Bal Sabha**" and that has worked very well. They have become confident and are now capable of managing the school's programmes.

I also introduced tours/picnics for the students. Then I thought of introducing computers in my school. I learnt to use one and then bought one with my own money. I kept it in school and taught the children and the teachers how to use it.

### **Promoting Kannada**

While using the computer I had an idea. I wished to prepare literature to promote Kannada. Though it is alive as a local language in many districts of Maharashtra, it is used as a method of teaching in a very few places. Many teachers and social workers are putting in effort to retrieve the language.

I gathered 12 teachers, who were interested in working on this project and formed an association named "Apna Sangh". We worked to prepare literature in Kannada which would be useful:

1. To prepare the students for scholarships and the Navodaya entrance exam.
2. To spread innovations from one school to another
3. To inspire teachers, students and others who were doing good things.
4. To generate interest in speaking and writing skills among students, teachers and parents.

This literature was compiled as magazine, which was called Gnanjyoti. Through the *sangh* we motivated the teachers to subscribe to it. The magazine included material for the preparation of various competitive exams like the scholarship exams conducted in classes 4 and 7, the Navodaya entrance exam. It was decided to charge Rs. 10 per issue and Rs. 100 for an annual subscription.

On 8<sup>th</sup> August 2004, the printed copies were inaugurated by the Akkalkot panchayat. All the Kannada medium teachers, especially those teaching in classes 4, 5 and 7 were invited. Participants in this inauguration were given complimentary copies. To promote the sale of the magazine I visited the *Kannada* medium schools of different districts of state.

By publishing this booklet, *Kannada* people started coming together. Teachers, students and parents have started using it. People started sending us additional questions, suggestions. This monthly booklet is now being circulated in many *Kannada* medium schools, like:

Akkalkot	- 50
Solapur	- 40
Jat	- 300
Pune	- 10
Mumbai	- 20
Adult learners	- 50

It is not easy to evaluate this innovation. But I can provide some indicators like an increase in the number of students receiving scholarships.

Schools outside Akkalkot	
- Prachand primary school Nagansur	- 01
- Kannad Bous school	- 03
- Kannad Girls school	- 03
- Toknur primary school	- 08

- Jeur Primary school - 10
  - Gudgaon primary school - 18 (it got an ideal teacher award)
- Schools of Akkalkot - 61



## **K UDHAYA KUMAR**

As teachers we are all basically engaged in the act of teaching children. While working at the PUE School Gandhipuram, (from 21<sup>st</sup> June 2002 to 20<sup>th</sup> June 2005) and the P.U.E. School, China Kondalampatti (2005 to date) I also tried to do my best for my students. I mobilized resources for facilities like classrooms, a boundary wall, water facilities, toilets, play and games material etc. through various schemes/resources.

But there are some other things that I did which make me feel proud.

1. Enrolment of disabled children in school
2. Imparting education to the children of jail inmates
3. Imparting primary education to jail inmates

### **Enrolment of disabled children**

In the year 2000, the problem of the education of 65 (I.E.D.) physically challenged children (polio victims, deaf, dumb, mentally less mature/slightly abnormal) at the Welfare Home Kulini and the Welfare Home, Don Bosco came to my notice due to my contacts with these organizations. Actually these children were brought to the organizations daily for study/classes and then, at the end of the day were taken back home. But their education was not certifiable since the Kulini Welfare Home was a school without recognition. At that time, the Bridge Course scheme was launched in Onriyam Village under the SSA. We took advantage of this and enrolled 11 children; 8 boys (3 in class 3 and 5 in class 5) and 3 girls (1 in class 3 and 2 in class 5). Then in March 2004, all 11 (IED) children, who had received Bridge Course education, were given admission into corresponding standards, in the P.U.E. School where I worked as Head Master. For all 11 students – text books, note books were provided. The teachers concerned have been given the necessary instructions to give special individual attention to those students. Special education teachers are invited once a week to guide us in solving our difficulties. The Welfare Home Administrator, Sr. Victoria, upon request, has made transport arrangements for the whole year, to bring the children to school and then take them back home in the evening. Necessary facilities like wheelchairs and toilets have been arranged for.

Thus in our area, among 49 schools, Gandhipuram school became the first to provide integrated education to the largest number of IED children. Now both privileged and handicapped children study together, I have noticed that the mentally less-mature children interact with the mentally mature children more closely and more lovingly. Similarly, the dumb students (children) try their level best to talk to the other students in the school. Students, who had hitherto communicated by action only, have now started speaking a word or two with the other students, though with difficulty. On November 14, 2005, “Children’s Day” was celebrated with the full participation of the IED children.

Now 5 boys and 2 girls have already passed out of standard V and gone on to higher studies (boys to the Govt. High school, and girls to other schools). They stay in hostels. The remaining 3 boys and 1 girl will complete their 5<sup>th</sup> standard education in May, 2006.

### **Imparting education to the children of jail inmates**

I had the opportunity to meet the inmates of the Salem central jail through contact with the sisters of the Welfare Home for destitute women. Many prisoners had sought our help for their children’s education. When I contacted the D.I.G. Prisons, Kovai Circle and asked him about this, he gave

permission immediately. But the major problems were related to lodging, boarding and taking care of the children. Sr. Victoria, Sr. Joice and other sisters from the Kulini Welfare Home and Fr. Rayon and Fr. Christ Raj from the Don Bosco Welfare Home agreed to take care of the maintenance of the children. This gave me a new strength. So I first, obtained a list of names and details of prisoners, serving terms of 5 years or more, in the Salem and Coimbatore jails. There were 28 children of such inmates, 7 (4 boys and 3 girls) very young children (suitable for std. 1 to std. 5) were immediately enrolled in our school in March, 2004. Their breakfast and dinner etc. were taken care of by the sisters of the Welfare Home Kulini. Their lunch, uniforms, textbooks, notebooks etc. are provided by us from the school. These children are brought to school in the same jeep in which the physically challenged children are brought. The remaining 21 children are in the Welfare Home as orphanage inmates. Special evening classes are conducted for them. Exams and competition programmes are conducted for all the children, thereby giving everyone opportunity to study well and merit certificates and prizes are distributed.

In the school, we bring up all children the regular students and the prisoners' children in same way, in a cordial environment. As far as other students in our school are concerned, they know them only as welfare-home children. As they mix with the other students, they undergo a great change for the better.

I noticed that their lack of self-confidence was gradually forgotten. They have acquired the confidence that they have many people to help them. They have a chance to grow up in a loving environment, without being ridiculed as murderers' or thieves' children. As a result their acute consciousness of a parent in prison has disappeared. Children, who were full of miser when they came to us, have turned into very happy and joyous children, with passage of time.

My only motto is that the children should not be affected in any way for the mistake committed by parents. Until they attain good school education and progress to a good level, I would try to help them in whatever way that I can.

### **Education for jail inmates**

Once the District Primary Education Officer, I and the Kovai Circle D.I.G. went to the Salem Central Jail upon receiving an invitation. The authorities informed us that the inmates also desired primary education. They requested whatever possible help we could render. Realizing that imparting school education to the inmates and changing them for the better is as important as imparting school education to their children. To this day, during our leisure time, we have also been teaching the prisoners. We identified the well-educated among the prisoners, and arranged with them to impart education in reading and writing skills to the other prisoners, for 5 days a week. The material required was provided by the District Primary Education Officer, Smt. Vabantha Malam through the Jailor, Shri Durairaj. About ten blackboards were provided by conscientious citizens like Shri Venkatesh, Shri Babu, Kadambari Press etc.

Other than these activities, I have also worked for the education of slum-dwellers/street children with the help of the Don Bosco Care Home – orphanage.

I shall continue such activities since I believe that as a teacher it is my responsibility to provide education to the needy.

## V UMARANI

"Life in the world cannot function without water", Thiruvalluvar said. Just as a world cannot exist without water, there cannot be life without education. It is the prime duty of the teacher to prepare students mentally, spiritually and socially to meet the challenges of life. Quality education is in crisis today. To address that the teacher needs to innovate for day to day teaching. Here I describe an innovation to improve the children's knowledge of words and to develop reading skills. All of us experience that students below average do not know letters and are unable to form words and small sentences. So my intention was to provide basic education in a joyful way.

I followed the procedure described below. After everybody has left the classroom and before it is locked I hide a flash card containing either a letter, a word or some written matter inside the classroom.

For example, the hiding places could be:

1. the top of the window
2. the back of the doors
3. the inside of a bench or chair or table
4. the top of a cupboard

The students are told in advance that I will be hiding a card in the classroom. They are also told about the probable hiding places. Then next day, the first student who finds the flash card and reads it aloud is declared the winner of the day. Now the student understands a new word. He, then, goes to the blackboard side and tries to write the word or answers without hesitation. Once he has done this successfully, he is applauded and declared the "Discoverer of Today".

This method can help improve many competencies.

### **Care to be taken**

The teacher has to be careful when he/she hides the card. Care needs to be taken that it is not hidden at a height for the children to reach. It should be neither difficult nor easy for the children to locate the hidden card. The teacher has to give clues regarding the card in such a way that this encourages interest and imagination. The card should be self explanatory. A string may be stuck to the card so as to make it hang on a wall.

Through this method the children of the first standard can be easily taught letters, the words for family-members, colours, tastes, birds, animals, vegetables, fruits, flowers etc.

**For classes II & III:** Well developed cards containing small words, sentences, proverbs, phrases, professional names, small answers to questions, names of taluka, city town, district etc. can be given.

**For classes IV & V:** Cards containing questions & answers related to nutrition i.e. vitamins, minerals etc., parts of the body, the structure and working of local bodies, the life style of ancient man food, dress, weapons, inventions, sea, continents etc. could be taught. General knowledge matters can also be taught.

Through this method all the children of all the classes can be taught the lessons prescribed. With the strategy "Discoverer of Today", we can make sure that an interest in study is created among all

the children. Even slow learners develop a keen interest in finding the hidden card and seeing it; they too want to make an attempt to go to the board and write what is written on the card. This is the methodology that we follow in our school. It has resulted in the desired outcome. It has increased the attendance rate of the students and all the students are now punctual in school.

## **KALIDAS L UMARYE**

### **When Gutters Glitter**

This incident took place almost 17 - 18 years ago. I still remember it. I had been recently transferred to the Central Primary School Bicholim, Goa. It was a new and challenging place. The school was being run in two sessions, morning and evening. Therefore, I had to take a short break for lunch every afternoon for which I went home.

One day as usual, I was going home on my bicycle. I saw a group of children, about 6-8 years old, walking along the side of the road, collecting plastic bags, bottles etc. from the gutters. They were so engrossed in their work that they were indifferent to their surroundings. They lived in their own world, with the sole goal of collecting as much plastic waste as possible to earn their daily bread.

Unexpectedly, it happened that one of the boys picked up a plastic bag full of mud from gutter and started whirling it around. In doing so, he was not at all bothered about his surroundings, and the effects of his action. It was a pastime, an enjoyment for him and others. The mud and waste splattered on my shirt so badly that I could never use it again.

The boy saw me in that condition. But there was no reaction of any kind on the children's faces. Their body language did not express any sense of wrong doing. They were devoid of any sensitivity, it appeared. I was irritated and got angry. To make them aware and point out their uncultured behaviour, I moved towards them. But it did not matter to them. Having realized the situation, I became cool and thought deeply. How could it be that the young minds of India are so insensitive? Weren't they aware of moral ethics? Then I thought that they must be deprived of good family background, which left them with no chance to be nurtured with cultured ways, to exhibit a social conscience.

I thought, if my guess was right then getting angry was of no use. This provided me with a turning point and I decided to test a new venture, a new idea.

I analyzed the situation as follows:

- 1) Since the children were on the roads during school hours, it meant, obviously they had never been to school.
- 2) To confirm my views I changed my route and followed them, to make them interact with me and tried to have a dialogue with them. But they remained passive, as if ignoring me. The day passed with questions lingering in my mind. But I made up my mind to accept the challenge. If our Ex-president can go "From mud house to Rashtrapati Bhavan" (the autobiography of Gyani ZailSingh) then why can't these children be taken from "gutters to school".

### **Action taken**

Once I had made up my mind to fight the odds, the next day, I kept watching to catch the children and motivate them to join the school. I kept on trying for 3-4 days, but in vain.

I did not lose hope but continued. One evening I found them walking along the road side, engaged in the routine work. As it was evening I guessed they would move to their huts. And I was right. After walking a long distance, all the boys entered different "houses" having roofs of polythene and walls of cardboard.

Having seen me enter one of the huts, an old man began to enquire what I was doing there. I asked him why they did not send their children to school. All of them were non-Goans. The old man narrated the story of how they had come to Goa and then asked me a question. "Why should we go to school? Are they for us? If there aren't any clothes, houses and food for us, how could there be a school for us?" He further said, "We are wanderers and we couldn't afford to spend on things like school and after all who would readily accept and entertain us in the schools in this shabby condition".

To build their confidence and kindle hope, I repeatedly visited them and assured them of all possible help. As I expected, there was a change in their attitude. The first battle was won. Now the children were well acquainted with me. Hence that built their confidence. I assured them of getting all the possible government help on a condition that they attended school regularly.

To enrol them, birth certificates were needed. I sought the co-operation of the Mamlatdar office for declarations instead of birth certificates. For the first time the children of these families entered school. They were about 15 in number. I also managed to get help from various organizations to provide them with educational material, including uniforms. I myself extended help, including food, whenever required. It was also necessary to motivate the teachers to get their whole hearted co-operation and support to create a conducive atmosphere in school, where these children would always be encouraged and readily accepted by others. My colleagues cooperated with me.

Another problem was that of enrolling some older children in school. Together with my colleagues and head master we solved this problem. I approached different institutions to get financial assistance for these young people so that they would not have any hesitation or reluctance to come to school.

As time went by, the whole atmosphere of the slum area was changed. A healthy competition began among the parents, where not sending a child to school was looked upon as a matter of shame. Hence qualitative improvement was also seen.

My efforts were multipronged. I kept on visiting their houses frequently, to check their status of study at "home", to find out their difficulties if any, and the reasons for absenteeism in school. If the reason was found to be sickness I provided them with medicine or money to pay the doctor.

### ***Co - Curricular activities to strengthen learning process***

I had already prepared students for all kinds of competitions from Taluka level to state level. Already my students had won more than 300 prizes in various subjects like, elocution, drawing, essay, story telling, integration songs, mono acting, fancy dress, handwriting, music and so on. So slowly and steadily I started introducing these "slum" children to all types of competitions. They also started winning prizes. Some of them won competitions at state level programmes. "Nothing succeeds like success"- was proved in the case of these students. These activities and success in competitions provided a strong base for a remarkable change in their 'taste' for learning. These "good for gutters" children proved themselves. They received well deserved appreciation from all the teachers; their parents were very happy. It was also proved that talent is nobody's 'patent'. It can be anywhere, if opportunities, with affection and consideration, are provided.

### ***Outcome***

Most of them are now studying in colleges; some have started their own businesses or got employed in different sectors. They lead lives of self respect and dignity, knowing that they are responsible members of society. This is the attitudinal change.

To achieve this, it took about 15-18 years of my life. Despite my physical handicap and family responsibility, desire, commitment, conviction and positive activism kept me vigorous and enthusiastic. I am happy that during this long period, more than 150 "slum" children, who otherwise would have been destined for plastic collection, got through formal education.

Now in my school the atmosphere provides kind and hearty consideration to their problems which are immediately solved. Therefore, our school has become the centre for their all round development infusing confidence, self-identity, and self-respect in making their lives meaningful.

## UTTARA

I was a teacher at the primary school, Alinagar. Many children of two adjacent villages of which one comprised very deprived groups, the people becoming to different status groups came to our school. Other than that, the children of 2/3 *bastis* nearby also came to our school despite the presence of several private institutions. Our perseverance and planning, was the main strength in achieving the target of 100% enrolment. There was no problem related to retention either. Though it was a mixed community of different castes, there were no conflicts relating to *castism*, which makes us feel proud.

When I joined, I was given class 3 to teach. When I entered class, I saw a fair number of students. When I asked the children if they knew Hindi, some students said "yes". I wrote "*Kamal*" on the blackboard and asked them to read it. They spoke as follows:

*Ka* for *Kamal*,

*Ma* for *Machhli*,

*La* for *Lattu*.

They did not read the word once. Rather they spelt it separately like '*ka*', '*ma*', '*la*'. I was stunned at their answer. After a short silence, I asked them again. They replied the same way. Again, I wrote some alphabets on the blackboard like *ka*, *kha*, *pa*, *na*, *fa* etc. and asked them to read. They replied in this manner *ka-* for *kabutar*, *kha-* for *khargosh*, *pa-* for *patang*, *na* for *nal*.

I was pensive about this situation for 2 or 3 days. I realized that the students knew the alphabets but were unable to pronounce words. Before I could do something for them, I was assigned to teach class one instead of class 3.

### **Teaching class one children**

When I entered class-1, I found another kind of problem. Many of them were crying, some were nervous. At this initial experience, I decided not to teach them. I decided to develop an interpersonal relationship with them. I treated myself as a child and them as friends. I used to make comic faces, play different types of games and do mimicry in class to attract them towards me. I continued this for 10 days and succeeded in making them regular in school.

I started teaching after 10 days with small poems. I helped them pronounce the words of the poem properly by emphasizing the movement of the mouth. In this way I helped them exercise the muscles of the mouth. They enjoyed doing this.

Then I started writing exercises. The problem I faced was that some students had brought notebooks, pencils etc. whereas some did not. Then the idea of teaching with chalk came to me. The next day I went to class with coloured chalk and distributed one piece to each student. I initiated discussion by telling them the names of the colours. Then I made them sit near the wall because four green stripes had been painted on the walls at the level of the students. I told them to write or draw anything on those stripes. They were very happy to draw lines, circles etc. These activities were continued for 2/3 days. Simultaneously they learnt about colours.

Gradually I introduced alphabets. Once they enjoyed learning these, I asked them to write them in their notebooks. Then I started giving them home work exercises for evaluative purposes. While doing so, the problem that I noticed was that many students were copied from others. So, I introduced a small period for evaluation during regular teaching hours. I asked them to write on the blackboard and judged the level of their learning.



In about six months, the children were able to pronounce and write. Then I taught them simple words. Finally I introduced small sentences. At the end of the year 85% of the students had learned the alphabets and words. They could read, write and pronounce properly.

### **Building confidence in a mentally challenged girl**

Meanwhile, I faced some problems in dealing with a mentally challenged girl, Anju. She was studying in my class. She was considered the naughtiest girl. The children called her the 'mad' girl. Everyday there used to be complaints against her that she stole things or beat other students. She was not concerned about her clothing. One day I called her parents and asked them to explain to her that she should not create any problem. But I was amazed at their reply. They said she was mad and there was no point in telling her anything. I scolded them and said that at least they should be empathetic towards her. Seeing Anju's parents' attitude I made up my mind to treat her affectionately and prohibited all the children from calling her mad. I started talking to her everyday on some topic or other. I observed that she was fascinated by me and came to school regularly. One day I was called by the principal in the middle of my class; I instructed Anju to maintain silence and make sure that none of the children went out. When I came back after half an hour I noticed pin-drop silence. I was surprised. When I asked the children, they said, "Ma'am Anju was prevented us from getting up from our places". I was very happy at her sincerity. Actually she could run fast and was good at lifting weights. If any child was found being disobedient she would shake him/her up. Then I assigned her the task of keeping the blackboard clean and putting chalk in the chalk box on a regular basis. She was very interested in attending the *Bal-sabha*. One day, during the *Bal-sabha*, I told her to dance; she was very happy and started dancing. All the students clapped for her. Likewise I found her strengths and encouraged her. Gradually, I taught her to speak and learn. Now she is not in my school, but I still remember her activities.

### **Teaching English**

I was asked to teach English to the students of classes 3, 4 and 5. Here I describe the way in which I taught the students in a progressive manner.

In class 3, I observed that the students were interested in learning English but they had problems in writing. They wrote the letters in the way in which they wrote Hindi. So I took the help of the blackboard. I drew 4 lines. I told them that some alphabets went 'up' and some went 'down'. I emphasized 'writing' and 'pronunciation' simultaneously; they had to write while uttering the alphabet.

In 3 months the children learnt all the alphabets. After teaching them the capital letters, I taught them the small letters but they had a small problem. I started a comparative study between capital and small letters like A-a, B-b, C-c, D-d, E-e, F-f, and G-g. I told them that there were 26 letters of which 10 retained the same shape while writing them as small letters: J-j, K-k, O-o, P-p, U-u, V-v, W-w, X-x, Y-y, and Z-z.

The students could not understand the difference between 'i' and 'e'. Then I explained that for the 'i' we had to draw a small line and put a *bindi* on it, whereas the 'e' did not require a *bindi*. Gradually they understood and learnt the English alphabets.

After that I moved towards English vowels and consonants. I taught that, out of 26 letters, 5 were vowels and 21 were consonants

### **Use of Vowels (Class 4)**

I told the students, that there were *matras* in English as in Hindi, but their representation in writing was slightly different. Then I introduced the vowels; e.g. vowel 'a', I explained that the first vowel is 'a' and sound comes as 'aa' when it is uttered. I used this method by giving examples like:

1) C + (a) + r = Car

2) C + (a) + t = Cat

3) H + (a) + t = Hat

I found that this method was easier for them. They could read and write words with the vowel 'a' easily. So, I taught the other four vowels in a similar way. It took me about one month to teach vowels to the children; at the end of one month they could write three-letter words. I evaluated them from time to time.

### ***Diphthong (Class 5)***

When the students progressed to class five, they had learnt to identify and write vowels and consonants, and small words like the names of flowers, fruits, animals etc. But in reading the textbook they had problems. Except words with 'a, e, i, o, u', there were so many other words which they did not know e.g. People, they read it like Pe -- ople ; Boat was read as Bo -- at.

Like there, there were many others which caused problems. So I started teaching them diphthongs, e.g. diphthongs of E

ae as in Aesthetic

ea as in Clean

ie as in Field

eo as in People

Likewise I explained the use of other diphthongs like ei- Either, io- Ion, ia -Bias, ou- Out, oo- Good, au- Caught, eo - Eon, oe- Roe etc.

I made them read, write and pronounce these. As a result most of the students became aware of the English language.

### **Teaching drawing**

Along with Hindi and English, I emphasized art teaching. I taught the children easy methods for drawing, like that of a *Rangoli*, by joining dots. I observed their creativity; their sincerity was evident in the fact that they counting dots to make their work perfect. As a result they developed good logical power, handwriting and learnt counting automatically.

Finally I would like to conclude that I am proud of having provided quality education to children brought up in a disadvantaged area. I am also proud of the mentally challenged girl, who was as good in her way as the other students.

## A VASUGI

I was assigned to teach social science to students of standard VIII during the academic year 2005-2006. Though I taught the subject with all preparation and resources, the students did not listen attentively. Despite my efforts I was unable to make the students develop the right attitude and interest towards the subject. Moreover, they did not do well in examinations. I realized that students do not like answering questions which require paragraphs to answer. They did not bother about the 'happenings' around them. They did not show any interest in learning historical dates. They lacked the knowledge of geography.

All this motivated me to do attempt a piece of 'action research' on the issue. So I began my study with title: "*rectifying the uninterested attitude towards studying social science, among VIII std. students and developing competence in the subject through 'activity based teaching'*"

The students of standard VIII of the P.V. Middle School, Salangapalayam were selected for the study. 70% were from poor economic backgrounds. They were the sons and daughters of handloom workers. Neither the students nor their parents realised the importance of education. And so the 'dropout' rate was very high among them and so naturally they lacked awareness in school subjects. They were unaware of certain historical facts and had not interest in the development of their lives and nation.

The main strategy I adopted was:

1. For various lessons I collected resources from magazines.
2. Students were asked to collect as much information as possible history, geography and day to day happenings across the nation. Sincere, interested and successful students were appreciated and given rewards and prizes.

### **How I practiced or implemented the activity**

I prepared additional literature on various topics for the students to read. This motivated them to read the subject with interest. Then I encouraged them to prepare additional material on their own as given below:

#### *Activity - 1*

Students were given pictures of great heroes and warriors of India like Veerapada Kattapomman and they were asked to write about their heroic deeds during the freedom struggle.

#### *Activity - 2*

To give the students information about the Karnataka war against the British Government a map of the Karnataka war was given to the students and they were asked to write about it. Besides, the students were also asked to draw the map of the Karnataka battle.

#### *Activity - 3*

To learn about the Tamil Nadu Government's developmental activities the students were asked to meet V.A.Os, PH centres, Nurses, IED teachers, teachers organizing noon-meals and panchayat Board presidents. They were directed to interview the persons involved in these areas. The students enjoyed such activities and developed an interest in the subject.

#### *Activity - 4*

To find out about the various industries in our state, the students were asked to draw and explained 'Tamil Nadu state industries' map. As a result the students gathered a lot of information regarding the industrial development of the state.

*Activity - 5*

To know the importance of the three armed forces: the Army, Navy and Air force, the students were asked to draw the symbols of the three forces and then I built up a discussion on this.

*Activity - 6*

The importance of women's education was explained in detail. Students were asked to collect pictures regarding this.

*Activity - 7*

World related incidents and the nature of the universe were explained to the students through picture albums and the students were instructed to collect more pictures. For example pictures of the 9 planets in the solar system, mountain regions etc. were collected by the students.

*Activity-8*

Students were motivated to collect the pictures of volcanoes and they were asked to prepare a picture album on the important volcanoes of the world like Paaran Island. Then the students were asked to explain the pictures of volcanoes.

*Activity-9*

Students were asked to collect pictures of snow-capped mountains, that related to the great cyclones of the world and they were asked to explain them

*Activity-10*

Students were asked to collect pictures of the great rivers of the world like the Amazon River. They were also asked to collect pictures of the great lakes of the world.

*Activity -11*

Students were also asked to collect pictures of disasters, floods and natural calamities. This was extended to teach crisis management.

To evaluate the effectiveness of my research I did the following:

1. The students' activities were observed and appropriate marks were given.
2. The students' progress in quarterly, half yearly and annual examinations was noted
3. The students' opinions were collected through an opinionnaire
4. The H.M of the school was asked to evaluate student performance in the subject
5. Students with educated parents were also asked to evaluate student performance.

I found that the students showed greatly improved awareness towards the subject; they were highly motivated and charged to learn the subject. They showed a positive inclination towards the subject and could easily remember important historical events, dates and incidents; they were able to explain the important geographical features of the world. Their scores in exams became higher and their achievement was appreciated by the local leading daily. VEC and PTA members also applauded my activity. Now the teachers of other classes have also undertaken such activities in their respective classes. Teachers of other schools in the union also appreciated my efforts.

## K VIJAYAKUMARI

On June 18, 2001 I was appointed as H.M. of the Primary School in Velampatty village of the Kaveripatnam Union of Krishnagiri district in Tamil Nadu. I noticed the low enrolment and attendance levels of the children. I studied the environment to understand the reasons.

In this village there were two main streets called MGR Nagar and Valluvar Nagar. I visited those two streets and my heart was pained to see the condition of the community and the children. There were more than 100 families living in this area. There were more than 100 to 130 boys and girls in the age group of 5 to 14 years, living there. There was no proper occupation for them. Moreover they were like nomads leading their lives by begging and working as Snake Charmers, Parrot Astrologers. They did not restrict themselves to any permanent dwelling place; they begged, ate and slept under trees wherever they went. Children were left on their own when elders went out. During these periods the children wandered in the streets. They did not have basic amenities like sanitation, accommodation. Because of poverty they ate roasted rats, cats and reptiles. There was no general awareness about educating children.

So, I identified the following reasons:

1. lack of basic sanitation
2. a nomadic life
3. for most of the time the parents are not with their children
4. a very, very low income or no income.
5. lack of awareness about education, or socio-economic development
6. lack of clarity about their 'category (caste category)' i.e. if they were admitted to school under which category they should be brought in; this was the main obstacle to admitting the children into school.

Once the problems were clear I began my efforts to bring them into school.

Firstly I met voluntary organizations like the Lions Club, the Pennar Jaycecs and requested them to arrange for slates, note books and other writing materials for these poor children.

Secondly I met the rich of the village and asked them to donate some money to the school under the 'Patron Scheme'. Now these children's needs are met from the interest of that amount. The amount is paid into the bank under a fixed deposit scheme. Only the interest is utilized. Some MLAs, MPs, the village president, *pannayar*, *jamindar* and some NRIs came forward to help these children. More than 100 persons came forward and offered about one lakh rupees under the 'Patron Scheme'. Some Voluntary Organisations provide uniforms, note books and slates every year. These efforts have led to an increase in attendance and hence one more teacher has been appointed.

Then I tried my level best to obtain caste certificates from the *thasildhar*. This particular 'Valluvan' belongs to a scheduled caste and I met the collector and the *thasildhar* to get the certificates. I wanted the certificates for them so that they would have a chance to obtain decent jobs.

At this stage I can say that they are aware of the need for education. The S.S.A. has also contributed to these efforts.

I feel proud to share this experience and convey my thanks to all for giving me a chance to express myself.



## PRASHANT N WAGHMARE

I was born and brought up in a village of Solapur. My father was a respected school- teacher in the village. He had served for many years in the special armed force with V.S.M. Joshi. He spent his life doing social service. I followed the discipline and good habits that he had inculcated in me, when I became an assistant teacher in 1994 at Ashramshala Wakhri of Pandarpur tahsil.

Then I was transferred to the Bhandirogaon primary school in 1996. I made friends with the youth of the sports association of Bhandirigaon and Dr. Headgear Bachanalya. I observed that students remained present in school but they were not interested in study. They were unaware of the importance of personal hygiene. The village youth were addicted to *Pan masala*, Gutka.

I introduced various activities in school, like the celebration of Raksha Bandhan, 15<sup>th</sup> August, 26<sup>th</sup> January. These celebrations created an interest among the students and they started paying attention to study as well. I also introduced sports and several other competitions in order to divert them from tobacco addiction.

### Improving attendance during festival time

One day I noticed that very few students were present in school. When I enquired, I heard that the absentees had started for the school but then vanished in to jungle to collect logs for the forthcoming '*Holi*' celebration. I was shocked, since there were 15 more days to go before *Holi*. I realized that if I didn't do something, the same thing would be repeated for 15 days.

I spoke to the students. I suggested that they celebrate *Holi* on the school premises without using wood. I told them, "This time we will do it in a different way. I will also join you in celebration. But for that we will collect garbage instead of wood". I chalked out a timetable for collecting garbage. The children were pleased. During the day they concentrated on study and in the evening they collected garbage/waste. Their presence grew in the classroom and my purpose was achieved. Moreover, by collecting garbage, they realized the value of personal hygiene. For two years, we continued the same practice of celebrating *Holi* by cleaning the village.

The villagers, too, were happier and started taking an interest in our way of *Holi* celebration. Then I thought of involving the youth. Actually the main *Holi*-fire, where the entire village gathered, was built near the Hanuman temple. With the consent of the villagers, the students of my school and the youth we decided to have only one *Holi* fire. So the practice of celebrating the festival by burning garbage was used to create the main *Holi* fire.

All the informal groups like the youth mandal, the MTA and the students collected the garbage from every corner of the village. They collected all the plastic pouches, paper, and other garbage and dumped it in one place.

I talked to the youth about the ill effects of *Gutka*. I emphasized the significance of *Holi* that it is about burning evils, and told them that *Gutka* is also a kind of evil. The argument had the desired effect on them and all the *Gutka* pouches were collected and burned in the *Holi* fire. The people

collected the *Gutka* pouches from the shop and burnt them along with the garbage and waste. To add to the positive effect that had already been created, I carried out a *Vyasan Mukti Abhiyan* in the village I informed the people of the diseases caused by tobacco.

In this way I modified the customs and the traditions followed by the people, and introduced new customs.

By doing this, I benefited in several ways:

1. During the *Holi* period, students used to be absent from school for almost 15 days; but now they came regularly to school.
2. The villagers and the students valued the importance of cleanliness and now they keep the village clean.
3. People stopped cutting wood, gave importance to the preservation of the environment and gradually became nature lovers.
4. Earlier the village people built *Holi* fires in many places/streets, now they do it in one place.
5. Earlier the village people put food grain in the *Holi* fire, now this grain is distributed among the poor.

My innovation was published in various newspapers, like the “Dainik Sakal”, “Tarun Bharat”, “Sanchar”, “Puthari”, “Lokmat” and “Samna”. So other villages also heard about an alternative way to celebrate *Holi*.

For last seven years the villagers have been celebrating the *Holi* in the modern way. Modernity seems to have influenced their other practices; expenditure on social customs and traditions has reduced and been replaced by donation of books, pens, pencils, school bags etc.



## MOHD. YOSUF ZAGOO

### **Improving hand writing and learning the correct way of writing**

I used to be fascinated by this idea that good writing is an indicator of good character and serves as a motivation to read. While teaching Language (Urdu) at primary school level I found that my students, most of whom were Muslims, made one peculiar mistake while writing. Most of them followed the writing pattern of English –writing from left to right. Some of them followed the correct pattern but their written arrangement of individual alphabets was erroneous. Another related problem was that most of them attempted to answer the questions asked in exams but rarely could anyone complete an exam paper. They found the time insufficient. While I was thinking of the possible ways to address the problem my effort took a different direction.

We received an order that English was to be taught from the very beginning of schooling, that is, from class 1 (till then it was introduced only in class 6). I was given the responsibility of teaching both Languages (I was a teacher in class 2). For the first time in my teaching experience, I observed that, all the students wrote English correctly. But in the case of Urdu, they followed the writing pattern of English.

Instead of imposing the correct way of writing on the students, I wanted something to be done to make them aware of the incorrect one.

I told them about the spacing between letters, sentences and rows, following an exercise to detect their mistakes. I watched them from the back. After gauging their learning level, I grouped them heterogeneously. I was confident of being able to correct these students within a few days, without using any tools. But these exercises led me to another discovery. Some students wrote Urdu from right to left but the writing arrangement of individual alphabets was incorrect; they wrote these alphabets from left to right. I thought that, this pattern of writing, if not corrected at this stage would affect their future writing and writing speed. I was able to anticipate that such students coming out of a matriculation examination would be seen, saying: I could solve only 4 questions instead of 5 due to insufficient time.

I examined the problem carefully and found that though many of them understood my instructions, they repeated the mistakes. I felt that they were doing this from habit. I realised that the speed with which one can write using a pencil leaves little time to think and form new habits. So I prepared "*Kalam trash*" made of hollow wood grown locally to replace the soft pencil. With a "*Kalam Trash*", one can write only after dipping it in ink.

With the "*Kalam Trash*", the process of writing was broken into two steps: dip the *kalam* in ink, write. This gave me a few seconds' time to instruct the students in between and to monitor their writing. With this method I succeeded to a great extent. Of the seven problematic students; five were corrected soon to the extent that they did not commit any mistakes even after repeated tests. But two students did not show consistent change. Perhaps these two students had been given pre-schooling by their middle school- passed mothers, who did not know the correct writing patterns. So I had to undo their past learning first. Hence it took me longer to teach them the correct way of writing Urdu.

I still use this method to teach language in lower primary classes with the aim of teaching the correct way of writing and improving writing speed.

