

EDUCATION  
**Nali-Kali – A Not So Silent Revolution for Joyful Learning**  
KARNATAKA

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*"Namaskara teacher", the children greeted us in unison, as we entered the classroom. The room was full of life, enthusiasm and more significantly without fear. The children were seated in 3 small groups and were speaking to each other. From a corner of the classroom, a little girl got up and wished the Block Resource Person, "Namaskara Sar". An atmosphere of informality prevailed between the children and the faculty.*

*The children of classes 1 and 2, both boys and girls, were grouped together based on their levels of learning and the degree of teacher facilitation required. They seemed to be working so well together, helping each other learn and solve their problems that we could not tell they were from different grades. They were keen to interact with us and proudly indicated to us where they were on the learning ladder.*

*In the afternoon general session on Environmental Studies, the teacher held out a picture card of fruit and vegetables. The students observed the picture and responded to the questions posed by the teacher. A child mimed his mother chopping vegetables. One of the boys enacted his morning personal hygiene routine; another boy mimicked birdcalls. The whole class participated actively. Of course, there were some children who were shy and needed some prompting to join in.*

*The teacher was friendly with the children. The emphasis was on creating a free atmosphere for the children to learn in ways that they enjoy the most 'Discipline' and 'noise control' were not on the agenda so long as the children were learning. The relationship between the Deputy Project Co-ordinator from the DPEP, District Project Office, the teachers and the Resource Persons appeared devoid of a fear of hierarchy – a feeling that the boss had come for inspection did not seem to exist.*

*It was really a wonderful day spent amidst the children. The twinkle in their eyes reminded me of the nursery rhyme, "Twinkle, twinkle little star..." Observations of M. S. Janaki.*

## **Introduction**

Can you imagine such a scene in the classroom where the teacher has totally done away with the chalk-and-talk method, is without textbooks, playing the role of a facilitator and guide rather than that of a 'teacher'. Where the classroom is alive with colourful charts along the wall, and the children's innovative art and craftwork suspended from the ceiling. Where the children are grouped according to their level of learning engaged in a variety of activities, happily immersed in the learning process. This is Nali-Kali (joyful learning) which has been making waves for 5 years now (see box - What is Nali-Kali).

In this article, I have attempted to capture the fundamental aspects of Nali- Kali, especially how it facilitates multi-grade teaching and multi-level learning through the concepts of the learning ladder and group activities. This account is based on discussions with key persons in Nali-Kali, DPEP, DIET, and the Resource Centres and a 2-day visit to 3 Nali-Kali schools in Mysore District where I had opportunities to interact with children and teachers in the classroom setting. I also visited a regular government school in Tumkur District and a DPEP school in Mandya District to provide the reader with an insight into their classrooms and serve as a basis for comparison (see Annexures 1 & 2).

### **What is Nali-Kali (Joyful Learning)**

"The Nali-Kali approach to learning began in 1995 with UNICEF assistance when a group of 15 teachers from Heggada Devana Kote (HD Kote), a remote tribal block in Mysore District of Karnataka, visited the rural schools run by the Rishi Valley Rural Education Centre in Madanapalle, Andhra Pradesh. Inspired by the principles of pedagogy which are entirely based on child-centered, activity-based learning, this group of teachers set into motion the processes for adapting the pedagogy to their own situation in HD Kote. Drawing on their experience of classroom transaction, the teachers

- Reviewed the learning competencies
- Broke them into small and manageable learning units,
- Sequenced the learning units into a comprehensive learning ladder,
- developed activities for each learning unit which facilitated readiness for learning, instruction, reinforcement and evaluation,
- evolved a more equal and democratic classroom management system which is not based on the child's gender, caste, age or ability, but on the nature of the activity taken up by the child, and
- developed an evaluation system, which is non-threatening, continuous and comprehensive.

The learning ladder is inclusive of activities, which facilitate art and craftwork, puppet shows, story telling, shadow plays, etc. Each step of the learning ladder is denoted by pictorial symbols - dog for flash cards, giraffe for word games, beetle for song, dancer for action rhymes, etc. which enable the child to independently trace his/her progress in the subject learning ladder and choose his/her activity for the subject. As the child completes an activity, she/he also plots her progress on the progress chart pasted on the wall.

The Nali-Kali approach is unique and precious, because it is entirely primary school teacher created. The original group of 15 teachers has grown over the years. Today there are as many as 192 teachers in Mysore district who have been empowered to function as resource persons. With their support, the experience of HD Kote is being expanded under DPEP. In 1998-99, the system was expanded to six blocks in Mysore district. In 1999-2000, it has been expanded to an additional six blocks and eight clusters under DPEP and the Joint GOI-UN systems Primary Education Programme.

There will undoubtedly be new challenges in the new areas of expansion, but, in Karnataka, we sense we are moving in the right direction."

Anita Kaul, Education Secretary, ex-State Project Director, DPEP, Karnataka

### ***The Birth of Joyful Learning in HD Kote***

Nali-Kali became the synonym for the revolutionary classroom transaction initiated in 1995 by a teachers' movement in Heggada Devana Kote Taluka (block), Mysore District, Karnataka.

It all started in October 1995. UNICEF had done a micro-plan in 1992-93 in Heggada Devana Kote (HD Kote) Taluka, a SC/ST constituency in Mysore district. It included a survey of in-school and out-of-school kids. The report was gathering dust due to the transfer of key officials. In 1995, when M. N. Baig was posted as Education Officer, Mysore District, UNICEF, the Commissioner Public Instruction and the Education Officer met to revive the micro-plan. The discussion focused on activity-based learning and Minimum Levels of Learning (MLL) competencies. Resource support was provided by the District Institute of Education and Training (DIET), Mysore. Next, a meeting was held in HD Kote with the teachers.

A team of 12 teachers and the Education Officer visited Rishi Valley Rural Education Centre, Madanapalle, Andhra Pradesh where the child's competencies were pegged to a learning ladder so that the child could chart her own progress. Alternative schools in Rajasthan and Bihar were also visited.

In 1997, DPEP in its 2<sup>nd</sup> phase covered Mysore district and was so impressed with the achievements of the teachers' movement in HD Kote, that they decided to extend Nali-Kali to all but one block of Mysore district. Thus 7 blocks were covered with the exception of Mysore Urban Taluka which had a high percentage of private schools.

6 additional blocks across the state were also covered to test the efficacy of the Nali-Kali approach. It seems to have made inroads steadily, and even gained the co-operation of the Department of Education in areas where it is being implemented. Thanks to a visionary leadership, lots of team effort, and support from the teachers, the Department of Education and the DIET, today, Nali-Kali is 4 years old and still growing.

### **Challenges in Education**

The challenge confronting the Department of Education in Mysore District was to envisage and carry out a revolution in classroom transaction in the innovation-shy government schools. Thus far, government initiatives thrust on teachers had failed. If it was to succeed, it needed to evolve as a teachers' movement.

The Education Officer had a brainstorming session with teachers of HD Kote about challenges and failures in the education system. The teachers were asked to list out their issues concerning teaching, the Department of Education, role of politics, corruption, etc. Problem solving at the teachers' level was encouraged. The teachers listed 115 issues during the brainstorming of which they felt competent to address about 10%. These issues related primarily to classroom transaction, which the teachers could directly influence. The thrust areas addressing these issues thus came to be identified under the broad category of universal access, enrolment, retention and achievement (see table).

<b>No.</b>	<b>ISSUES</b>	<b>THRUST AREAS</b>
1.	Low enrolment/ high dropouts due to child's seasonal migration or involvement in farm labour, domestic labour, loitering	Universal Access and enrolment
2.	Absenteeism due to child's involvement in farm labour, domestic labour, loitering	Universal retention of children upto 10 years of age
3.	Classroom transaction not meaningful, effective, attractive	Improve classroom instruction
4.	Teaching learning material was so extensive that it was not possible to transact the required syllabus in one year especially for neo-learners who have no support at home	Develop teaching learning materials, which are activity based and developed through teacher participation
5.	Multi-grade teaching and multi-level classrooms lead to attainment gaps and dropouts	Substantial improvement in quality of education to enable all children to achieve essential levels of learning
6.	Universal promotion policy for classes 1 and 2 meant that attainment was not emphasised	Through multi-level teaching, bridge attainment gaps in learners which are a result of en masse promotion
7.	Teachers preferred the chalk-talk method	Enhance teachers' commitment to the profession
8.	Pre-service training after the Teachers' Certificate Higher did not expose the trainees to rural areas, multi-grade teaching	Enhance teachers' professional competency
9.	Last child tended to be ignored since only the bright children were used as a yardstick to gauge attainment	Develop adequate monitoring and evaluative tools giving room to accountability in the system, and space for multi-level learning

10.	Irrelevant Teaching Learning Material made available to teachers if at all	Increase contingency amount to provide freedom to the teachers to develop supplementary teaching learning materials and organise co-curricular activities
11.	Textbooks restricted the teachers to lessons rather than learning based on experience and observation.	Discard text books and emphasis on activity cards and thereby avoid teachers relapsing to textbook teaching
12.	Academic support required for teachers was not available through the Dept of Education	Training, guidance, monitoring and evaluation through peer group
13.	Textbooks had an urban bias though 89% of schools are in the rural areas.	Environment friendly - a set of work/activity cards rather than textbooks and work books

### ***Preparing for Nali-Kali***

The next step then was a pre-training session with a group of cluster resource persons (35 teachers) from HD Kote, along with the Block Education Office (BEO) staff, DIET Mysore, and resource persons from Rishi Valley. This group ideated on the fundamental principles that would form the basis for classroom transaction, and developed the teaching learning material. This served as a crucial capacity-building exercise for the cluster resource persons from HD Kote.

The group began with identifying learners' problems especially those confronting first generation learners. It was felt that if the children found education fun and relevant, they would be attracted to school. Thus, the Minimum Levels of Learning were scrutinised, competencies reviewed for the 1<sup>st</sup> 6 months and converted into teaching learning inputs. The learning load or quantum of curriculum was reduced to an achievable level where the minimum, not the maximum, levels of children's learning would serve as the benchmark.

The three core subjects for primary school – language, mathematics and environmental studies, were to be taught/learnt through art and craft, poetry, song, dance, activity cards, games, field visits, surveys, simple experiments, etc. Activities were developed for each competency as well as additional teaching learning material, all of which were analysed. Remedial teaching methods and evaluation tools were devised. A need was felt to evaluate achievement levels and record profiles of all learners.

The vision of Nali-Kali that it would allow for joyful, child-centred education is a major shift from the earlier teacher-centred education. Nali-Kali encourages peer learning within the classroom; the teacher plays the role of a facilitator in the learning process, breaking the traditional hierarchical space normally existing between teacher and student.

### **Teaching-Learning Material (TLM)**

The emphasis has been on making the learning process a joyful one, in a radical deviation from the conventional mode of teaching, namely, the chalk-talk method. The two main criteria for the TLM have been that they should ensure attainment, and attract children to the school. The first time around the teachers developed the teaching learning material for 6 months for class 1. They in turn trained 300 of their peers to make the classroom transaction effective.

Vocabulary, structure and knowledge have been regarded as central to the comprehension abilities of all learners. These have been carefully graded from known to unknown; concrete to abstract; simple to complex. Based on their experience, the core group of teachers reviewed the Minimum Levels of Learning (MLL) and developed Teaching Learning Material for competencies that the child ought to have acquired. The TLM includes preparatory / readiness exercises which create a moderate learning demand in children. The activity cards for the children's use include readiness cards, content cards, and practice cards, application cards and evaluation cards. Supplementary materials add variety to the learning experience.

### **The Learning Ladder**

Each competency has been broken into its smallest constituent units so as to be manageable and easily learnable. The competency is achieved through engaging in a series of activities, which include conceptualisation, application and evaluation. The activity clusters for each competency are arranged in a sequence which is designated the **learning ladder** (see learning ladder table and pictorial learning ladder). It uses pictorial symbols for indoor-outdoor activities, concept, application, evaluation, so as to systematically capture the learning cycle. Clusters of activities form a step of the ladder and are denoted by numbers. (For example, step 13 has a 'hand holding a pen' icon against which the activities are marked as 49/1 to 49/5 to indicate that there are a total of 49 letter formation and writing skills activities of which 1-5 are accomplished at step 13.) The activities enable self-learning, reinforcement and evaluation.

A pace-setter has been developed on the basis of a time-work study. The average time taken by children for each activity serves as a guideline for a month-wise distribution of the steps that can be accomplished in the learning ladder. The learning ladder both challenges the child and gives her a sense of achievement for each step that she has mastered.

Until the child has mastered a competency whether it is a number or an alphabet, there is no possibility of moving onto the next level of the

learning ladder. This is Nali-Kali's crucial point of difference from the government school or even the DPEP activity-based learning. Nali-Kali thus aspires to surpass the existing formal school system.

The children are divided into groups based on whether the children require teacher or peer group facilitation, independent work or evaluation. Thus, at any given point in time, multiple levels of learning amongst children can be accommodated in a single classroom through small group learning. This kind of classroom transaction also breaks through the barriers of gender and caste.

### ***The Training Process***

Teachers from 257 primary schools in HD Kote were trained in 1995, which increased to 322 schools in 1999 all of whom have adopted the Nali-Kali approach in classes 1, 2, and 3. Private schools have also been given the option to adopt Nali-Kali, which most have done.

Initially, 3 training venues were fixed with the intention of training all teachers in HD Kote block within 2 periods of 12 days each. 50 teachers met at each venue with a multi-skilled team of 6-8 Teacher Resource Persons using a combination of lecture, craft, song, dance, activity for training. The Education Officer was a roving participant moving from one training venue to another to ensure acceptance of the Teacher Resource Persons given the new process of peer training, and at times to resolve academic and administrative knots in the training process. The academic staff of the Block Education Office and the District Resource Persons from DIET were also deputed to each training venue for a similar purpose. The participants were provided an opportunity to conduct Nali-Kali classes in the neighbourhood schools during the training workshop.

The Nali-Kali training has done away with the usual hierarchy and lecture method. Teachers sit on floor mats, immersed in producing material in the course of the 12-day residential training. The trainings, unlike the usual Department of Education trainings, carry on from 7 a.m. often until midnight. Resource teachers work beyond hours to provide logistic support, review the day's proceedings and plan for the next day. The training team decides the duration of the training workshop, the daily schedule, responsibility chart, requirement of training material, etc.

With this level of commitment and initiative, the core group of Teacher Resource Persons have continued to develop material for 6-month periods and now have material ready upto class 3 with preparation of Teaching Learning Material for class 4 underway. Each activity developed is regularly subject to constructive criticism by the peers; non-acceptable activities are modified and new activities evolved. All such modifications

are shared with participants of other workshops and a consensus evolved so as to have uniformity in the teaching learning material. The teachers have thus authored the Teaching Learning Material, thereby enhancing their own professional competence. The teachers feel ownership of the mounds of material that they generate, and after the painstaking effort to produce it are found to be more likely to use it than textbooks which have been handed to them rather than created by them.

A unique feature of the training is that the Teaching Learning Material is hand-made by the participants in the course of the 12-day training-cum-production workshop. The Nali-Kali team has deliberately stayed away from providing the material in print form (at the risk of antagonising the textbook publishing lobby). The idea of teachers manually preparing the material has been multi-fold. It has encouraged self-reliance and reduced dependence on the Department of Education. Moreover, print material means investment and a relative degree of permanence which is contrary to the spirit of openness, criticism and review of TLM that Nali-Kali is seeking to foster. The rationale and process of material preparation and its use are all incorporated into the workshop with continuous opportunity for hands-on experimentation. With the participants having to make copious notes that fill a 300-page long register and produce upto 800 activity cards for a 6-month period the Nali-Kali process has been aptly nicknamed “painful training, joyful learning”.

Nali-Kali, possibly for the first time, recognised primary school teachers as trainers and resource persons. Of course, there have been some hiccups in the use of peer trainers, and the training environment and methodology – acceptance initially tended to be slow, especially from those who considered themselves far more competent, or had a negative attitude about new ways of learning. There was also some resistance to floor seating the idea of which was to encourage down to earth, non-hierarchical, equal relationships between trainers and trainees, and also give the trainee teachers a flavour of being students again.

In the second round of training, the participants reviewed the 13 problems to check whether they had been addressed. In the review workshop, each teacher’s voice was heard; thus the Teaching Learning Material was refined and the learning ladder came to be viewed as dynamic rather than cast in stone. For example, the language learning ladder experienced an organic growth from 88 steps/rungs in 1995 to 151 steps in 1999 through the process of regular review.

The 3<sup>rd</sup> phase of training has covered select blocks under DPEP-I. The 4<sup>th</sup> phase of training has covered the Joint GOI-UN systems Primary Education Programme. Thus the Nali-Kali trainings continue for new inductees at regular intervals each year in addition to refresher trainings

for teachers already trained in the Nali-Kali approach. The duration of the refresher trainings depends on the review of the Nali-Kali schools, the feedback from prospective participants on the basis of which additional training inputs are decided.

### ***Monitoring and Evaluation***

The core team felt the need of a support mechanism to ensure that Nali-Kali would be sustained in the way it was envisaged and continue to grow organically. Therefore, to counter the insufficient academic support, resource teachers were designated as Cluster Resource Persons and assigned 4-12 schools to visit each month so as to guide and facilitate the new classroom transaction. In cases of weak schools or weak teachers, the frequency of visits may increase. The Cluster Resource Person also verifies the progress chart and randomly checks whether it depicts the true picture of class progress.

The Cluster Resource Persons are sponsored by the inspector of schools on the basis of the teacher's professional competency, dedication, willingness to adapt to new ideas and changes, leadership qualities, ability to interact with peers, innovate and serve as a role model. The school to which the Cluster Resource Person belongs is designated the Cluster Resource Centre. The Cluster Resource Centre functions as a place from which teachers handling class 1 & 2 can seek guidance in usage of TLM, classroom management, developing additional set of TLM, etc.

On the basis of the performance of the other teachers and their profiles presented by Cluster Resource Persons, one more resource person is identified within the cluster to develop a second line of leadership and avoid a vacuum in the event of the transfer of a Cluster Resource Person.

Supplementary material and success stories are shared at the monthly meetings of Cluster Resource Persons, and if accepted are incorporated into future training workshops. Challenges confronting the teachers are also discussed and ways of tackling them suggested.

Now that Nali-Kali has been expanded to other blocks, the Block Resource Centres have been set up. Their members have been trained by the core team of 36 teachers equipping them to train teachers in their own block.

### ***Agencies Involved in Nali-Kali***

UNICEF provides financial assistance for Nali-Kali as well as for inter-state visits of resource persons, and relevant literature for academic improvement.

DIET staff functioned as District Resource Persons in the initial stages of the training. As the competency and confidence of the Teacher Resource Persons increased, they could forge ahead on their own steam, visit schools to follow-up on the training imparted and provide guidance to the Cluster Resource Persons and other teachers.

MYRADA/PLAN have been providing the training venue, food and accommodation at a subsidised rate. MYRADA/PLAN officers participate at various stages of the training programme, and serve as good-will ambassadors for education in the community.

Village Education Committee trainings have activated the committee members and they meet periodically to discuss issues pertaining to the children's education, as well as support that the school may require.

Since 1997, DPEP Karnataka has co-opted Nali-Kali. DPEP has been putting out a Kali-Nali wall newspaper. In Mysore District, though, the Nali-Kali/DPEP office puts out its own Nali-Kali-Nali wall newspaper sharing innovations, short stories, games, puzzles, cartoons, drawings and craft ideas on language, mathematics, environmental studies and general knowledge for teachers and students.

### ***Inside a Nali-Kali Classroom***

The atmosphere of joyful and independent learning and the spirit of camaraderie between the teachers and the students struck us at the 3 Nali-Kali schools we visited in Mysore District in Hinkal Hundi, Ilawala, and Krishnapura. There was liveliness and eagerness in the class when the children burst out into song and dance for us, or put up a shadow play on the tiger and the cow, or even when they were immersed in their group activity. They seemed to be having so much fun while learning that I came away with the feeling that if only such government schools existed in Bangalore City, what a wonderful opportunity my daughter would have.

The classrooms were of a standard size with no electricity but adequate natural light. They had 5 windows, a door and a high tiled roof. The ceiling decorations were suspended from a wire gird showcasing the children's art and craft, flash cards, pictures. The walls had a wall slate along the lower wall with sections for each child's use. One end of the classroom had a blackboard. The blackboard was systematically written on with the total strength of boys and girls plus those in attendance in the right corner, the date in the left corner and the subject being taught in the centre of the board. The windowsills proudly displayed clay modelling of objects and animals, while the group project work done by the class – whether a scene of a kitchen garden, a field or a forest was displayed in a corner of the classroom.

The rest of the wall was plastered with the Nali-Kali-Nali wall newspaper alongside colourful charts on birds, animals, fruits, vegetables, alphabet cards, word cards, picture-word cards, picture-story cards, learning ladders and progress charts for each of the 3 subjects. The activity cards were neatly placed in wall hanging bags which were colour, number and logo coded. For example, the class 1 cards were green, class 2 pink, class 3 blue, and class 4 yellow. Moreover, the language cards used black ink, the maths were in blue ink and environmental studies in green ink. A logo, for example, a calf would be affixed to a pouch/section of the bag in which would be stored all shape recognition/repetition activities denoted by the calf.

There was ample evidence in the classroom of how the teachers were utilising the contingency amount of Rs. 500 per annum provided to them. Some had purchased material to prepare an additional set of TLM; others had developed supplementary material. Colouring material, scissors, rulers, drawings sheets, etc. had been provided for the students' use for art and craft activities. Most teachers had purchased registers and chart paper to maintain student profiles and progress charts. Fabric had been bought and wall hanging bags or wooden racks made to store the TLM.

We were introduced to the school Cabinet and Chief Minister drawn from the higher primary sections of the Ilawala and Hinkal Hundi Government Higher Primary Schools. Each of them had a portfolio such as hygiene and sanitation, environment, education, and finance pertaining to the school and its students. It was striking to note that in schools where the infrastructure had been provided such as toilets, committed Cabinet members had a definite role to play in ensuring that the toilets were well maintained, as were the plant beds in the school compound.

### ***Decoding the Language Learning Ladder***

To understand how the language learning ladder is constructed, it is important to know that whereas the regular government primary school teaches the alphabet from beginning to end, only after which words can be formed, the Nali-Kali approach is quite different. The Kannada alphabet is divided into 10 letter strips with 1 vowel and 3-4 consonants in each strip. The letter strips are formed on the basis of their potential to create the maximum number of words. This break-up of the alphabet into clusters or letter strips enables the child to begin recognising and forming words at an early stage in the language learning process, experience a sense of achievement, and also facilitate the learning of local specific words after each category is mastered.

Mymunnissa and Kendagannaswamy of the HD Kote Block Resource Centre, who accompanied us to the Krishnapura Government Higher Primary School, guided me through the first 21 steps of the language-learning ladder. It seemed very complex at first glance but once I began to understand the sequential logic of the clusters of activities for each category of letters, I found that the sequence is repeated from steps 10 to 21. However, there may be some modifications for each new strip of letters that the child has to learn. By the time the child reaches step 151 of the learning ladder she has learnt all of the 10 letter strips, is able to recognise, read and write them, and form words and sentences with them. At this point the child is ready to learn the *varnamala* – the entire Kannada alphabet in its traditional sequential order; she is now ready to take on the challenges of class 2.

The subject-wise learning ladders and progress charts hung on the wall enable the child and teacher respectively, to track progress being made by the student. The learning ladder thus provides a concrete opportunity for tracking multi-level learning.

A child, who at the end of the academic year has not yet reached the end of the learning ladders for class 1, will still be promoted to class 2 as per the government's universal promotion policy for classes 1 & 2. However, the child will continue on the learning ladders from the level of her last accomplishment in class 1 so as to ensure that there are no attainment gaps in the child and a strong foundation has been laid for learning. Thus the principle of multi-level learning is adhered to without contravening the government's non-retention policy.

### ***Classroom Transaction: Facilitating Multi-grade Teaching, Multi-level Learning***

A language session facilitated by Teacher Mercy (see Interview) of the Krishnapura Government Higher Primary School gave us an opportunity to witness how Nali-Kali can actually facilitate multi-grade teaching and multi-level learning. The floor had 6 geometric shapes painted on it to accommodate the various groups. Each shape had a number in it, which determined the cluster of activities on the basis of which the group would be formed. The children could meet in a general session or be divided into 5 small groups based on whether their activities were for the entire class or needed to be Partially Teacher Supported, Fully Teacher Supported, Peer Group Supported, Partially Peer Group Supported or Self-learnt (see diagram).

In the diagram of group activities, the inner circle of the group denotes activities to be undertaken by classes 1 & 2, the outer circle denotes activities to be carried out by class 3. In case of a multi-grade teaching situation, older children could assist the younger ones for a common set

of activities, for example, letter writing in group 2, or word and sentence formation through the assistance of pictures in group 3.

However, in the class we attended, there were only 3 groups of children seated in circles on the floor. Within a group, the children would be doing a variety of similar though not identical activities as indicated in the learning ladder below. They were enjoying the activity and noise level was high. The teacher did not seem to mind and was happy to facilitate the groups' activities.

It is interesting to know how the children are divided into small groups. When a child enters class 1, she would participate in the general group activities that are fun and meant to attract the new school-going child to the classroom. There would be song, dance, story telling, craft, and painting, all of which serve as preparatory activities for learning while allowing the child to enjoy school. It is also a time when classroom routines and a working order are established.

The teacher observes the child in the general group and assesses whether the child is ready to move into group 1, a partially teacher supported group. These would be children who are verbally expressive, creative or imaginative and show a readiness to move to specific preparatory exercises necessary for learning. While the other children continue with general activities, the children of group 1 have begun activities such as the shape writing stencil activities, the picture rail, letter rail, shape recognition strips. Those who have mastered these activities move into group 2 – a fully teacher supported group to be engaged in shape feel and writing skills, sequence story.

As and when children are ready from the general group they would move into group 1 though they may be at a different activity level than those already in group 1. The classroom transaction is thus dynamic with space for multiple levels of learning both within the classroom and even within the group.

Those children who attained the competencies associated with group 2 would move into group 3 – a fully peer group supported group doing practice activities for learning. Having accomplished their tasks, they would move onto group 4 – a partially peer group supported group a major part of which is the process of continuous evaluation.

Only twice a year would there be unit evaluations for which group 5 would be constituted. At most points in time, mainly groups 2, 3, 4 would be operational. The evaluation involves the teacher and any student (maybe one or more) who has achieved the requisite level in the learning ladder. Evaluation through games allows the child to perform in

a non-threatening atmosphere while allowing the teacher to know the child's learning level, where she has faltered and where her learning needs reinforcing. The evaluation games, thus, serve as diagnostic tools to help the teacher resort to remedial teaching.

The teacher has to record the progress of each child both in the register as well as the progress chart hung on the wall depending upon the child's placement on the ladder. It helps the teacher, students and parents know the pace of progress while developing the spirit of competition among the learners. Progress is marked at the stages of evaluation, which are in the form of games.

**Interview with Teacher Mercy of Krishnapura Government Higher Primary School, HD Kote Taluka, Mysore District**

*What is your pride as a teacher in the Nali-Kali classroom?*

It is the children's positive response to learning given that they are first generation learners. The pictorial learning ladder has become a part of the child's understanding of her own learning pace.

*What does it mean for the teacher?*

Scope for the teacher to bring in new ideas.

Are you still confronted with absenteeism, dropouts?

The children mostly enjoy coming to school. Though a few do migrate to Coorg in the coffee season for 2-3 months.

*What are the challenges you have confronted?*

At first, it was difficult to make and set up cards for group activity, form groups, decode the cards. It was then that the Cluster Resource Person was a great support to me.

(1 Cluster Resource Person is assigned to 10-15 schools and visits at least 1 school a day. HD Kote block has 22 clusters with 1 faculty each. 1 Block Resource Centre has 5 Block Resource Persons.)

*What about 5 years ahead?*

The old method was to push and promote a child. In the new method, one knows that the foundation is strong.

### ***Making Sense of Numbers***

Mathematics begins with preparatory/readiness exercises as in language learning and then moves onto content/concept, practice, application and evaluation through a variety of indoor and outdoor activities and games.

The preparatory exercises include sorting on the basis of properties, shape, size, and colour. Then the children are given exercises to match shape, size and colour; left, right and centre; in front of, middle and behind. The children learn concepts of distance such as what is near, what is far; the concept of one and many, the concept of one, one more and some more, small and big in relation to size, short and tall in relation to height, heavy and light in relation to weight. All of this

learning is at the conceptual level using objects, persons; the symbolic representation of the number is not yet introduced.

Thereafter, the children are familiarised with numbers through songs and action rhymes. As in the case of language, rubber numbers are given to the child for feel and pronunciation interspersed with craft and other activities. The mathematics learning ladder has 100 steps through which the child learns the concept of numbers 1-2, then 3-5, 6-9, 0, 10, and 11-19. More than half way through the activities, the concept of 0 is introduced to the children then the concept of tens and addition, subtraction using 0.

Each time an arithmetical concept is introduced, the exercises are practised at concrete, semi-concrete and abstract levels for better conceptual clarity and reinforcement. Most arithmetical concepts would have an outdoor activity wherein children are used for demonstration, later the same concept is further reinforced with the use of seeds, pebbles, sticks, etc. The children then enter into the realm of abstract numbers in association with pictures. The picture and number matching activities are important for the child to understand that numbers are merely symbols that help one to count objects, measure distances, etc. The children are finally ready to work with abstract numbers and signs on worksheets.

As and when a group of numbers are introduced, for example, 1-5, the child within this limited group learns the shape of the numbers, their pronunciation, writing, and function. The child also learns the concepts of greater than, less than, equal to value, before, after and in between, ascending and descending order. The child is then ready to perform addition, subtraction and mixed operations done both vertically and horizontally (to facilitate the learning of algebra in later years). The child thus develops an in-depth understanding of what is learnt, and is able to reduce dependence on the teacher as she progresses in the learning ladder.

Towards the end of the year, the children also learn the days of the week through a song. Coins are introduced to them through indoor activities and worksheets as also traditional modes of measurement such as span, arm length, foot, etc.

### ***Learning from the Environment***

The teacher showed the children a card full of pictures of fruit and vegetables and asked the children to identify what they eat, foods that can be eaten raw, and foods that need cooking. The children eagerly responded. Then 2 children were called upon to mime their morning routine, which they did with great gusto. Thus personal hygiene was not

a dry lesson in the textbook anymore, but a fun activity. A boy mimed how his mother cuts vegetables and cooks them; a girl showed what her father does when he returns home on a hot day. Riddles and jokes were shared. A child imitated the crowing of a cock. The children applauded each act. The children then became engrossed in a colouring activity.

The afternoon is a time when the children are less eager to return to the classroom, when children would rather be outside playing, loitering or working. It is in this post-lunch session that Environmental Studies (EVS) has been scheduled as a general group activity to attract and retain potential afternoon absentees into the classroom.

The Environmental Studies class includes indoor and outdoor activities. The indoor activities give the children opportunities for observation, mime and mimicry, discussion based on pictures, craft, project work, verbal and creative expression. The outdoor activities provide the children with opportunities to establish links between their social and physical environment and experiences and the classroom through observation, experimentation, surveys, etc.

Twice a year, in June and October, the children carry out a General Survey covering a total of 14 competencies. Ten micro-surveys enable the children to master 10 competencies. The learning cycle begins with a pre-test where previous knowledge systematically gathered through the survey forms the basis for developing the competency followed by exhibition and discussion, craft, mime or mimicry, or simple experiments as required. The activity is chosen on the basis of the competency to develop. For example, the children of class 2 undertook a forest project to understand how plant life grows. A corner of the classroom was converted into a mini-forest with sprouted seeds sown in red earth and cared for by the children.

The structure of the Environmental Studies session has greatly reduced after lunch absenteeism, attracting children to the classroom through joyful learning activities (see box – A day in the life of...). Reading and writing have been deliberately kept out of the afternoon session. Nor are there small groups to facilitate multi-level learning though multi-grade teaching can still take place. For instance, a class 1 child may be asked, “why do we eat?” – “because we feel hungry” while a class 2 child may be asked, “why do we feel hungry?” – “because we work, play, etc.”

#### **A Day in the Life of...**

**Madhu** is in Class 2 at the Krishnapura Government Higher Primary School, HD Kote, Mysore District. His day begins at 8 a.m. He then starts his daily routine - brushing his teeth with charcoal powder washing his face, hand and legs. *Ragimudde* (Ragi balls) and *saru* (sambar) is what he has for his breakfast.

He is off to school at 10 a.m. Classes begin at 10.20 a.m. He attends assembly and then the joyful learning sessions begin. He told me he is happy to be in school. He enjoys his language and mathematics classes. The post lunch session is all about *parisara* (environment studies). At 4.30 p.m. the school closes and they all assemble again to pray before they disperse.

Back at home, in the evening, he changes into his casuals and goes out to play. The boys in the neighbourhood get together and play *kalla-police* (robber-police), cricket, football, kabaddi etc. Late in the evening he does his homework with a little help from his father.

Madhu was also proud that he is able to tell the days of the week, and the months in a year in English.

**Swaroopa Rani** is Madhu's classmate. The early morning routine is almost the same as in Madhu's case. The difference is that Swaroopa also assists her mother in household work. She washes the dishes before she comes to school. She says she likes what is being taught in school and also enjoys the language classes. The girls gather to play games such as skipping, hopping and catching, hide-and-seek, etc.

Her elder sister and brother also study in the same school and help with her homework.  
(*Recounted by M. S. Janaki*)

### **Challenges Ahead**

Micro-level studies and a formal evaluation of Nali-Kali need to be carried out through an external agency to review the aspects of enrolment, retention, achievement, classroom transaction and management, teaching learning materials, utilisation of funds, monitoring and evaluation, etc.

There is some conflict between the DPEP activity-based Minimum Levels of Learning and the Nali-Kali approach wherein competencies are pegged to the learning ladder. Some of the DPEP teachers who have also had Nali-Kali training have combined both sets of say language learning activities, whereas the Nali-Kali teachers whose blocks have come under DPEP use the activities from the bank as additional activities as and where they fit into the learning ladder.

The TLM could be replicated without the spirit of owning the TLM in which case it could well become another mechanical approach to learning. It definitely requires not only institutional support, but also the conviction of the teacher to infuse a spirit of joy into the learning process.

Another challenge would be to develop the teaching learning material for alternative schools with changed strategies and in various state languages where such a teachers' movement can be forged. (Also see box – In conversation with M. N. Baig.)

Nali-Kali schools have curbed the mushrooming of private schools in Mysore District assert the Nali-Kali/DPEP officials. In Madapura, a private school had to close down since most children sought a transfer to the government school that had a highly competent teacher. Yet it is unclear whether the Nali-Kali schools have been able to significantly reach out to those children who are excluded from the education system on account of their poverty, marginalisation, caste, class, religion, ethnicity, gender, labour, (dis)ability,. If education at the school level has to be more inclusive, then teachers need to be involved in reaching out to the community, parents and children. The teachers need to draw them into the schools as a critical human resource both in the teaching-learning process and to enable greater accountability in the education system. The revolutionary pedagogy that is Nali-Kali must create such spaces and opportunities for the hitherto excluded.

**IN CONVERSATION WITH M. N. BAIG ON THE CHALLENGES AHEAD FOR NALI-KALI**

“The sense of direction given by the Department of Education leadership at the top is critical. The person who is directing needs to be keenly interested, else a lukewarm response would affect sustainability of Nali-Kali. Teachers need to be continuously motivated and get a sense that Nali-Kali is not a dying project but a dynamic one that has wider application. The challenge also is how to successfully replicate Nali-Kali or adapt it for other blocks, districts and states. Rigorous manual preparation of Teaching Learning Material has been the hallmark of Nali-Kali. Gradually, explore the possibility of some print material for each session while retaining Nali-Kali’s characteristic openness to criticism and review.”

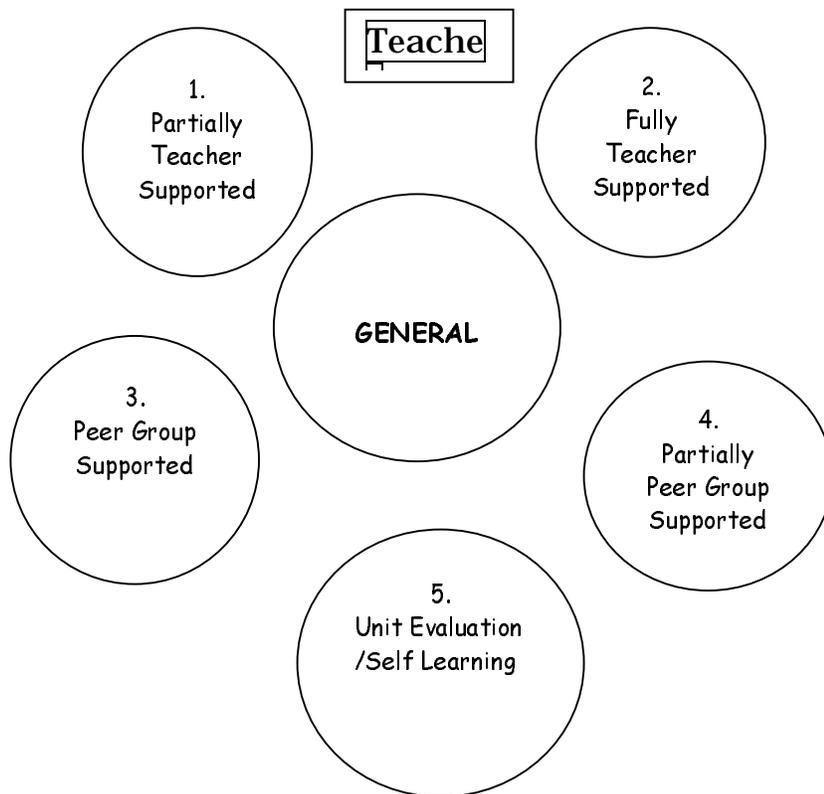


## Nali-Kali Learning Ladder

### **Language, Class 1**

S. No.	Activity	Card No.	Logo/Symbol	Description of activity	Gr
1.	Group songs	7/1 to 7/5	Boy-girl	General, action songs	Ge
2.	Story-telling	6/1 to 6/6	Lips	General by teachers and students	Ge
3.	Craft	5/1	Brush in a pot	Drawing, paper craft, painting	Ge
4.	Custard apple	1/1		Shape writing	Pa
5.	Taranath	1/1		Shape writing	Pa
6.	Simple conversation	5/1	Bell amid rats	Use imagination and verbal expression	Ge
7.	Picture story	1/1	Rogue elephant	Use imagination and verbal expression	Ge
8.	Picture train	1/1	Train	Shape recognition	Pa
9.	Alphabet train	1/1	Train	Shape recognition	Pa
10.	Picture words	38/1 to 38/4	Dog	Pronunciation, Picture word association	Ge
11.	Shape recognition	10/1	Calf	Shape recognition Repetition reinforces recognition	Pa
12.	Rubber letters	-	Finger on a letter	Shape feel, recognition, pronunciation	Fu
13.	Letter formation	49/1 to 49/5	Hand holding a pen and writing	Letter formation skills - trace letter with finger and with seeds/pebbles	Fu
14.	Picture word song	10/1	Baby	Song uses letters of strip 1 used in picture word cards	Ge
15.	Picture word story	10/1	Jackal	Teacher uses series of pictures to tell a story using words formed with letters of category 1	Fu
16.	Picture word	10/1	Crocodile	Recognise, read and write the words	Pee
17.	Practice	10/1	Cow	Children read-write from word cards using letter strip 1 without picture assistance	Pee
18.	Picture sentence	10/1	Deer	Aided by the picture, children read and write the sentences	Pee
19.	Picture word match	10/1	Sheep	Continuous evaluation card; Child matches the picture to the word using coloured string	Pa / c
20.	Fill in the blanks	10/1	Rabbit	Continuous evaluation card; Picture words in card have blank space which child fills in to complete word	Pa / c
21.	Word game	10/1	Giraffe	Continuous evaluation card; Checker board with 33 squares and letter strips, 2-4 students play at a time with the letter strips	Pa / c
49.	Letter word game	15/1 to 15/5	Tortoise	Continuous evaluation card; 1 Teacher card, 4 dissimilar student cards; teacher calls out letter, child recognises letter and places a seed on it	Pa / c
50.	Unit evaluation	3/1	Cobra	Each square of the 5x5 grid has a word, picture, letter, and word with blank or sequence. It is played as a dice game amongst students with the teacher as referee	Un
51.	Unit evaluation	6/1 to 6/2	Lion	Match the picture and word columns; Copy writing; Fill in the blanks; Identify and write words for pictures and sequence; Pick out in rubber shapes the letters shown.	Un
151.	Kannada alphabet	1/1	Teacher writing on blackboard	Vowels and consonants are identified in sequence and taught as <i>varnamala</i>	

## **Group Formation For Classroom Management**



## Annexure 1

### A Day in A Government Higher Primary School

In Kora Village, 12 km from Tumkur District Headquarters is a regular government higher primary school distinguished by no innovative pedagogic interventions whether by DPEP or Nali-Kali. A scene of the classroom transaction here provides a stark contrast to the vibrancy of the Nali-Kali classroom.

The walls of class 4 were bare except for pictures of Saraswati and Ganesh adorned with fresh flowers. The room was clean and bright with 5 windows, a door and a high tiled roof. The children were seated on a cement floor in 2 columns - the girls colourful in their *pavadai* (skirts) with flowers in their hair, the boys in shirt and pants. The children had placed their bags before them for use as tables for their books. A wall slate below the blackboard had multiplication tables and numbers 1-100 painted on it. The teacher read to the children from the textbook and wrote key words on the blackboard. Her questions evoked a chorus response. The children copied what was written on the blackboard. A girl and a boy were called upon to read aloud to the class.

Classes 2 and 3 were combined into one for the day since the teacher of class 3 was on leave. When I appeared, two class teachers were chatting at the doorway and scurried back to their respective classes. The teacher was obviously ill equipped to handle the multi-grade teaching situation that was temporarily thrust upon her. Throughout the session she interacted mostly with her class 2 students while class 3 looked on. The only attention paid to them was when they got too noisy and were asked to be quiet. The children were seated in rows - girls in front, boys at the back. The class 2 lesson was to read aloud whatever the teacher wrote on the board, syllable by syllable, word for word.

Class 1, however, had an unusual transaction in progress. The classroom was almost bare with no storage space, but from some corner, the teacher unearthed a box filled with different objects for counting. The teacher was taking a mathematics class and called upon the children in pairs to come to the head of the class. One of them was asked to count 4 marbles, give 2 away to the other, and then announce the remainder he had, that is, 2. Similarly, the teacher used coins to count the bus fare from Kora to Tumkur. The teacher had obviously been through a refresher training but seemed to lack the support to utilise her learning consistently to enrich the classroom transaction.

The teachers highlighted some of the issues confronting them. None of the teachers had their own copy of the textbooks because the Department did not give them a teacher's copy. They mostly borrowed it from a student in the class at the beginning of a period. One of the teachers had been 14 years in service and had received no refresher training. They were issued equipment that was of a sub-standard quality, so rather than risk its wear and tear, they preferred not to use it. Toilets were not

functional. Attendance dropped drastically during the harvest season.

## ANNEXURE 2

### A DAY AT A DPEP SCHOOL

The Mangala Government Higher Primary School, Mandya Taluka and District was well-kept, with an *anganwadi* (child care centre) next door within a walled compound. Wall slates along the corridor were colourfully painted with the alphabet, months, numbers, etc. We entered class 1 and were introduced to the Teacher Gayathriamma. The children were in festive clothes on account of Karthik Som. They were seated on straw mats in neat rows in 2 columns, 11 boys on one side, 9 girls on the other.

The teacher had been to a 6-day in-service teacher training conducted by DIET (District Institute of Education and Training). The evidence was the teaching-learning material (TLM) displayed on the walls of the classroom and being used in classroom transaction. The TLM such as the flash cards were stacked neatly at the back of the classroom. The Teacher had obviously made good use of her Rs. 500 grant for TLM. Teachers' Guides were provided to the teacher (unlike non-DPEP schools) and the children were provided with workbooks for the 3 subjects - Kannada Language, Mathematics, Environmental Studies.

The classroom walls were covered with plenty of printed charts provided by the Department of Education - parts of the human body, space, family, transport, good habits, birds, animals, fruits and vegetables, leaders. Craft work made with bangles, sticks, paper at the Chinnara Mela (children's fair) was posted on the wall as also the children's artwork exercising their creativity through thread paintings and symmetric paintings. There was a blackboard on the wall as well as wall slates along the lower part of the wall for the children's use.

The children greeted us with a *namaste* in chorus. I sat with them through their language and mathematics class during the morning session. The children were divided into 4 groups of 5 each. Each group was given a strip of 5 letters and 20 tiny cards with a letter each on them. The children had to learn a group of letters through the help of a card activity as in Nali-Kali.

When the bell rang to signify the start of the next session, the teacher began the mathematics lesson with a song on numbers 1 through 5, which is big, which is small. The activity assigned to the children was to arrange as many tamarind seeds or sweet wrappers as the number called out by the teacher. The children loved to volunteer for the counting exercise as also for the simple addition using objects, for example, 1 seeds + 2 seeds = 3 seeds. Among the other materials that the teacher had for counting exercises included empty matchboxes, pebbles, broomsticks, and weaverbird nests. The use of low cost - no cost material was evident in both DPEP activity-based learning and Nali-Kali classrooms.

It seemed just like a Nali-Kali classroom. On inquiry, the teacher informed me that in addition to the 6-day DPEP activity-based training, she had also been through a 12-day Nali-Kali training. Thus, in her classroom, she was able to use a blend of both approaches to teaching-learning. Though the learning ladder was not visible in her classroom. Teachers with a desire to innovate clearly benefited from the training and were able to pass on the advantage of revolutions in pedagogic approaches to the children, thereby enriching the entire teaching-learning process.

I then proceeded to class 2 in which there were 18 girls and 8 boys. A woman teacher was teaching the children language competency number 4.2.2 by reading aloud a story from a magazine cutting. The teacher proudly showed us the material that she had gathered from newspapers, magazines to serve as teaching aids.

The children were shown flash cards with the students' names printed on them. The class

recognised each syllable and pronounced it aloud, and then constructed the syllables as a name. For spelling practice, the children were given dictation. One student at a time was asked to write select words from the story previously read in class. The language session was interspersed with wake-up activities such as action songs much to the delight of the children.

In class 4, the students' EVS experiment was on germination and plant life for which they had piled mud in one corner of the classroom and planted a variety of cacti in it. They had also filled coconut shells with mud and sprouted beans in them.

The DPEP activity-based learning clearly emphasises experiential and practical learning, increasing children's participation in the learning process with the teacher as facilitator. Art and craft sessions are often used as an opportunity to prepare teaching-learning materials. The DPEP language workbooks include text, colour pictures, and worksheets.

### **Challenges to Teachers**

I met with the teachers to understand the challenges confronting them. The social composition of the students indicated that they were mostly drawn from the Vokkaliga Gowda, and Scheduled Caste communities. The lower primary school had a slightly higher number of girls than boys. The school records dated from 1950. Most of the teachers hail from Mandya, which is 8 km away, so teacher absenteeism was not a major issue here. DPEP adhered to the Universal Promotion Policy of the Government for classes 1-2 but it was often extended to classes 3 & 4 too. The children were under continuous evaluation through a variety of activities.

The teachers opined that activity-based learning does make greater demands on their time and energy, requires teachers to change their attitude to the children and classroom transaction. If the Department of Education no longer supported activity-based learning once DPEP had withdrawn; or in the event that they were transferred to a non-DPEP school, the teachers thought that they would have to adopt the conventional method of teaching to fit into the demands of the department's administrative structure. However, they were quick to point out that the old method was teacher-dominated without much concern for the child's level of comprehension, whereas the new method stressed opportunity for equal participation of all children and fostered a questioning spirit amongst students.

### **DPEP Block Resource Centre**

The Mandya Block Resource Centre had a very enthusiastic team of 5-6 resource persons. They were all teachers with a keen desire to innovate. They held primary responsibility for designing activities, such as games, songs, cards, dance, models, and activity banks, which would enable a child to achieve a certain competency. Importantly, in the course of the training, the teacher is shown how a particular activity could be used to teach all 3 subjects in an integrated manner, or for learning of multiple competencies. The innovative teachers adapt the activities and share their experiences with other teachers from their block in their monthly meetings.

Though the inspectorial system continues to emphasise checking of administrative details, the Block Resource Persons have played a useful role as facilitators in the Teaching Learning Process. They did encounter teething problems with some teachers, but sustained interaction between the Block Resource Persons and the teachers helped to overcome the initial resistance.

### **Community Participation**

The Village Education Committee members have become quite active after training. They have been able to convince the parents and the community of the efficacy of the newer activity-based

learning. They visit the school at least once a month, encourage children's participation, and observe the class, support school activities and programmes and provide financial assistance too in the school's time of need. The VEC members participate in melas to exchange experiences across villages in a block, plan follow-up activities and prepare an action plan.

EDUCATION  
**Bhasha: Of Those Who History Forgot**  
GUJARAT

*Suverchala Kashyap*

***Introduction***

Blood curdling tales of death in custody, purported as suicides; hatred towards a particular people because they were born so and due to the biased and at most times limited understanding of the British, thus listing entire communities as criminals. More than 125 years down the line certain communities are still treated as outcasts...

Every second day, one gets to hear of atrocities by the police against adivasis, tribals and some classified as criminal tribes. They are perpetually hounded, at times even made to commit crimes under duress. Their homes are burnt, their women raped, not to mention the constant harassment, at the hands of those in power, as well as those at a higher place in society owing to their caste. It is happening everywhere - Bihar, Bengal, Madhya Pradesh, Andhra, Gujarat, the list is endless.

This is the story of those who have for long, lived on the fringes of society. Being cut off from the so called civilized world is only one aspect of the canvas - what is of importance, is the fact that they have been constantly exploited, not only by the mainstream populace but, also by others who are of their ilk, but not entirely. This has led to churning out of reams and reels of fiction, immortalizing within tomes and on celluloid a different era. Not much, however, has changed for them.

The tribals are a culturally rich people with a vast and varied knowledge passed down from generation to generation, unadulterated by time or development. They are the keepers of several secrets from typically unique know-how about forest, agriculture, animals, the supernatural to life in general. They have immense information that is valid and time tested, though not always logically proven. A gift, they believe, that has come from their ancestors.

They have their own social norms, their own Gods, their languages are many. In several ways, they are more advanced than the 'developed' world. Long have they survived in oblivion, out of choice most often, but now they have a saviour, a messiah so to say. Someone who is striving through his relentless work to bring justice to a wronged people - Dr Ganesh Devy.

Deforestation and rapid urbanization are already speeding up the process of some of these tribals opting for jobs they've never done--construction labourers, daily wagers, thus cutting them off from their natural way of life, in turn threatening age-old cultures and lifestyles. Perturbed by this development Dr Devy on his several jaunts to the tribal areas of Gujarat and Maharashtra, and after a close association with them over a period of time, decided to do something. A professor of English literature and a Sahitya Akademi award winner could most easily be visualised as a 'prim and propah' intellectual gentleman with a Brit hangover.

One wonders why an immensely popular professor with a love of teaching would give it all up and take on the tougher and apparently mundane job of documenting tribal languages, folklore, songs, traditions, health practices etc. "Well for one, I was at a stage in life where all personal needs and goals had been fulfilled. I did not require too many materialistic comforts and hence did not need to hanker after money," he said. Also, there was a desire, a latent energy within, that made me take this decision; my interest in cultures and languages of different peoples was another factor that attracted me to this, he elaborated.

Thus was born the idea of setting up a tribal institute, one of its kind in the world, at Tejgadh, a small village about 90 km from Baroda, in Chotaudepur, Panchmahals district. Called the Bhasha Research and Publication Centre, the work has already begun, though the actual institute is yet to come up. "When the idea germinated nearly three years ago, the intention was to list and document the nearly 80 languages, that are not recognised and promoted by the Eighth Schedule of the Constitution. Each of these languages has nearly 10,000 speakers," said Dr Devy.

A number of like-minded people, intellectuals, artists and academicians have pitched in with time, money and ideas aplenty. There has been a slight deviation from the beaten path, i.e., instead of just focusing on the documentation of languages, it is also being applied to tribal performance practices, oral traditions, organizing national level seminars and public meetings. "Eventually the aim is to provide a common ground at Tejgadh, where apart from tribals, scholars, sociologists, anthropologists and linguists can come and study", he beamed.

Out of the numerous languages in India, only a limited number are recognised and promoted by the Eighth Schedule of the Constitution and national bodies such as the Sahitya Akademi and National Book Trust. Anthropologists, sociologists and historians who have worked on some of these languages have made valuable observations on the state of literacy and imaginative activity in them. The literary works, songs, stories, narratives, episodic verses etc have been rendered into the recognized and Scheduled languages of India. Occasionally, English renderings of such collected works have been published.

Many of these languages too, are facing the threat of extinction, owing to the absence of institutions using them. The new generation has to attend schools in which the medium of instruction is one of the recognized and scheduled languages.

Says Dr Devy, "Tejgadh was chosen for mainly two reasons. One, it is well connected with the outside world, has electricity and telephone lines. Second, it forms a convenient base camp allowing us easy access to the remotest villages in the area. More important is the fact that people here are extremely cooperative and are not averse to the idea of an institute being opened in their area."

Another reason for choosing the place elucidates Dr Devy, is that it is very close to the villages where the extremely interesting and famous Pithora form of painting has been preserved for several centuries. The site of the institute is a sprawling 20-acre undulating landmass, through which runs a perennial stream. Close to this water body is a single huge rock face that cuts across the sandy bank. "This rock is going to be an open-air stage, where tribal performances can be regularly held. The institute will be a simple building to be constructed with locally available material. No architect will be formally consulted, as these very tribals will implement the whole project albeit with a little help," says Devy with a gleam in his eyes. The main area will comprise an arts studio, a library, halls of study, flanked by residential quarters where people from across the world can come and stay.

Tejgadh, a 13th Century medieval capital was successfully ruled by a queen, Rani Tejal, though there is no formal documentation of this fact. Fortifications, remnants of a glorious past, however, are still visible. Today it has a maximum population of tribals, mainly Rathwa Bhils, Nayaks, Tadwis, Gamits and a marginal one of other communities. Interestingly, the arrangement of these people in terms of hierarchy is reflected in the caste system prevalent in the country. At the centre of the village is the 'vania' class, followed by the Muslims and other communities then the Harijans and on the outermost periphery are the tribals and even beyond are the denotified and nomadic tribes.

### ***Denotified Tribes***

Apart from the yeoman task of stringing together languages, traditions and cultures, Dr Devy has only recently targeted his energies to a more happening problem, that of the denotified tribes. Their status in society and the terrible treatment meted out to them is a cause for concern. He is ably and actively supported in this by the renowned writer, playwright and activist, Mahashweta Devi. Together with a number of like-minded individuals they set up the DNT Rights Action Group (DNT-RAG), in March 1998, at the Verrier Elwin memorial lecture, in Vadodara. Thereafter, there has been a flurry of activity wherein Dr Devy, Mahashweta Devi, Laxman Gaekwad, Nandini Sathpathy and several others have travelled to different states, holding public meetings to create

awareness about the plight of the DNTs. The DNT-RAG also brings out a monthly newsletter, Budhan, named after a tribal who was killed in police custody. Budhan Sabar was all of 28 years and lived in one of the poorest districts of West Bengal, Purulia, home to the Kheria Sabar tribe, still enlisted as criminal. His crime--a robbery, he had not committed. The centre also publishes a magazine called Dhol in the tribal language.

"The story of the DNTs goes back to the early years of the Colonial rule. Whoever opposed British colonial expansion back then was perceived as a potential criminal. Particularly, if any attempts were made to oppose the government by use of arms, the charge of criminality was a certainty. Many of the wandering minstrels, fakirs, petty traders, rustic transporters and disbanded groups of soldiers were included by the British in their list of criminal groups," informed Dr Devy.

During the first half of the nineteenth century, the tribes in the North West Frontier had been declared criminal tribes. This category became increasingly open-ended and by 1871 the British had prepared an official list of Criminal Tribes. An Act to regulate criminal tribes was passed in the same year. By 1921, the CT Act had been extended to cover numerous other tribes in Madras Presidency, Hyderabad and Mysore. Thus, about the time Indian politics saw the emergence of Mahatma Gandhi as the leader of the freedom struggle, Indian society mutely witnessed the emergence of a new class of people who were branded as born criminals. Soon after independence the communities notified as criminal tribals were denotified by the Government.

This notification was followed by a series of Acts generally entitled Habitual Offenders Act.

There is a list of tribal communities prepared by the government called the Schedule of Tribes. Denotified tribes are other communities not listed in SC or ST and formerly considered criminal and because of that the GOI repealed the Act and denotified them.

According to Dr Devy their focus is now on creating awareness among the police forces and people at large regarding these communities. "Though legally they are denotified, the police and public continue to treat them as criminals. There is a lot of mob lynching, burning their houses etc. We want these things to stop, therefore we are demanding the setting up a new commission and exemplary punishment to the police." These people, have neither land nor education and are do not even get the benefit of reservations and concessions that are accorded to the SCs and STs, hence the nation needs a new policy for the DNTs as their number is nearly two crore and keeping such a large number uneducated for a long time is dangerous, he opined.

"Besides, these are our first batch of freedom fighters, they were declared as criminals by the British because they were resisting them. Their battle for independence has still not ended, even though they began the war of

independence they were never recognised as martyrs. We owe it to them that they should at least now be given independence and a life worth living", said Devy.

They had met Ms. Maneka Gandhi, the then Minister for Social Welfare and sought her cooperation in the matter. Though it came as an immense surprise to them when while apprising her of the plight of the tribals she retorted, "But, tribals are criminals !" However, once the entire scenario was explained to her she has promised full support, as also has Justice Venkatachaliah, chairman of the National Human Rights Commission.

Work at Tejgadh is progressing with every passing day, apart from the academic, tremendous social and economic changes are slowly creeping in. Particularly, in Gujarat a lot of work has been taken up for the Chara community, living in Chara Nagar on the outskirts of Ahmedabad. They have been constantly badgered for being what they are.

Dr Devy is also going a little beyond by organising exhibition cum sales of the tribal art work. If things do work out as envisaged by Dr Devy and his group there just may be better days ahead for those people from whom perhaps all others have originated.

Collectively harnessing the elusive water. There are solutions to problems which are so often within reach of everybody, without depending on the government and yet changing ground realities. This is the feeling echoed by the members of Maali, a group of people who have come together in Tejgadh area of Chotaudepur, Gujarat, to harness the elusive and hard to come by commodity called water.

"In a country where the government has not taken much initiative on the developmental side after more than half a century of freedom, there is no other option but to resort to self-help strategies," says Dr Ganesh Devy, currently involved in setting up water banks, in this area.

Though Gujarat is internationally known as a leading industrial state, large pockets of it seem to have been bypassed by development: particularly the eastern parts inhabited primarily by tribals. The brain behind this set-up, Dr Ganesh Devy, through his constant interaction with the tribals realised that if there was any fixed answer to their specific problems it lay right with them. Says he, "The lopsided governmental policies have led to these areas being economically and educationally the most underdeveloped parts of the state."

The people here have finally realised that in order to rectify their condition the change has to come from within. "We were just the catalyst in sparking off something that has been dormant for a long time," adds Nima who is closely involved in the water bank programme called, Maali . In the local language the term Maali, means, "the sacred space for storing water". In this area, it is

synonymous with the people's participatory project for water harvesting, optimum utilisation of water resources and irrigation.

The Maali project covers nearly 24 villages, with a total population of approximately 45,000 people. The total land under cultivation in these areas per village is about 250-300 hectares, the total of which is 7,000 hectares.

The average land holding of a tribal adult (for Chotaudepur region) is 1.5 acres. About 70% tribal farmers hold no larger a land than two acres and about 10 % hold land between 5-8 acres. The average rainfall per year here ranges between 25-30 inches. And the tendency of 70 % population is to grow only one crop during the monsoons. During the winter months people migrate to towns as far as 300 km away and end up as construction workers. In the current year says Nima there has been an influx of workers in Vadodara due to the unusual drought situation, and the Bhasha survey has noticed that getting employment for even three days a week is a problem.

Says Dr Devy, "the single most important factor that will empower the tribals to rectify this sad scenario is to have enough water for irrigation, which would in turn enable them to have two to three crops a year. If they have adequate water they will not need to migrate in search of jobs and food." He strongly feels that enough water along with the micro-credit societies will forever free them from the hold of the moneylenders.

### ***The Project***

The eastern border of Chotaudepur is about 25 km from the river Narmada. The Orsang, which is a dry river and an important tributary of Narmada, carries water only in the monsoon. The project is based on the concept of voluntary participation in the management of natural resources. In each village tribal farmers have come together for forming cooperative water banks.

Adds Nima, "We hold monthly meetings and therein decisions are taken such as the number of subscribers for each water bank, which usually ranges from 30 to 50. Also, each Maali is an autonomous and democratic body and for its administrative convenience has to elect a Pramukh and a Mantri. The subscribers of the bank have the right to take part in all decision-making processes.

Inform Dr Devy, "certain ground rules have been laid down by the tribals themselves after a lot of discussion which are making this project a successful one." After the group has decided collectively to undertake reconstruction of an existing water work, creation of a new one or utilisation of a natural or manmade one, the cost is determined, in consultation with the field supervisor designated by the Bhasha center.

Nearly 25 % of the total cost of construction, creation and maintenance is collected by the group on a pro-rata basis. The collected amount is deposited in the Group's bank account after informing the supervisor. The Bhasha centre facilitates obtaining of appropriate grants available in various governmental schemes for this purpose. It also makes available about 25 % of the costs as a loan amount, preferably as a non-refundable loan.

The centre also tries to obtain the remaining part of the funds required for the project from national or international funding bodies. If that cannot be done says, Dr Devy, "we liaison with a nationalized bank and secure a short term loan to meet the requirement." Also he adds that field supervisors are provided to monitor the working of the Maali groups. And in order to ensure foolproof monitoring we choose the volunteers from the tribals themselves because they are well acquainted with the topography and language and are sufficiently educated to liaise with government officials and outside funding agencies.

The Bhasha centre also undertakes short-term training courses for orienting the Pramukhs, and Mantris of the self-help groups formed for this water project. Summarises Nima, "Even though this SHG is barely a year old the tribals have realised that fighting a problem singly does not have enough impact, but results are clear to see when people work collectively. Though this is a positive impact it also has a flip side, she adds, that is, it is somewhere down the line giving rise to a new social leadership and it is a very potent weapon in a way breaking up the stranglehold of the Panchayat.

In effect the Maali project visualises that over a period of 7 to 10 years the average annual income (currently it is Rs 12,000 per year per family) of at least 70 % of the population of the 24 villages will increase in real terms by 150%. The level of indebtedness will come down between 0 % to 5 %.

And more important than anything, Dr Devy highlights, "In the cyclic droughts faced perpetually by Gujarat the villagers will have enough surplus foodgrains and fodder to fall back on. This would also lead to competitive agriculture, not in terms of becoming another industry but to protect their rights and privileges and determine the crop cycle by producing enough to survive and last in the rural market. "

- The maali operates on the principle that agricultural development of a village is possible only through collective participation of the farmers, self-reliance is thus the main element in the success of such a scheme. Any villager holding ownership rights and the land title of any agricultural land can become a member of the group.
- Every member will surrender all rights on any water source that is in his/her individual possession of the group. The member will have equal rights on all water sources managed by the group. While undertaking the work of digging a new well or reconstructing an already existing well or building a check dam or employing method of water harvesting, every member will have the option to subscribe or not to subscribe to that particular water work.
- The subscription to any new water work undertaken by the group can be made in the form of money or adequate quantity of water. For example explains Nima, "in case seven villages

decide to dig a common well then four out of the seven can contribute in cash and the others can contribute a comparable quantity of water to the group for use by other members of the group.”

- The member in whose farm a new water work is being undertaken will surrender through a contract on a stamp paper the ownership of that area of land which is being used for that specific work.

### ***Beyond the Realm of the Real***

"The beauty of the tribals is known and admired, but the truth about them is still not known. Those who venture into their world have realised that it exists far beyond the realm of the verbal. It rests somewhere in the darkness of the jungle. In a state of trance it surfaces occasionally. There's no entry into that world with our chartered minds. One must enter it only through the path of faith, by accepting ritual, superstition and conventions on their own terms. It is only then that we may make a beginning towards understanding tribals," said Dr Devy explaining his rapport with the tribals of Tejgadh particularly, and those of other areas that he comes in contact with from time to time.

In one of his recent essays, 'Tejgadh: Between pleasure and pain', he gives an insight into this very world that he has often traversed. The tribals live more by intuition than by reason, the space surrounding them is considered more sacred than secular, and their sense of time is personal rather than objective. The world of the tribal imagination, therefore, is radically different from that of modern Indian society.

Once a society accepts the secular mode of creativity, within which the creator replaces God, the imaginative transactions assume a form. Tribal imagination is still to a large extent dream-like and hallucinatory. It admits fusion between various planes of existence and levels of time in a natural and implicit way. In tribal stories oceans fly in the sky as birds, mountains swim in water as fish, animals speak as humans and the stars grow like plants. Spatial order and temporal sequence do not restrict tribal narratives. This is not to say that tribal creations have no conventions and rules, but they admit the principle of association between the emotion and the motif used in narration. Thus stars, seas, mountains, trees, men and animals in tribal stories can get angry, sad, happy and disturbed.

One may say that tribal artists work more on the basis of racial and sensory memory than on the basis of a cultivated imagination. In order to understand this distinction it is necessary to understand the difference between imagination and memory.

The tribal mind has a more dynamic sense of time than sense of space. Somewhere along the history of human civilization, tribal communities realised that domination over territorial space is not their lot. Therefore they seem to have turned quite obsessively to gaining domination over time. This urge is

substantiated in the rituals of conversing with their dead ancestors. An amazingly sharp memory helps the tribals evolve a highly complex system of classifying material and natural objects into a system of knowledge. The importance of tribal knowledge has not been sufficiently recognised. but the aesthetic proportions of the houses they build, objects they make, rituals they perform, fascinate a curious onlooker. One thus wonders how without any institutionalised training or tutoring, tribals are able to dance, sing, build, make things speak and live so well.

But in this fast changing world, tribal memory is being sacrificed in a big way. It is insisted that tribal children must attend schools where the rest of the children go. They must use medicines manufactured for all other people in the country and follow the common agricultural practices. All this because we have very little time to listen patiently to the tribals who have immense knowledge and creativity.

We have decided that what is good for us is good for tribal communities as well. In the process we are destroying a rich vein of India's cultural heritage. There has, of course, been a government policy on tribals. Tribal development departments have been set up in the states populated by tribals. In fact, Verrier Elwin, drafted a policy for tribals which was endorsed by Jawaharlal Nehru soon after Independence. But, in all these policies, tribals have been seen as 'backward' and socially primitive people. the policy has fluctuated between studied non-interference and efforts of assimilation.

I have noticed that in most tribal communities, the caste system is absent. Gender discrimination is much less than in our society. Among tribals widows do not carry a stigma, raped women are not tortured, orphans are not left to beg. Tribals do not exploit other people's labour to fulfill their own sense of greed. They do not destroy nature to build monuments of human ego. Can such people be considered uncivilized? I think it is time India gave a thought to this community.

### ***Bhasha- Activities at a Glance***

I Documentation and preservation of tribal languages:

- \* Publication of Dhol magazine in ten tribal languages (Rathwi, Gor Banjara, Ahirani, Dehwali, Panchmahali Bhili, Bhanu, Kukna, Pavri, Dungri Bhili, Chaudhari)
- \* Documentation and publication of Tribal Knowledge Systems
- \* Publication of issue based books on tribal development

II Conservation of Tribal Arts and Craft:

- \* Tribal Artists Co-operative Society
- \* Craft training for tribal artisans
- \* Exhibitions & Displays of Tribal Art

### **III Education and Training:**

- \* Tribal Academy, Tejgadh offering Post Graduate Diploma in Tribal Studies
- \* Workshops and seminars on Tribal Studies & Development
- \* Research Courses in Tribal Studies
- \* Computer training for tribal youth in villages
- \* Vidya : 22 Non-formal literacy centres for tribal children
- \* Mobile Libraries in rural areas

### **IV Healthcare :**

- \* Prakriti Programme for detection & treatment of sickle cell anemia in tribal villages
- \* Conducting health surveys & holding health camps in rural areas
- \* Providing medical aid

### **V Socio-economic Development:**

- \* Micro-credit network: 149 groups
- \* Below Poverty Line Self help group network: 24 groups
- \* Food grain Banks: 40
- \* Water Banks: 64

### **VI Social Justice and Human Rights**

- \* Organizing Migrant Tribals engaged in construction work
- \* Legal advice to tribal victims of atrocities
- \* Denotified & Nomadic Tribes Rights Action Group
- \* Publication of Budhan journal for Denotified Communities

### **VII Sensitization and Awareness Programmes:**

- \* Verrier Elwin Memorial Lecture series
- \* Tribal - Police Archery Contest

EDUCATION  
**A School Apart-**  
**Kamala Nimbkar Balbhavan in Phaltan**  
MAHARASHTRA

*Dilip D'Souza*

***A School in Phaltan***

Often enough, you hear talk about the "philosophy" of a particular school, about how it is so vastly different from others. I have no doubt there are schools in India that break new ground in one or more areas; perhaps some do follow philosophies that are really fresh and stimulating. But it must be much rarer to find a school whose philosophy you can actually see: in its students, its building, the surrounding trees, the way its teachers talk to students and to you, a visitor.

The Kamala Nimbkar Balbhavan in Phaltan, Maharashtra, is such a school. I don't know if there is a single name to attach to the thinking that drives this school, but you don't need a name. You can see it everywhere. In many ways, KNB seems just like a "normal" school "should" be. Except that the sad reality it reminds you of is that "normal" schools in India are not like this. To much of the country, KNB would seem very strange indeed. In particular, KNB seems to be achieving those always elusive goals -- a hand up to our depressed sections, melting away prejudices -- in the best possible way: unobtrusively, thus effectively.

It happens in the KNB nearly by the way, this mixing of children from disparate backgrounds, this offer of opportunity to those steadily denied it. Yet it is decidedly not by the way; it is an important part of the school. And while there are many organisations that work among India's lower castes, what is interesting about KNB are the attitudes of its higher-caste students. They seem unable to see why there is, or was, or should be, any difference between them and their lower-caste friends. They speak in wonder about how kids from other schools sometimes ask them why they "mingle" with the lower castes at KNB. They are bewildered that this is a question at all. Surely such bewilderment is this school's greatest achievement. Before KNB started in the mid-1980s, its founders had thought that their sole commitment must be to poor children. But they came to see that even middle-class children were forced to attend what an early progress report calls "joyless schools that destroyed their spirit",

where the "highest values are success in examinations and conspicuous consumption."

That was 1986, but those remarks apply just as surely today. So many Indian schools kill all creativity, a sense of community and compassion, even a feeling for the planet we live on. Could a new school in Phaltan offer an egalitarian ambience for learning, foster concern among its students for their fellow humans, their surroundings? And a school with a vision like this could have other worthwhile goals. It could offer selected lower-caste children opportunities they would never get elsewhere. Besides, as another report noted: "[I]t was equally clear that middle-class children needed the interaction with the poor if they were to grow up with an awareness and appreciation of the social reality in our country." So KNB would be a school where "Dalits would learn alongside the elites."

With that context, these were the goals the founders set for the school: It will have a free and happy atmosphere. Students must be from all walks of life, with a concerted effort to attract bright lower-caste children. The medium of instruction will be Marathi, but English will be taught from Standard 1. Class size will be strictly limited. It will use innovative, child-centred, activity-based instruction. Environmental awareness will be inculcated in its students. It will be secular. It must become a resource centre for other schools in the area, particularly government schools. Again, note how the entire caste issue is so underplayed. I suspect that is the reason for KNB's success in dissolving caste differences among its students. Nor is there any particular distinction on religious grounds. Thankfully, these children are generally free of the petty and divisive distinctions that are drilled these days into millions of Indian heads.

KNB aims for a high-quality education for all its 450 students. Whoever they are. And when I visit the school, I can see easily how well they are achieving that. The classrooms are bright and airy. The library is filled with stimulating books. The teachers are proud to show off the work of their students. They talk of such a cliché as "job satisfaction" with feeling, as if it truly means something to them; which it must, because salaries here are a third or a fourth of comparable government positions. The students are curious, enthusiastic -- even alive, in ways other schools have forgotten. Girls and boys mingle freely, sharing a healthy informality.

As for academics: KNB has now sent four batches to the 10th standard SSC examinations. Every single student has passed. That 100 per cent record is unique in Satara district. Parents are told that their children will get a fine education at KNB, but will almost certainly not be toppers at the SSC exam. Even so, it is by far the most sought-after school in the area. Of course, all this success has not come without certain strictly observed guidelines. Though government-recognized, KNB does not take a grant from the government. Girls and boys are admitted in about equal numbers. An admitted student's sibling

will also be admitted, but only one -- a sturdy hint to parents that two children are enough. Teachers are not allowed to take outside tuition classes, the practice that is destroying so many other schools. Classes are small: the last SSC batch had 24 students. Even with the small classes, Standards 1 through 4 are allotted two teachers per class.

Two other features of KNB are worth mentioning. First, there is a concerted effort to make the student body a fair cross-section of the Phaltan community. Nearly 60 per cent of the students belong to backward classes; admission policies work to ensure this. Compare this to other government-aided private schools in the district: one study found that only about 23 per cent of their students are BC. (That is, even though these schools operate on public money, they would rather ignore the educational needs of the greater, and needier, part of the community). Second, at Rs 60 a month, KNB fees are low. Even so, about a fifth of the students attend for free (and their books, uniforms, class trips and midday meals are also free).

While raising fees makes financial sense and some parents could certainly afford such an increase, consider this from a 1996 report by the principal: "By raising fees, we would be in danger of alienating those lower middle-class people who are the backbone of our school and give it its distinctive character." A truly astonishing sentence. How many other schools acquire a "distinctive character" from their poor students? How many other school principals aim to be distinct in this way?

And that character may explain why some of KNB's most outstanding students -- not necessarily in terms of their exam results -- come from poor families. I met two. Wasim Maner is the son of a tailor (Maners are traditionally BCs, bangle-sellers). He was an active member of the school's Nature Club, and has kept up that interest after graduating from KNB in 1997. Today, he is a paid research assistant in an ongoing study of wolves in the area: one of my happiest recent moments was chatting with Wasim about a favourite book: Peter Steinhart's *The Company of Wolves*. Wasim returns often to KNB, and is a popular face there, often taking students bird-watching. There is something deeply moving in what he once wrote about what the Nature Club meant to him: *'It changed my life. When I was small I was an angry boy. I was very short-tempered too. ... [W]hen I joined the Nature Club, I felt something was wrong with me and I started to change myself. ... I wanted to become a simple man. If I become a simple man, then I do not need many things. Really, nature education is good and important. It releases us from bad habits and bad companions. Nature gives a turn to our life and makes us good persons.'*

Prakash Anbhule is from a poor Maratha family; his father is a watchman. Prakash's first school was a local municipal school. On his first day in the dingy classroom there, the teacher ordered him to go back outside and ask for permission to enter. He remembers indiscriminate beatings every day.

Naturally, Prakash began skipping school, sitting under a tree and composing poetry in his head. He reached the second standard without knowing how to read and write. He then came to KNB. Two years after graduating, he remains what the principal describes as the best poet the school has produced. An accomplished computer operator, Prakash did most of the layout work for the 1999 issue of the school's Marathi magazine, *Navnit*. He has come a very long way from asking permission to enter a dank room in a municipal school.

So how did KNB come to be? By the vision and drive of its founder and principal: Maxine Berntsen, once of Escanaba, Michigan, USA. Maxine-*maushi*, as Phaltan kids call her, came to India in the early 1960s and stayed, except for the few years she spent in the US completing her PhD. After a long struggle with suspicious and apathetic officials, she became an Indian citizen in 1978. She is now a renowned educator and a respected Marathi scholar. And she runs a damned fine school. If it took a woman born outside India to inspire a KNB, that speaks most of all of her profound compassion for and understanding of India. Especially today -- yes, especially today -- there are many of us who might take note.

**Excerpts from 'A Chance to Dream', a Pragat Shikshan Sanstha leaflet:**  
*The Kamala Nimbkar Balbhavan is run by the Pragat Shikshan Sanstha in Phaltan. It has functioned since 1978 and was registered in 1984. PSS also runs Apli Shala ('Our School'), pre-primary and supplementary classes for children in a Dalit area of Phaltan; and Educational Outreach, a programme designed to help improve the quality of instruction in local government schools.*

EDUCATION  
**Digantar – Alternative Education for All**  
RAJASTHAN

*Avinash Jha*

***Introduction***

The question of elementary education occupies a contentious space in our society. A large number of children never enter school and there are many who drop out after having joined a school. Where they do find space in some school or another, children find themselves confronted by teaching procedures and content of inferior variety. Even in expensive private schools, they are under great deal of pressure to perform according to ill-conceived standards and compete with other children for honours of dubious nature. Efforts of 'alternative schools' generate a lot of interest on account of the quality of their teaching and the kind of freedom they allow for children. These schools often remain islands of excellence though, without a deeper interaction with the community around or with the educational concerns of the whole society. While rooted in the experience of an alternative school, Digantar has made a distinctive contribution to educational practice and debate in the country. Digantar is known for its deep engagement with the philosophical issues of learning while working with children from deprived communities. An intensive dialogue on the nature of education with these communities is an essential part of their programme. Indeed, the schools they run would not have been possible or effective without substantial support and contributions from the community itself.

While "getting education is a right due to each member of the human race", we cannot just create facilities of education without ensuring that a good education is actually received by the child. An alternative model of elementary education, which Digantar seeks to evolve, has to "help the child become an independent and motivated learner". A self-sustaining lifelong learning process has to be set in motion in elementary stages. Moreover, this model should be such that it can reach every child in whatever socio-cultural or geographical situation. An educational system should be able to attract children to it and win the community's support. If it is failing to do so, it is probably because the system is unable to develop capabilities in children it is claiming to develop. If that is the case, this system can never reach all children. Digantar has endeavored to develop an educational programme for elementary education which places the child at the centre of the learning process. The model of education has evolved through actual teaching in schools which they have been

running now for almost a decade. As the parents and elders will testify children are eager to come to these schools and enjoy the freedom they find here without being any the worse in formal learning achievement.

In these times, when education is sought to be used for delivery of concocted histories and petrified ethics, significance of Digantar's approach to education cannot be overstated. Instead of stunting the thinking capacity of children with ready-made packages, they seek to equip children with critical capacity and skills that would help them in learning for the rest of their lives. They would be independent personalities willing and insistent on thinking for themselves and deciding for themselves.

Digantar was the name of a school which Rohit and Reena started in 1978. They taught a small group of children there for about ten years. Towards late eighties, they registered the organisation called Digantar Shiksha Evam Khelkud Samiti. By this time they were also involved with another organisation working for education of slum children in Jaipur. Digantar moved to a rural area near Jaipur in 1989 and a school was started there in the newly established campus. This school was part of the Elementary Education Project supported by the Ministry of Human Resource Development. Two other schools were started later in neighbouring areas under the same project. Intensive work has been done by Digantar in all areas of elementary education. They have worked out large parts of the curriculum and are engaged in its continuous evolution. Many other programmes in the country have sought their help.

### ***Journey to the School***

The best way to introduce Digantar is a journey to the schools - Digantar Shalas - on the outskirts of Jaipur city. Bandhyali is the name of the village where one of the schools is situated. The school is situated on a small sandy plateau. It was grazing ground once, now there is nothing to graze here. The community has now given it for a school. But it is still 'government land'. From this vantage point you can see clusters of houses scattered all around in the dry landscape dotted with occasional trees. Children from these houses come to this school. In the distance you can see barren hills on one side. One has to travel a little way off the main road on irregular paths to reach this school which is a circular one story construction made of brick walls and thatched roofs.

You enter the school from one opening in this circle and around you are the classrooms for different groups with their own names like Chandni, Saras, Apna Ghar, Roshni and so on. Digantar's outlook on education and learning clashes headlong with the notion of schools with progressively higher classes - class 1, class 2, ... Children are not vessels to be filled progressively with so much of learning in each year, nor are they race horses participating in an obstacle race. They are human beings who have already lived a life for five long

years before they step into the school. Each one has lived a different life and has gone through different experiences as an individual. In the course of their lives they have developed skills, knowledge, attitudes; they have imbibed values. They have participated closely in the life of their family and community and have acquired a complexly textured imagination with which they interpret the world.

It is not considered a handicap for learning - the fact that they are not blank slates but each an individual with differently developed capacities. Some may have well developed linguistic competence, while others may be keen observers of adults. One may be particularly sensitive to colours, the other may be good with numbers. One child may be fast in picking up something's, another may be slow. Digantar takes it for granted that each child is different from the rest and seeks to provide her or him with an opportunity to learn further at her or his own pace and according to their own interests at the moment. Instead of a handicap, child's pre-school knowledge and experience is considered an achievement to be further built upon.

Putting children of same age in one class and expecting them to master a package of skills and knowledge at a given pace is to set up a situation where learning becomes difficult and uninteresting. If children turn away from such learning then force, threat and cunning is used to push them along. This compounds the problem, for one does not learn in an atmosphere of fear. The irony is that learning actually is a spontaneous activity in us; we enjoy learning new things, acquiring new skills and excelling at old ones. Digantar wanted to make school an enjoyable and fruitful experience for children and did away with the system of classes. But in order to be able to pay attention to each child, it was necessary that they be in groups of manageable size. Bandhyali school has seven groups now. Each group has children of varying ages and levels of learning. This diversity in a group adds another quality to school education. It is not only from teacher that students learn, they learn from each other too.

I am sitting in the Bharat group where Ghanshyamji is the teacher. He has called three children near the blackboard and is explaining some Hindi letters and their sounds to them. Some children are reading their books. The rest are busy solving exercises in the book. Before he started, Ghanshyamji called a boy near him and asked him about his absence for past seven days. He was trying to explain how much loss of learning this would have resulted in. Now the three children are busy with some work. The teacher goes and sits with various children and helps them with specific things. After some time he asks everyone to return their books to him. Now everyone sits in a circle and the teacher says now they will study English.

He writes a few sentences on the board and tells them that English words have to be written on top of the line in the notebook, not below the line and how all the letters of a word should be close together. He begins to draw lines in their

notebooks. There is small box where pencil sharpeners and other accessories are kept. While Ghanshyamji is drawing lines for some children, some others are busy sharpening their pencils. Some are just chatting. On two walls are large blackboards and the third wall has a large notice board where many pictures made by children are pinned up. Soon everyone is writing English sentences in their notebooks. On the front side of the room wall comes up only to about 3 or 4 feet so that you can see the other classrooms across this one. This class is relatively quiet. You can hear the constant hum of voices coming from the rest of the school. Occasionally you hear a song which another group is singing. A pleasant feeling washes over me as I sit here, not least because all children call the teacher by name. You can hear them all the time: "Ghanshyamji, this" or "Ghanshyamji, that".

The first group I went to sit with this morning happened to be made up of upper primary students. These students have passed their class V examinations of the state board. Digantar has started teaching upper primary children relatively recently. This was the first period of the day which consists of reading out poems, telling stories, performing plays, reading of newspapers, discussions, playing of games. The rest of the groups are playing out today.

When I entered and sat down the period had begun. They were sitting all around with space in the middle. I was trying to spot the teacher. He is not there in the middle or even in the front row. In a few minutes I am able to identify the teacher sitting in the circle with students. Anil is a young teacher hailing from a nearby village. They are discussing what they should do in this morning's period. Some students perform small one act plays or mime. A few jokes are told. Some riddles are posed and it is irritating the teller of riddles that some students blurt out the answer even before he finishes posing the problem. Teacher picks up today's newspaper now and a student reads out some headlines. Finally he reads the headline on Ayodhya. Today is 15<sup>th</sup> March, the day VHP is seeking to perform 'shila puja' despite Supreme Court's order to the contrary. The headline says that Ayodhya has been converted into an army camp. Another headline states that Mahant Paramhans threatens to commit suicide if he is stopped. Someone quips that that would bring the whole business to an end. Others laugh. The boy reading the paper retorts that if the mahant did commit suicide, his followers will go on a rampage and there may be riots. I am surprised that such sensitive topics are picked up for discussion.

Later in the day I met some of these students studying in the carpentry room by themselves. They told me they were studying here since they did not need to do the revision of geography being done in their group. I ask them about their future plans. They all hope to study further - some in Jaipur, some in his maternal uncle's town and some in the closest school. They like their school, but then "who does not like his school". They like the friendly relationship with

the teacher. They can say what comes to their mind. They would have got beaten up in another school, they guess.

Later during the lunch I query the teachers as to how they prepare themselves for teaching. Teachers maintain a pre-formatted notebook with lot of space for descriptive notes for each child for each teaching day. There are columns for writing out the plan to be followed for that particular child, what the child has managed to learn, and prior preparation needed for the teacher. The school is from 9 in the morning till 3 in the afternoon. From 3 to 5, teachers sit with this book and reflect on the happenings of today, record the progress made for each child and write out the plan for the next day. Saturday afternoon of each week teachers sit together to do a review of the teaching in school for that week and deal with particular difficulties that may have cropped up. One teacher may bring up the difficulty she is having in children identifying the last and the first sounds of a word. Another may talk about a girl who is irregular in attending school because she has been put to work in the fields. They discuss possible solutions. There is a larger meeting of all Digantar teachers along with coordinators once in two months. Each year, before the beginning of a new academic year in June, there is month long workshop where all of them together make preparations for the coming year.

Training of teachers for these Digantar schools is fairly long and rigorous. The emphasis is as much on exploring their beliefs and notions about education as on curricular and pedagogical issues.

### ***How Do We Learn?***

All this is excellent, one might say. Children enjoy themselves and the atmosphere of school is nice and friendly. But do we have to go through the rigmarole? Children manage to enjoy school life anyway. They are mischievous and need to be disciplined in order to learn. Why does a school has to be this way or a variant of it? These questions and doubts assume that the organisation of schools and its activities in the manner we have outlined above is a matter of adding icing to the cake of learning. If it were so Digantar's work could be safely left to the specialised discussions of educationists and we could have merely said that it is a matter of parental taste whether they want to put their children in schools of this kind.

The central concern of Digantar is the development of understanding and skills to interact with the world. Elementary school is the place where a child is initiated into this development. Organisation, functioning and ethos of the school follow from the requirements of learning in the light of objective mentioned above. The fundamental choice in any educational programme is between two approaches. Either we attempt to 'hand down' a certain body of knowledge as a finished product. In this approach child is the instrument for the propagation of certain skills or a body of knowledge in order to fulfill certain function in society. This is the approach which requires regimentation even for partial effectiveness and is liable to be employed in all contexts where

an elite organizes the life of the whole society. That society then depends on the majority of people being able to fulfill pre-assigned roles. The alternative is to help children develop capability of understanding and mastering the process of knowledge formation, acquisition and testing, to whatever extent possible. This approach becomes imperative if we put a value on all human beings.

If we choose the latter, as Digantar obviously does, the school has to be a place where each child is valued for her or his own self. School is there to help them develop understanding of the world and impart skills to interact with the world in order to fulfill their own objectives whatever they might be. This requires that school be a place where "children have a voice, can state their difficulties, question, criticize and discuss its functioning and have an important role in decision making... It [school] should respond warmly to their educational needs which include both cognitive as well as emotional needs." [Digantar document: 'Theoretical Basis of the Digantar Programme']

Digantar delves further into the cognitive process itself. As they understand it, knowledge cannot be 'transferred' at all. Knowledge can be re-formed in each individual, however. We evolve conceptual structures which though based on our experiences also help us to organise that experience. These conceptual structures are the basis of understanding which also includes values and attitudes. Conceptual structures are formed by each individual in her or his own way, it they are not just meant for parroting or flaunting. So the process of learning, if we look from the viewpoint of learners, is the process of formation of knowledge on the basis of the experience of the learner. To learn, the learner thus has to participate actively. The teacher, who has already formed his conceptual structures, can help the learner to organize her experience to evolve his own conceptual structures.

In other words, Digantar believes in the philosophy that we learn things by discovering and inventing for ourselves. Others can aid in this process, but no body else can actually develop our understanding for us. This would imply that even in highly hegemonic situations conditions of independent learning cannot be obliterated completely. After all any society, however hegemonic or conformist, would require efficiency and a degree of dynamism that cannot come from indoctrination alone. Therefore such societies can and do change over time.

If we look back at our own lives and try to identify certain formative events in terms of our cherished beliefs, values and outlook, we would perhaps discover those moments as moments of deep learning which marked us for our lives. We remember certain books that we read at a certain point in our life, certain teachers whose company we loved for a period, certain journeys we made, and so on. The nature of these events point to conditions of learning Digantar is trying to tell us. We chose those books to read, we felt cared for by those teachers, we enjoyed those journeys.

## **The Curriculum**

Once the framework outlined earlier has been adopted, content of the curriculum and the method of transacting that content cannot be separated. If a certain conceptual structure is sought to be communicated to the child, say solid, liquid and gas as three forms of matter, it can either be supplied to her as god-given categories handed by the all-knowing teacher; or the child learns to categorise various objects available to her through trial and error and with the help of teachers and friends. In the latter case, "the child will learn to see these categories as products of human intellect, created to make meaning out of its own experience and guide its action."

The curriculum cannot just list the contents to be taught without at the same time indicating, or at list hinting, at the possible activities to teach that content. Curricular development for Digantar means "a conceptual map of human understanding with flexibly defined routes to be followed up by individual learners and a set of guiding principles regarding the pedagogy." [Digantar document: "Theoretical Basis of the Digantar Programme"] For this purpose, understanding that is being aimed at is defined by four qualities: clarity, consistency, potential for anticipation and projection, and capacity for self-examination and refinement. Human knowledge is also divided into several categories on the basis of distinguishing features of their fundamental concepts and ways of testing and verification. In this manner body of knowledge is seen as consisting of mathematics, science, history, aesthetics, ethical understanding and philosophy. Another dimension of curricular development is development of skills. Skills are understood in the context of actions to bring about change in the world. Lastly, language is seen as the very condition of knowledge. The process of the development of understanding and the development of language are seen to progress in close interaction with each other. Therefore the curricula developed by Digantar always lay strong emphasis on language competency.

Based on this foundation Digantar identifies five streams of learning which move concurrently in elementary education. These are:

- Language;
- Mathematics;
- Environmental Studies;
- Handicrafts
- Expressive Arts

[Digantar document: "Shiksha Kram" (Curriculum)]

The range of curricular material Digantar has prepared is large. They include storybooks for children, introductory books on a subject, workbooks, and guidebooks for teachers, and self-instructional material for children. The work on curriculum is still going on. The current development is taking place in a concerted way in English language teaching and art. Several other schools and educational programmes are using material developed by Digantar.

### ***Interaction with the Community***

While sitting through the periods in the school, I wondered often about the milieu these children come from - their homes, parents, neighbors. What did the parents think about the education being given to their children in these schools? In particular, the independent behavior the school encouraged in children, didn't it create some problems? Did children start talking back to their elders and questioning deeply held values and attitudes? This was uppermost in my mind when we stopped in a dandhi (settlement) of the village for a chat with villagers.

Most fathers (of school students) had not returned from their work. Most of them are in private service of one kind or another. Old people were busy playing cards. It seems that farming has almost come to an end because of unavailability of water. So the older people have very little left to do now. It was a thriving agricultural area at some time. Since the flood in early eighties, the water table has gone down. You have to sink a bore well at least 120 feet deep to reach the water. The city of Jaipur is also advancing relentlessly and several people have sold their lands.

People are quite happy with the school and regret that it cannot accommodate more children. They say how children are keen to go to this school while those studying in a private school nearby have to be forced. They do not pay any fee and they do not have to spend on books. To my question about children's independent behaviour they politely say there is no such problem.

Gaffarji, the programme coordinator for elementary education, tells me later of some of the high points of their interaction with the community. He tells of their difficulty in getting used to the idea of absence of classes like in the normal schools. If they are not passing from one class to another every year, what are they learning? When they visited the school they often found children singing and playing and this worried them. They discovered that their children had not learnt the alphabet even some time after joining the school. Digantar teachers were in close interaction with them. They asked whether your children can read newspapers even if they cannot recite the whole of alphabet. This indeed was true and the parents conceded that they are pleased their children can read newspapers. Slowly they began to understand that this is also education though different from what they had known or experienced as education.

Then there were the problems of the kind I mentioned earlier. Some parents did indeed express their anxiety at children refusing sometimes to do as they were told since they had started going to school. Those circumstances were discussed in detail and it turned out that children often had a reason when they refused to do something. Now the parents were confronted with the

question whether they want their children to mindlessly carry out all orders or to develop as human beings who can see and decide for themselves.

There were problems of a more sensitive nature at times. Gaffarji told me of one. This area has more Muslims than any other community. In the early years when teaching used to take place under a tree or in a room in the village itself, teachers began to notice that some children were carrying bottles of water instead of using the common tank set up there. There was a pattern of caste and community here. Hindu children from Brahmin caste were the ones carrying water bottles. They decided not to discuss and preach to the people. They found that among the teachers themselves some Hindu teachers were not eating with the rest of teachers. They began to share food among teachers in a visible way. At some point they raise the question to children why some were carrying bottles. Was there something wrong with the water in the tank? A discussion ensued. Some children said finally that they do not share food or water with Muslims because they eat meat. But then some castes within the Hindu community ate meat too. This fact was well known to children. Discussion proceeded in this vein for some time and then it was dropped. Now teachers began to talk to parents of those children who were carrying water bottles. They go to work in the city, drink water everywhere; they cannot possibly decide whether a Muslim is touching their water or not. Why are they stopping children from doing something they themselves do not even think about doing? Gradually bottles disappeared.

Even as a matter of principle Digantar considers it their responsibility to maintain continuous interaction with the community. School influences the worldview and values of children. This has an impact on how these children will function in the community and as such it is an intervention in the community. "No one has the right to intervene in any community's life without the knowledge and consent of the community itself." Moreover, it is considered necessary to understand the community's life in totality in order to grasp the understanding of child which is the starting point of school learning.

### ***Digantar and the Educational Scenario***

Firmly anchored in this focused endeavor to evolve a framework of alternative elementary education, Digantar is playing an increasingly significant role at a national level. On the one hand it has drawn attention to the deeper link between the quality of education in schools and the efforts to make them accessible to all. On the other, it contributes to many educational programmes in the country by helping them with curricular and pedagogical inputs.

With the advent of globalisation and ideologies congenial to it, they expect a backlash as far as progressive and liberatory educational practice is concerned. Digantar's secretary, Rohit Dhankar, points out that in the USA there are already voices which question progressive education on the ground that it has not helped their society to avoid or overcome the problems of crime, drugs and

the like. There is an attempt now to supply education in neat packages. While employing innocuous terminologies like `communication skills', a subtle shift in the orientation of education away from development of critical and thoughtful personalities is being brought about. In such an atmosphere where all knowledge is sought to be converted into transferable `bits', the significance of Digantar's work goes beyond the field of education and extends to broader socio-cultural and political choices facing our society and the world.

EDUCATION  
**Khoj -- Teacher Training in Secularism**  
MAHARASHTRA

*Sufiya Pathan*

**"We Want Khoj"**

The gate was open, the chair for the watchman empty. Inside I could hear chaos during school hours. Not that I was surprised considering the reputation that Municipal schools in Mumbai have. As I found my way through the Municipal School to the 6<sup>th</sup> standard class I found myself wading through a great deal of mayhem. Two classes were being held out in the corridor with students sitting on the floor and the teacher sitting in front of them without chalk or black board, indeed without anything to say. The children seemed to be having a half-heartedly regimented break rather than a class. Just adjacent to this was a closed door - the 6<sup>th</sup> std. class. And as I opened the door I found about thirty curious faces who were listening quietly (which is what struck me first!) to the story of ...

*Ram Lakhan Singh was perplexed and confused... What were these people trying to achieve talking of blood, revenge and the Lord in the same breath?...Ram lost in these uneasy thoughts was knocked off the scooter by a jeep... In his will he left all his worldly belongings to his family but he also had another clause in the will. He had willed that his two kidneys be donated - one to a Muslim and one to a Sikh.*

As the students are asked to mull over what the story said and why the character had made this 'strange' will I spoke to them about Khoj.

- *Do you like this Khoj programme?*
- *Yes teacher, very much.*
- *Why?*
- *Because we get a lot of knowledge, we learn about the news and what is happening around us, about different religions and most of all we love all the stories!*
- *If I give you the option to have a free period when you will be allowed to play outside instead of Khoj, which will you choose?*
- *No teacher, we want Khoj.*

And that was a pretty emphatic decision. I visited two schools and three classes of the Khoj programme and everywhere the children's verdict was the same: "We want Khoj".

### ***What is Khoj?***

Khoj is best defined in terms of its *raison d'etre* and methodology rather than organisational structure or specific activities, for those are fuzzy, ever expanding boundaries.

Khoj began with the realisation that the climate of growing intolerance in our country over the past decades had, unfortunately, not even left our schools unscarred. Schools that prided themselves on a sound base of liberal values were horrified to find - post December 1992 - that their corridors, and classrooms reflected this prejudice. Manifestations of this took a cruel form when Muslim students were ostracized by their own friends, and in some stray but chilling incidents, told by their teachers, to "go back to Pakistan". Since June 1994, in an attempt to address this growing prejudice and concern among educators, especially on the question of the inability of the existing curriculum to tackle this baggage of prejudice, Khoj was born. It is an attempt to formulate, through intensive, non-formal interaction with children aged ten, eleven and twelve years, a comprehensive module - within the social studies and history curriculum - to tackle this phenomenon.

Khoj, which began as a secular education programme with the objective of countering communal divides, also found itself addressing a variety of prejudices - caste, gender, class and country. Central to the programme is its methodology, which stresses the exploration of prejudice through creative expression before attempting to counter it. Once prejudice is identified, it is not lectured away, but is countered through a series of creative and analytic exercises that allow the child to make up his or her mind on their own.

One of the prominent developments in Khoj has been Aman, a letter exchange programme between children of India and Pakistan. Begun in '96, the exchange of letters continues. In fact, 250 more children are expected to join the programme by next year as a result of the joint effort of Khoj and Avehi.

Khoj has developed mainly in three distinct directions. One, is the alternative Khoj syllabus (Section I) that runs parallel to the school Social Studies curriculum for standards V, VI and VII. 'Khoj' one realises is an extremely apt appellation considering its unique methodology and objectives. Literally meaning both the verb 'to search' as well as the noun 'discovery', it is characterised by creative, personalised exercises that explore prejudice in the child while trying to impart important conflict resolution and media critique skills. Added to this are the history modules on Mumbai (or whichever city they live in), Kashmir, the North-East and South Asia as a whole. Linking history to current affairs and personal identity brings to life a subject that has otherwise always been extremely unpopular with students.

The Khoj family today consists of a few dozen Urdu medium schools, and a few Marathi and Hindi medium schools in Mumbai; and 3 schools in Gujarat, 1 school in Pune as well as 2 schools in Sri Lanka.

The second direction is the alternative history syllabus (Section II) as formulated by Khoj founder, Teesta Setalvad, which consists of alternative text books of history which look at the subject from a contemporary perspective with the consciousness that history as a subject plays, or at least should play, an extremely crucial role in the development of identity and formation of a mature world-view for a young child. The approach to history is characterized by the consciousness that our history syllabi have been guilty on two counts - one, the exclusion of large sections of society who are conveniently marginalised so as to render them invisible in history and in contemporary society. And two, our texts have been guilty of inadvertent misrepresentation of historical events and periods that make them prone to communal or casteist interpretations, if not blatant presentations of communal and partisan views.

For example, the SSC textbook in Maharashtra deals with the confrontation between Afzal Khan and Shivaji. Teachers from some schools in Bombay have expressed difficulties in controlling the emotions that run high whenever this class is taught, every year. Especially in those schools that have an active enrolment of Muslim students. "I rush through the chapter on Afzal Khan and Shivaji's confrontation. It has become politically and socially such a loaded connotation," confided one teacher. Thus, it is obvious that the incident becomes a platform to reinforce impressions of 'Muslim deceit' and 'Hindu honour and valour'. Shivaji's conflict with the Mughals becomes an example of Hindu-Muslim conflict. What is completely ignored in our history texts is the fact that two of Shivaji's most trusted generals were Muslims and he is a great national hero also because of his secular credentials.

Khoj seeks to correct the imbalances in our history texts as well as providing students with a history that underlines the significance and relevance of historical events and the processes that underlie them rather than making the subject a list of dates that need to be memorised.

The third is a campaign of a national level critique (Section III) of the blatantly communal and partisan history that has become part of the official school syllabi in some states. Khoj has carried on this campaign in conjunction with various individual historians and history groups since 1999.

## **Why Khoj?**

### **Scenario One**

*A child from a middle class home is looking out of her window. She sees a group carrying a bleeding body agitatedly moving towards a lone police van parked. There are only five or six policemen visible. She thinks there are shouts from*

*someone in the crowd asking for help to take the injured person to hospital. This is not forth-coming as the policemen remain still, lathis and rifles poised. Suddenly a few persons from the group, including a couple of women move agitatedly forward towards the men in uniform, jostling and defiant. The policemen tense up, some start waving the lathis, the others training their rifles while others from the group move towards the van and start breaking the glass windows. She watches still, terrified, thinks she cannot take it anymore, runs in even as she hears a single gun shot and then sounds of mayhem. (July 1997, Bombay)*

### **Scenario Two**

*Children from middle class homes have been away from school due to three days of paralysis caused after police firing on Dalits (July 11,1997) allegedly because a group was uncontrollably agitated on finding the statue of Dr. B.R.Ambedkar garlanded with chappals. Retaliatory acts of violence by Shiv Sainiks in the days that followed had forced schools to remain closed. During a discussion that followed held by us within class rooms, a few children responding to questions about what they knew to be the cause of that Friday's violence said, "These angry Muslims were on the streets and destroying cars and all other properties that they could find." Even more telling were the responses from Dalit adolescents eager to give opinions on who might have been responsible for the garlanding of the statue. "It must have been done by a Muslim. Asi goshta aamche loka karnar nahin (our people could never have done something like this). It could have been Dawood Ibrahim's men".*

### **Scenario Three**

*Orders had been issued to principals in all Delhi's schools soon after Prime Minister Indira Gandhi's assassination to make sure that children did not discuss the subsequent violence that reigned, unchecked, on the streets of the capital. A trainee teacher teaching English sailed through her period teaching a textbook lesson at the end of which she wrote a few words on the board asking children to make extempore sentences of their own using them. One of the words given to the children was "arrive". Of the several children who raised their hands, the one that the teacher chose read out this sentence, "When a Sikh arrived in Delhi, he was killed by Hindus".*

Education is a powerful cultural force that has an influence all of its own, as do economic and political forces. Its potential has been exploited to great advantage by privileged sections that have dominated our institutional structures and rank communal forces. Admitting the power of oral lore that is a major factor perpetuating prejudice whether it is on the question of communal, caste-based and the ever-prevalent gender-related prejudice means addressing them through creative modules of exploration. Generating spaces and techniques within our classrooms at schools to draw out, discuss and debate on these crucial issues of social conflict is a compelling challenge.

Faced with any or all of these scenarios, as educators or animators working with children what should we do? Unfortunately, educational institutions and teacher training institutions prefer to be silent, avoiding any creative discussion of conflict, or situations that may generate active and heated discussions with and among the students. This has traditionally made teaching easier, with the teacher in control delivering a text-book prescribed lecture and not risking a shift in the teacher-student hierarchy if uncomfortable questions that invariably come from the young and the curious “cannot be” answered. As one teacher reluctantly admitted “such an approach means less homework, and a much less noisy classroom. How many of us really like the children to ask us questions, particularly those that make us uncomfortable?”

For the student described in scenario one, no discussion or space to describe what she was an eye-witness to was causing deep unease. Questions to her parents got her only sketchy, half-baked replies. Following an open discussion within her classroom with other classmates on the versions surrounding the violence that had occurred in her city, of which she had only witnessed one incident revealed a potent mixture of fact and rumour. “The score finally got evened out because the Shivaji statue at Dadar was also similarly garlanded with chappals a few days later” was one. (On the Monday that followed the firing against Dalits bizarre rumours had done the city’s rounds, this being the most explosive, forcing most schools to shut by mid-afternoon.) The first task then was to assiduously sift happenings from rumour. This was followed by a more extensive session on the lived facets of the system of caste organisation in India that drew an interesting response from students.

“In the building where I live, a Dalit (the word children used more easily was untouchable) woman works, sweeping and cleaning our bathrooms. But she is not allowed to have even a glass of water in the flat across so she always has her mid-day snack and water in our kitchen because my mother insists on it” was one. “When the caste system became rigid making it compulsory for sons and daughters to adhere to what their father was chalked out to do that made it really unfair and unequal” was another. Other reactions compared its inequities to the racism against Asians in UK and the USA.

## **Section I**

### **Alternative Khoj Syllabus**

#### **Methodology and Rationale**

Our aim has been to evolve an alternate approach to the teaching of social studies as well as radically change its content.

- The sessions are therefore interactive and discursive to encourage the student to ask questions and make inquiries. A practical orientation is given a great deal of importance while not neglecting theoretical knowledge. For instance, while learning the history of Mumbai in Std. V students learn how various names came to be attached to various areas of the city. This seems to enthuse students to find out more about their own and other areas of

Mumbai and how they came to be called what they are today thereby allowing them a sense of participation in history.

- Media Studies and Media Critiques are encouraged, a skill of great importance in the modern world. Today's child is exposed to a great deal of violence through the media. Of course the incursion of the media impacts children in ways they do not even know. Therefore, children need to be armed with a consciousness that recognizes the media as a force in their lives and the role it plays in forming their opinions. Sensitive and contentious issues such as terrorism are not presented in black and white terms. Rather the children are exposed to several points of view on the same issue and then through discussions with the teacher and class as a whole are encouraged to come to their own conclusions. The idea is not to convert but to get them to question for themselves and come to their own conclusions, whatever they may be. Though it is hoped that children will ultimately choose options which value peace over violence.

Media critique is also approached via Khoj Khabar which allows students to bring whatever articles they have found interesting in the newspaper to class and discuss them while the teacher brings clippings that reflect multiple perspectives of a particular event or issue. They also put up these articles on their notice board whenever possible to form a Khoj spreadsheet.

- Creative exercises that attempt at greater engagement and absorption of the student in sessions are a central part of Khoj. The emotional world of the child's needs gets explored through such creative interventions. Thus Khoj begins with the personal. Students are asked to make a self-portrait and then list out likes and dislikes. Often this module becomes the platform for expressing religious prejudices or most often deep-seated negative feelings towards Pakistan.

The Khoj diary further allows students to keep a record of what disturbs them and to either share it with the teacher or keep it their own record of emotions that they can then perhaps understand and resolve. One teacher found a child who had extremely conflicting emotions towards his diary. He would write about his disturbances and then tear the pages out because they "made him angry" later. He shared some of his entries with the Khoj teacher but even after assuring her he would not tear the pages she found them torn the next time. However, she hopes the child will learn to cope with his negative emotions gradually. Is this not a significant part of a child's development? Yet our structured education system does not allow for personal development.

- Multi-dimensional, creative and interactive methodologies for social studies and history teaching as well as an emphasis on conflictual issues in the realm of the personal, political and social – hence the orientation towards

**Conflict Education.** The idea behind this is to enable us to impart strength and strategies to the young towards Conflict Resolution, inclusive and relevant in terms of subject choice given present day social realities.

One of the most well-loved sessions in Khoj is that of the story-telling. Children are read out various stories which present situations of personal or religious conflict and are asked to respond both individually and in groups. The groups then debate with each other with the teacher mediating and challenging them to justify their stands. A favourite story is that of Lara, a child who challenges taboos of sharing food between communities. Another important session is that of Festivals of India which exposes the child to the diversity that is India as well as throws up debates related to festivals like "Bakri Eid" which have been a contentious issue. First a context is provided by telling children about why the sacrifice is carried out as well as the role of animal sacrifice in other festivals in other religions and regions and then children debate on how the issue can be sorted out.

In several cases, especially in Municipal schools, teachers have encountered children in whose lives violence is an ever-present danger because of alcoholic and abusive fathers. During the riots many children had witnessed violence from their homes. Unless the childrens' own experiences are grappled with, how do we impart values of 'non-violence' which appear in theory in our curricula but do not make a dent in the child's psyche.

- Teachers are trained through intensive sessions over the syllabus and through weekly reports are encouraged to share the classroom discussions. However, after the first year the teachers are not monitored but are encouraged to use their own creativity and innovate within the broad structure of the programme. For example, Noorjehan of Urdu Khoj recounts how they use songs, games or quizzes that they formulate themselves or learn from other sources to enrich the Khoj programme. Neeta of Hindi Khoj organised an Eid cum Christmas party since the two festivals were close together in 2001. The space for innovation is a great strength since it keeps the teachers involved to the fullest and even allows for students to make suggestions about what they would like to do.
- The issue of the South Asian region is a constant physical, historical and creative focus within the syllabus. The rationale for this is that the Indian student becomes familiar with his/her regional issues and problems – even the contentious ones – along with familiarity with parts of the western world.

## **Sessions**

### **Std V.**

Module 1: SELF-PORTRAIT

Module 3: Map-work on Mumbai

Module 4: *Malachi Mumbai*: personal history of families in Mumbai.  
Module 5: Read out a poem to god

### **Std VI.**

Module 1: Rumour and Reality/ Fact and Fiction. The class is divided into groups of 4-8 each. "Reality - Facts, Rumour - Fiction". Under this head students are given an opportunity to creatively express themselves through writing a poster or a collage.

Module 2: Children will be asked to construct their own religion, describe what its tenets should be.

Module 3: We will put down the names of different communities / religions on the board and then try and elicit candid impressions from each child (individual work in writing) on what their impressions.

Module 5: What does the Nuclear Bomb Mean?

Module 6: Police, Police-Citizen relationship

Module 9: Festivals & Social responsibility

Module 10: Organised debate

Module 11: Development and Social Welfare

Public Property - Private Property

Poster Expression.

Students are encouraged to express themselves in poster format on any of the issues that have been handled through the term, through the year.

Field Visit : Encompassing multi-cultural, multi-religious Mumbai, we will take students out to have a real experience of this.

### **Std VII**

Module 1: Varying Identities. Written essays by students under the title of IDENTITY with thought-provoking prompts provided by the teacher.

### ***Impact: "The Weapons in Between Disappear"***

If anybody is sceptical about the final results the Khoj programme yields it's certainly not the Khoj teachers! Says Noorjehan of Urdu Khoj, "The difference is clear if you examine the kinds of visuals that the children come up with by the time they are well into the Khoj programme. While earlier, any visual presentation of two communities would be marked by a show of hostility and of swords or other weapons being held or by violence, later the weapons in between disappear. The tensions perceived and learnt are reduced to a great extent."

Farzana adds, "Khoj does not merely teach them facts about other religions. Rather, it stresses the religious values that underlie their own and other religions. They then realise that these are more or less common."

As importantly, Mubina another Urdu Khoj teacher stressed that in municipal schools it isn't just about secularism. One of the greatest battles is getting these kids to understand the importance of education itself and building in them the will to work hard at school in spite of all their problems. "We do feel that kids become a lot more conscious of their role in the family and society and are keen to study in order to develop skills that will help them in the long run. Other important values are cleanliness and even self-respect. One of the

children in my class used to do menial work like rag-picking and collecting items from the garbage that could be sold. He used to be the butt of ridicule in class and one day he came to me crying. That is when I emphasised to the class the importance of respecting work and the consciousness that this child was actually being extremely responsible at a young age. His earnings were important for the family. This built up self-respect in the child and his classmates too stopped picking on him."

One of the immediate signs of success is the popularity the Khoj teachers enjoy within a short span of time. "They clap and scream when we enter class! Their class-teachers are always surprised, sometimes even resentful. 'What is it that you do to these kids that they love you so much?' they ask."

In several cases Khoj teachers have been complimented by other teachers who have appreciated the difference in the kids. "They tell us 'We can't believe these are the same children'. They learn to question and to argue things out. Besides, they learn to read the newspapers and understand what is going on around them", says Tayyeba.

"There are relapses sometimes. For example I had spent so much time working out their prejudices against Pakistan but after the Parliament attack (on December 13, 2001) it all returned."

The idea is not to convert the child. The concern has been with the shameless manipulation of information in our history texts and partly also to address the mediocrity of the Social Studies syllabi and the teachers' apathy. The objective is to equip the child with the ability to question. And to reflect in our education the diversity and disparity that makes up our society.

The strong emphasis on fundamental rights education is also an extremely crucial element in the programme as it suggests a far more pro-active role for the individual child in his immediate environment to begin with and in society later.

As Neeta corroborates, "The children become more confident and understand their rights better. Especially after the module on 'my rights'. In one school the children pointed out that the cleaning lady in school used to make the kids do the classroom cleaning themselves. As a class they then confronted her and decided not to allow her to get away with shirking her own work."

Such instances may seem small in themselves but in a country where education has quite clearly failed to empower the people and shift centres of control, these are steps that hold great promise.

## **Aman**

An olive branch of the Khoj project. This was conceived one, with the realisation that with all our emphasis on a comprehensive education, the best of schools impart very little knowledge about India's neighbours, the countries in South Asia. Pakistan, Bangladesh, Sri Lanka, Nepal, Burma, Afghanistan, what do our children know of these countries?

Given the fact that we've completed half a century since Independence, and Partition, is it not important for children from this subcontinent, particularly, India and Pakistan to establish links with each other? At the Bombay International School, which has also pioneered the Khoj project, students from Std. VII took a pledge for peace on August 15, 1996. Within a month, two schools each from Lahore and Karachi in Pakistan enthusiastically responded and soon, independent contact was established through a letter-writing programme (Peace Pals) for the children.

When we began Aman in 1996, it is not as if our kids did not ask searching questions. If the relationship has to be meaningful, we must have separate modules (they demanded) on two aspects that bother us: Partition and Terrorism in Jammu and Kashmir. Reassured by their candour, this is just what we formulated for the follow-up sessions at Aman. The letter-writing between children of India and Pakistan has been on for over six years now. "Are there rivers in Pakistan?", an Indian child asked of his Pakistani counterpart. "Please describe the different religions in India!", a Pakistani peace pal wrote back. After the decision of India and Pakistani to opt for the nuclear option, KHOJ-AMAN organised the post-bomb competitions. We received over 2,000 responses.

## **Section II**

### **Alternative History Syllabi**

#### **Teacher Training**

A large part of Khoj involves interacting with and motivating teachers through Teacher Orientation Workshops (Why and How I teach History). This is a very important area. Teachers are slow to be moved, children are faster. Teachers on the sub-continent unfortunately, for a variety of reasons have a low self image, low motivation. So our sessions include 'Why I chose to be a teacher?' (one teacher from my childhood...); What kind of teacher am I?; What kind of history do I teach?

While most do not have trouble seeing that history changes with the sources referred to, rarely if ever do we examine the teacher as the primary source of history for our children. Wouldn't the teacher's personal biases act as a filter to the history she brings to class? Yet, his/her prejudices go unexplored. Teachers are a crucial vehicle of change through which we mould future generations. It is only when the teacher is made conscious of the biases within and s/he accepts them that we can move towards fostering a truly multi-

cultural, multi-religious, secular classroom. And our classrooms could well serve as paradigms for society in the understanding of our children.

Khoj has conducted more than 75 sessions with groups from BEd. Colleges as well as teachers and principals from a variety of schools. The sessions are meant to sensitise them to questions of pedagogy as well as to expose them to fresh perspectives in history. It is hoped that they will then be inspired to take step II, which is opting for the Khoj alternative history syllabus. A minimum of 10% of the teachers need to respond for the programme to take off. The teachers are made active participants in the chalking out of an alternative history text, its contents and approach.

### **History Syllabus**

- The Concept Of The Aryan Invasion
- Early Arab Travellers To The Subcontinent
- Trade And Communities
- History Through The Literature Of Periods (Examples)
- The Caste System, Then And Now
- How Religious Conversions Took Place In Indian Society
- Multi-Religious Co-Existence On The Subcontinent
- Mohammad Ghazni, Ghoris (Somnath)
- Shivaji
- The Sufi, Bhakti Traditions
- The Moghuls, Aurangzeb, And Others
- Temple And Mosque Breakers
- Tipu Sultan
- Revolt Of 1857, Nana Phadnavis, Rani Of Jhansi
- Interesting Insights Into The Indian Freedom Movement (Popular Struggles)
- Growth Of Communalisms, And The Movement For Partition
- Mohammad Iqbal
- Tilak, Ranade
- The Arya Samaj, The Aligarh Movement
- Dr. Ambedkar And The Dalit Movement
- The Indian Women's Movement
- The Indian Working Class Movement

### **Regional Histories**

- History Of The North-East
- History Of Kashmir
- History Of Bengal
- History Of Kerala
- History Of Mysore
- History Of Gujarat
- History Of Sindh
- History Of Baluchistan
- History Of Sri Lanka
- History Of Burma

### **Alternative History Texts**

Three Don Bosco Schools use the alternative history text as formulated by Khoj for secondary school students of standards III - VI. Recently a controversy erupted as the Shiv Sena objected to a section on Shivaji in the text for standard VI, which traced the socio-economic background of Shivaji and his achievements located in these. Attempts were made to have the text revoked. However, the inquiry committee under the state government with prominent academicians exonerated the Khoj texts. Khoj continues to fight the case in court.

These alternative history texts follow similar approach to the Khoj programme and experiential learning is given great importance. For example, as part of their social studies component either on caste or class or community, they are taken on a field visit, say to a construction site or to a minority community dominated area. The visit then sparks off further questions and dispels easy stereotypes in most cases.

### **History Seminars**

Khoj pioneered the first ever South Asian Historians Workshop in February 1999. This workshop brought eminent independent historians together to specifically deliberate on how the construction of the nation states within Asia, the drawing of national boundaries on the Indian sub-continent had proscribed and limited the scope, vision and perspective of history teaching within countries in the region. The subsequent majoritarian and exclusivist histories within countries in South Asia that became tools for the majoritarian Hindu, Islamist and Sinhala Buddhist politics on the sub-continent.

The intense creativity and excitement that this pioneering workshop generated led us to plan further actions. I still recall Dr Mubarali Ali, an eminent historian from Lahore, Pakistan invited by us as resource person to share how the Pakistan had distorted history and manipulated history teaching after the government sponsored 'Islamisation of history project.' His presentation focused on the Pakistan State's attempts to use history in order to ratify the two-nation theory by all means possible, including the glorification of 'Muslim rulers' and the blanking out of 'Hindu' ancient history - the Indus Valley Civilisation, a sizeable area of which falls in today's Pakistan. The most exciting aspect of the workshop was its proposal to look at South Asian history before and beyond borders.

Some of the questions that the seminar raised were : What are the theories of origin and identity in pre and post colonial South Asia? How have they been appropriated by communalist tendencies within nations? How has history, the teaching of distorted versions of it, been used to achieve this legitimisation and exclusion? What have been the specific forms of this selective legitimisation, biased representation and outright exclusion?

The first Khoj history seminar was held in February 1997. Called 'History and Distortions', the seminar saw participation from some of the most prominent historians in India today, like Romila Thapar, K.N. Panikkar, Keshavan Velluthat and Anirudh Ray. The seminar not only deliberated on the problems of Indian historiography but also systematically dealt with the three phases of Indian history - Ancient, medieval and modern and worked towards countering popular but prejudicial notions rooted in historical representation of these three periods.

The workshop was aimed at school level history teachers and the impact was obvious. In one teacher's words : "I wish every single history teacher in my school and in all schools could have had the opportunity to attend. It was really worth our while....it left us feeling satisfied and very excited by the prospects of new openings, new approaches in our subject and that is especially important. Because history is a subject that is taken so much for granted."

The text of the seminar, which is in the process of being published by Khoj, would in fact serve as an extremely useful tool for countering prejudicial readings of history.

### ***Section III***

#### ***Campaign Against the Communalisation of Education***

Khoj has taken on a national level campaign against the communalisation of education. This campaign started out with the objective of exposing the blatant prejudices bred via history school texts especially in the state of Gujarat. As a result of the campaign a Parliamentary Committee which was set up to examine the issue recommended changes in the texts. However, the texts have undergone two reprints since then but there have been no changes.

The campaign gained even greater proportions with the new education policy that the BJP government was championing. The entire issue gained greater urgency when the HRD minister, Murli Manohar Joshi announced deletion of 'objectionable' material in CBSE textbooks by renowned historians ostensibly because the sections were offensive to particular religious communities. (He went on to declare that all religious heads would review school texts and any section they objected to would promptly be deleted.) The issue became even more serious when he appointed undisclosed individuals to rewrite the NCERT texts. The issue becomes more worrisome since the proponents of this rewriting are proud affiliates of the RSS which teaches extremely virulent and partisan versions of history designed to generate in children its version of 'Hindu nationalism'.

These are clear signs of the state engineering and doctoring history for their own purposes. In December 2001, Khoj and SAHMAT together hosted a

seminar against the communalisation of education. In January 2002, Khoj and the Delhi Historians Group held a press conference for the release of a booklet discussing in detail the deleted sections in the CBSE texts.

### **Challenges**

Besides the obvious problems of finance, publicity and staff, Khoj has encountered a few but significant problems. In several municipal schools students of std. V are still unable to write one complete sentence. Khoj volunteers in such cases find it very difficult to draw responses from the child. They most often find themselves doubling as language teacher and Khoj teacher. Several of the volunteers have taken on special classes for some of their students in order to impart language skills. (Of course, these children are invariably blessed with greater than average artistic skills and they tend to produce very high quality visuals.)

The programme had to be terminated in one Marathi medium school since the fact that the Khoj teachers there happened to be Muslim created suspicions in the minds of school management and staff that their hidden agenda was to proselytize students. Of course, the programme itself is seen as a threat. One English medium school decided to discontinue the programme under the influence of a VHP board member. It was reconstituted after an extended campaign involving parents and teachers.

Growing privatisation is also set to pose other problems to Khoj. With BMC schools gradually closing down access to students is going to be exceedingly difficult. It would mean approaching individual school administrations and getting the programme passed. Already with six out of ten kids dropping out of school on an average classes constantly get combined or cancelled. For instance, the Urdu Khoj volunteers started with 19 schools, however the programme was withdrawn in six of them as classes of the Vth or VIth were discontinued for lack of students.

### **Conclusion**

Our experience has taken us into a variety of, what we believe unexplored areas in the school curriculum. The best of schools have been able to deal only slightly with the personal background of the individual child, his or her sense of collective identity. This seems a crucial aspect when we talk of a system of education, which caters to a multifarious reality --- children from not just varied religious but cast and ethnic backgrounds. How can we truly speak of a complete education system when it leaves these critical areas untouched? If we are not able to tackle them, is it not a sure breeding ground for all manners of preconceptions and prejudices?

EDUCATION  
**Prajayatna-**  
**Citizen's Initiative on Elementary Education**  
KARNATAKA

*Sreeja*

***About Prajayatna***

The Citizens' Initiative on Elementary Education in Karnataka (CIEE-K) evolved from the direct interventions with children and communities that MAYA had initiated while campaigning against the issue of child labour. Over time, MAYA found that its main strategy of re-enrolling drop-out children to school was insufficient, since children merely dropped out again. This, it was found, had more to do with the situation of the school and what it offered, which provided no evidence of its functional advantage over other alternatives available to the parents and children. The need for a large scale, broad-based campaign, which would develop a systemic understanding of the problem and evolve strategies, processes and activities based on this understanding, was the origin of CIEE-K. The Citizens' Charter on Elementary Education in India - 1997, developed through a process of rigorous consultations among citizens from all walks of life across India, served as a pertinent referendum that helped formalise the initial vision and objectives of CIEE-K.

At present working in 6 districts of Karnataka - Bangalore Rural, Bangalore Urban, Mysore, Bellary, Bijapur and Chitradurga - *Prajayatna*, the Citizens' Initiative on Elementary Education in Karnataka seeks to bring about universalisation of and qualitative reforms in elementary education through building capacities of the community to define and determine what kind of education do they aspire to as a community and what it takes (their responsibility) to move towards ownership of their life and systems.

***The Initial Years***

At the onset of the 1999 school year, ninety lakh school-going children were out of school as a result of a strike by government primary school teachers all over the state between the 28<sup>th</sup> of June and the 7<sup>th</sup> of July. An opinion poll was conducted to highlight the apathy of the system wherein even after classes resumed it was taken for granted that neither the parents nor the children would question this sudden closure of schools. The fact that the strike created a situation where thousands of children might have dropped out of school and those newly enrolled may not resume school was totally disregarded. It must

also be kept in mind that while the teachers have the teachers' unions to protect their interests, the children and their parents had none.

Initial efforts were more towards enrolling all concerned citizens' by creating structures and awareness for participation in the movement of different interest groups (children's base nucleus groups, women's groups, youth groups, teachers' groups) through facilitative processes with these groups.

To elicit responses at the community level, interactions were held with children, teachers and parents in 30 Government and private schools in Bangalore Urban (South) prior to CIEE-K's formal launch in the state of Karnataka. The responses strengthened the need for reform in the elementary education system and provided a firm basis to formalise the direction of the envisaged campaign. CIEE-K was formally launched in Karnataka in Bangalore Urban District on 13<sup>th</sup> February 1999. The launch helped to: introduce the concept of CIEE in Bangalore, invite public responses on the present education system, and enroll volunteers into CIEE.

### ***The School Information Campaign***

Experience of working closely with the communities and schools in the rural areas revealed an absolute lack of information among the community, as well as the officials, on the existing education system. Plans and projections were all made with insufficient information and unreliable statistics. Consequently, the School Information Campaign was launched by *Prajayatna* not only to create a database of information on government schools but also to serve as a platform to initiate community-involvement in matters pertaining to the local school. As part of the School Information Campaign (SIC), data is collected on aspects pertaining to the school ranging from school infrastructure, enrolment, dropouts, teacher child ratio, teacher regularity, to existing structures for community participation and their efficacy.

The School Information Campaign was initiated as a two-page questionnaire aimed at collecting data on some basic aspects – infrastructure, enrolment, teacher-child ratio – pertaining to the local government school. Field-testing the SIC booklet helped us incorporate more specific aspects pertaining to the school rather than generalities that would contribute little towards any decision-making to address the issue e.g. 'availability of toilets' was replaced by 'usability of toilets'; 'availability of teaching-learning material' was supplemented with 'their actual usage'. Data components were fine-tuned so that information collected would enrich our understanding of the present situation of the elementary education system in Karnataka and align our work to this enhanced understanding. Over the following year, the SIC questionnaire evolved into a bilingual 23-page comprehensive village and school survey format.

### **Village Education Councils**

Information from the School Information Campaign set the context for the village meetings on education - the Shikshana Grama Sabhas. The open discussion facilitated at these community meetings allowed presentation and verification of information from the SICs. It also initiated a community-level dialogue on critical areas of concern pertaining to the local school and education of the children, necessary action that might be commenced to address these concerns, and assumption of responsibility for ensuring the same.

Participation at the Shikshana Grama Sabhas were institutionalised through the formation of a *Citizens' Action Group* - an interest group emanating from the proceedings of the Shikshana Grama Sabha (SGS) that would follow up on decisions taken at the meeting. However with the formation of the School Development and Monitoring Committee (SDMC) as a community-based structure to address issues of the local school, since September 2001, *Prajayatna* has been facilitating SDMCs as CAGs during the Shikshana Grama Sabha process to avoid duplication of structures.

*The children of the HPS in Chikkamannahalli village, Chitradurga district rarely had the opportunity to play. This in spite of the fact that a huge ground, though full of rubble, lay close to the school. Nobody - not the teachers, not the parents, not the Gram Panchayat gave a thought to the fact that the area could be used as a playground. The Shikshana Grama Sabha led to the formation of an interest group that cleared the ground of pebbles and stones. The land has now been transformed as a playground for the children.*

*The HPS in Chikkenahalli, Bangalore Rural district, has needed an extra room for over ten years. This had been sanctioned but due to bureaucratic bungling, corruption and political interference, the room never got built. Following a Shikshana Grama Sabha and with the active support of a Gram Panchayat member hailing from the village, the construction of not one but two rooms has begun. The community has also planted a kitchen garden alongside the school compound. Small beginnings. Of educational reform at the local level. In ways that children, parents, teachers, communities experience for themselves.*

The impact of the Shikshana Grama Sabhas conducted so far across 6 districts may be seen in the initiatives that people have begun to take. People have started monitoring the functioning of the school, leading to an improvement in teachers' regularity. They are contributing towards enhancing the infrastructure of schools by for e.g. building a roof or a compound wall. Contributions are also in the form of time, energy and money to ensure that the schools function better, increasing the sense of ownership of the community. Relations between the teachers and the community; and the Gram Panchayat and the school have shown improvement in some areas.

*The LPS school in Dyavasandra village, Bangalore Urban district, has three rooms but only two teachers. As a result, only two rooms are being used. The third room is often used by people who need extra space for e.g. if they have visitors who stay overnight. The teacher had bought a lock to secure the room twice and both the times it had been broken. He expressed helplessness at his inability to exercise any control over the room.*

*The issue found its way into the Shikshana Grama Sabha discussion. It was decided at the Shikshana Sabha that the room could be used by people but that they would have to pay a sum of Rs.10 per day. The sum thus collected would be used for the school. At the follow-up meeting, it was realised that people who regularly used the room, had removed all their belongings. The Ganapati Mandali which used the room for two days have paid Rs.20 which is now being used to get a lock for the room.*

In more than 500 government schools across 6 districts, the community has initiated activities pertaining to the local school to address educational needs. Provision of school furniture, water and toilet facilities, maintenance and repair of the school building, registration of land for the school to arrangement of land for school playground, arrangement of electricity and provision of teaching-learning materials are some examples on which communities have worked. They are more aware of different incentive schemes and are pressurising the concerned authorities for their timely and regular implementation.

Following *Shikshana Grama Sabhas* in all the villages within Dasanapura Grama Panchayat (GP) in Bangalore Urban district, a meeting of the Citizens' Action Groups (CAGs) was set up to which all GP members were invited. A discussion on what a 'model school' should be like ensued. In order to make all the nine schools in the GP 'model schools', it was decided that the present status of the schools in the GP be examined. The GP members and CAG members could look at the problems, not only of their own schools, but also that of their neighbouring schools. *Prajayatna* proposed that the entire group visit all the schools that came within the GP. The GP members agreed immediately and took the initiative to make arrangements for the entire group, including the CAGs, to go to all the schools, at their own cost.

Though *Prajayatna* did not accompany the group on the visits, all members were provided with information on each of the schools, as well as a report on all the *Shikshana Grama Sabhas* earlier held. As the visits took place, GP members became aware of the issues confronting each school and used what was within their power to correct the situation. Some decisions were taken right on the spot. For instance, in Marapanapalya, the ground adjoining the school (which had been donated by a local resident) was unlevelled. Running alongside is an open drain, the presence of which caused a problem of access to the school. In the course of the visit, a volunteer, Hanumanthappa, said he would level the field. In Shivanapura, it was decided that an open well would be closed with a slab, as it was dangerous for the children. In Nagaroor, it was decided that a compound would be built for the school.

The GP members then decided, of their own accord, to have a meeting to realise the goals of the model school, now that they had seen the schools, and knew what the problems were. By taking greater responsibility, the GP is slowly beginning to realise its own rights over local schools.

### ***Engaging with Teachers***

Engagement with the processes of brought us in close contact with the teachers and the need to elicit their involvement and active participation in the educational reform process. The concept of the possibility and potential of a Teachers' Forum – a space where the teachers can share their perspective about the present education system, discuss certain issues raised in the *Shikshana Grama Sabhas* and discuss specific problems identified in the School Information Campaign – is discussed with teachers.

An independent forum facilitated by *Prajayatna* without any link to any teachers union, the Teachers' Forum is envisioned as a mechanism that allows teachers to deliberate on and initiate proactive processes that enhance their motivational status, strengthens the community-teacher linkages and upgrades children's learning. This forum also seeks to address apprehensions of any resistance to reform in the educational process that might arise from this important group of stakeholders in the education system.

The teachers forum has been initiated at the taluk level in Kanakapura, Doddaballapur in Bangalore Rural district and processes have commenced towards formation of such fora at the taluk level in Bangalore Urban and at the district level in Bijapur.

Interaction with members of local self-government bodies – Grama Panchayats, and Taluk Panchayats – also occur on a regular basis at the Shikshana Grama Sabhas, either at the meeting itself or during presentation of report on the outcomes of the SGS and ensuing discussion with the members. During these interactions *Prajayatna* has intensive discussions with the local level functionaries to encourage them use their powers to address issues of budgetary allocation especially in terms of infrastructural needs in the school and also in terms of discussing school issues as an important agenda in the Gram Panchayat meetings.

### ***Community Management of Education***

The 73rd and 74th Amendments to the Indian Constitution hold immense potential in enabling the local community manage education. However this involves processes to build capacities of the functionaries of the institutions of local self-governance to understand their role and powers and utilise the same in bringing about educational reform. Therefore to facilitate institutions of local self-governance take on responsibility for and control over education at the local level, *Prajayatna* has been organising Taluk-level meetings of Presidents and Secretaries of all Grama Panchayats within the Taluk, since May, 2001.

The Grama Panchayat President and Secretaries meetings organised so far, have seen a lot of debate on the lack of resources at the GP level to meet the local developmental needs. The workshops have witnessed an understanding of their role and powers by the GP functionaries and utilisation of the same towards educational reform. Participants have initiated discussions on priority-based school requirements. They have also started redressed frequent problems, such as repair and renovation of school building, provision of infrastructural facilities (school compound, water, toilets) and enrolment of dropouts.

Kanakpura Taluk, in Bangalore Rural district has three 3 Hoblis (clusters of Gram Panchayats). Of these, Kasba Hobli comprises 10 Gram Panchayats. In the taluk – level workshop in Kanakpura in June 2001, *Prajayatna* sought to underline the roles, responsibilities of Grama Panchayat members with respect to education. Following this, a workshop at the Hobli level was held in November 2001 to assess and review the work initiated by the members and functionaries of the 10 Grama Panchayats in Kasba Hobli.

During the workshop members and functionaries of Grama Panchayats of Kasba Hobli shared about school development activities by the Gram Panchayat with the support of *Prajayatna*, identified and discussed issues pertaining to the schools at the more macro (i.e. Grama Panchayat) level. Some of the issues that were deliberated upon were, the need to : include school and its basic infrastructure requirements as an agenda at all GP meetings; convince parents to re-enrol dropouts; have all information pertaining to children and schools within the GP at the GP office; monitor distribution of school materials and implementation of different schemes; conduct Shikshana Grama Sabhas in every school; ensure proper usage of all teaching kits and library books.

In the Taluk-level meeting with GP functionaries, a Taluk Report on the status of education in the Taluk prepared by *Prajayatna* is presented to all the members and their response to the issues in the Report sought. The Report outlines issues relating to infrastructure, community participation, administration and those pertaining to children and teachers. Discussion on what is possible with the powers vested in the local self-government structures takes place. *Prajayatna* has been bringing out these Taluk Reports as well as District Reports in an attempt to disseminate information on the status of elementary education in Karnataka and provide citizens' feedback to the government that will facilitate a dialogue between the educational bureaucracy, elected members and citizens. These Reports made available and discussed at different levels of the educational and administrative hierarchy seek to enhance citizen participation in educational matters and increase transparency in the functioning of the educational department. Content of the Taluk and District Reports is structured to enable the concerned persons – either elected representatives or members of the bureaucracy – to take necessary action.

*Prajayatna* has always believed that any educational reform process entails a more holistic concept of partnerships with various stakeholders at different levels. Liaising and forming partnerships with and between the government, educational administrators, parents, teachers, the private sector, and other relevant institutions to enhance reach, improve capacity and ensure quality in the educational reform process, with each partner leveraging the strength of the other stakeholders, have been integral to *Prajayatna's* work processes. Issues arising from our ongoing work have served as the basis for Advocacy at the State levels. An endeavor to draw attention to the importance of addressing the issues of quality in the process of Universalisation of elementary education saw *Prajayatna* organising a State level Public Debate on 'Quality in Elementary Education - towards Universalisation' along with the District Primary Education Programme (DPEP), Government of Karnataka in December 2000. An important outcome of this convention was the need to re-look at the incentive schemes - such as that of rice distribution - in terms of its efficacy; the need to evolve a People's Policy on Education at the state level was also one of the outcomes of the convention. .

Advocacy also takes the form of a Newsletter - *Prajayatna* - that is brought out every quarter. Intended to provide relevant information that will advocate for a larger discussion on the status of education and policy in Karnataka., the 6 issues of the newsletter published so far has opened up avenues for sharing information with regard to status of education in other districts. It has also provided an opportunity for teachers, children and community to understand, learn and reflect from experiences of other schools and communities in addressing issues of accountability, community ownership, infrastructural development, innovative methodologies that have improved learning levels of children and thereby enrolment and retention.

### ***Education Advocacy***

The Government of Karnataka has introduced a decentralised management structure at the school level in the form of the School Development and Monitoring Committees from the academic year 2001 - 2002. CIEE-K has been organising Training Programmes for these SDMCs at the Grama Panchayat level to facilitate this structure enable the community take initiative and follow-up on decisions that lead to mobilisation of local resources towards school betterment, enhanced accountability from school functionaries, and strengthened linkages with the community and also local self government bodies. This newly formed structure contains several progressive features that would with appropriate facilitation not only enhance community ownership over education and result in a truly decentralised institutional structure, but also effectively promote community-based processes already initiated by CIEE-K like the Shikshana Grama Sabha.

The following is an instance of a training programme for the SDMC members of Kalhalli GP, Kanakpura Taluk, in Bangalore Rural district. There are a total of

8 Govt. primary schools in Kalhalli Gram Panchayat, of which 3 are Higher Primary and 5 are Lower Primary Schools. There was a good representation of both women and men among the 35 members from all 8 schools at the meeting. The teachers and HM of Kalhalli HPS (where the meeting was held) also attended the meeting. The meeting began with an introduction to the SDMC (as a new effort of the Dept of Education). Some of the participants shared their experiences with the previously existing Village Education Committees (VECs) and School Betterment Committees (SBCs) and it was surprising to note that almost all of them were completely unaware of the existence of such committees. The purpose, processes and experiences of Prajayatna across the six districts was also shared with the participants.

Leading the participants into a vision building exercise, the Prajayatna representative asked them to build an image of an 'ideal school'...what they think makes a 'school'. The members were then facilitated to compare this collective vision of an 'ideal school' to the situation currently existing in their schools. The stark contrast between these two images seemed to have a strong impact on the members: all the existing schools lacked almost all the features/facilities that the members had listed in their vision of a school. The significance of a process like this, to identify the exact issues besetting the school, as the first step towards improving the situation was clearly illustrated to the members.

Taking the discussion further, it was shared that a mere identification of issues was insufficient and that there was a need to start with modest efforts to address these issues; only then would one face both positive and adverse situations and gain the necessary confidence to tackle larger issues. Thus building the case for reform in elementary education, the members were now asked to think how they could address bring about reform... how these identified issues in the schools could be addressed. The members were also made to reflect on the fact that though they refer to the school as their own rather than the Govt.'s (*namma shaale* as opposed *sarkaari shaale*), their responses seemed to indicate that any issue in the school is to be addressed by the Govt. (Education Dept). Some of the members responded that they had 'no experience' in addressing school issues and until now, had had no opportunity, means or forum to be involved in the school.

This aspect of 'no experience' was further discussed with all the group members, and each of them expressed a keenness to gain such experience. The SDMC was then presented to the group as a mechanism that had the potential to bring about the reform that they sought in their schools and which would support them in gaining experience. The roles, responsibilities and powers assigned to the SDMC (elected parent members) were shared with the members. In this context, the importance of making a plan, to distinctly identify and prioritise issues in the particular schools, was highlighted. The need to determine processes for each of the prioritised issues was also said to be equally important to ensure effectiveness and positive results of the process.

It was also shared with the members that they needed to elicit the support of other community members in addressing the school issues. Towards this, it was suggested that the members meet with community persons to organise a meeting in their village; to support the SDMC members in this process, Prajayatna could facilitate the first meeting. The members decided to organise these meetings and intimate the Prajayatna representative. More recently, as a result of this meeting and the efforts taken thereof by the SDMC members, two schools have been provided with water facility; two schools provided with additional teachers; and nine children have been enrolled back to school by the SDMC members.

The outcomes of the GP level SDMC training programmes are in the nature of tentative first steps towards understanding their schools and building a rapport with the different government departments by the SDMC members. Consequent to the training programmes SDMCs have initiated processes to present the situation in their school to the concerned officials/ departments by highlighting the aspects that need to be addressed on a priority basis. Arrangement of additional teachers to address issue of teacher shortage by approaching the BEO, mobilisation of local resources to provide for lack in infrastructural requirements (extra rooms, teaching-learning material, etc.) of the local school, and making discussion on school and children's learning an integral part of all community meetings have been some of the initial outcomes of the enabling process that Prajayatna has initiated with the SDMCs.

### ***In Conclusion***

That community ownership of educational processes positively impacts all aspects and activities of the school is gradually and surely being recognised by the government, development organisations, citizens' groups, educationists, researchers and all others associated with education. This is a direct reflection of the experience with the present system of functioning of Government schools that has been unable to solve persistent problems of declining quality - high dropout rates, irrelevant curriculum, low enrolment, continual absenteeism of children and absence of community participation.

CIEE-K believes that education can be qualitative, only if it is based on a community vision. Our ongoing processes with the community have shown that 'quality in education' would have different connotations for the community:

- a more transparent system which provides the parents, the child and the community information about the school performance ;
- a vision for the school that sets the future direction for the school ; a better teaching-learning process ;
- a learning that is relevant to the context of the community ; effective teacher training ;

- a higher level of community participation that supports learning ; a conducive school environment ;
- an understanding of explicit (caste, religion, gender bias, etc.) and implicit (access to transport facilities, cost of educational material, etc.) discriminatory practices that marginalise children and pre-empt education for all ; or
- the school being able to deliver appropriate skills to be effective in this world.

In the light of an understanding of a 'quality' which encompasses all the aforementioned aspects, accountability assumes a new meaning. When a community defines its vision of education, it not only brings with it a sense of ownership but also necessarily makes the community accountable to realise this vision. An accountability that arises from mechanisms/processes that: create opportunities to empower communities to develop resources and abilities to meet their needs, expectations and aspirations; and facilitates structures and mechanisms that enable the community to effect decisions to realize them. Therefore, the imperative need to redefine educational governance such that communities are viewed as partners and decision-makers and are facilitated to take ownership of educational processes.

Effective community governance, as viewed by CIEE-K, focuses on the overlaps or linkages among three key elements:

- Community articulating their vision of education and engaging in the determination and measure of outcomes thereof.
- Community engaged in government policy pertaining to education and its implementation
- Government as a facilitator providing adequate information regarding educational resources and budgets in a transparent and easily accessible manner and establishing structures and mechanisms that enables the community to jointly determine with the state what is appropriate to their school, children and processes connected with it

However the above linkages are not self-sufficient. These linkages, their strengthening over time, would demand as prerequisites some mechanism/structure in place and also adequate resources to sustain continuation. Prerequisites which the system, by the 'delivery and receiving mechanism' paradigm constructed by it and reinforced by 'participatory development' approaches which have had mechanisms designed for community participation which were only 'for' or 'to' the community rather than 'with' or 'by' them, has negated. CIEE-K's efforts towards establishing processes of effective community governance are determined by a focus on these prerequisites.

This in turn implies not merely administrative decentralisation but a democratic process evolved and determined by the community to articulate

their needs and expectations (here educational) and determine their solutions. A need to go beyond tokenistic participatory approaches towards a new partnership that seeks to effectively address how such a 'community - system partnership', when it inevitably enters the arenas of the governmental machinery, can engage with issues of institutional change. The understanding of this need to work beyond only 'civil society' or only 'state-based' approaches, to focus on their intersection through new forms of participation, responsiveness and accountability, governs our ongoing work.

EDUCATION  
**Kanavu: School of Dreams**  
KERALA

*M P Basheer*

Kanavu means dreams. Years ago, writer and social activist K.J.Baby dreamt of setting up a school where tribal children could grow up in a habitat beyond the clutches of landlords and settlers who held them in bondage. Baby wished to reach into the recesses of the tribal psyche and tap the latent genius of the community. Most of all, he wanted the children of the forest to stand on an equal footing with the kids in the cities. Baby and his wife Sherley, a lecturer by profession, set to work on realizing it. They created a school out of a cluster of thatched structures in six acres of land donated by a trust. And they christened it Kanavu, a sweet dream.

Kanavu nestles among the rolling hills of north Kerala's Wayanad district, which has a high concentration of tribes. With its innovative teaching methods and visible impact on a crop of students drawn from the social underclass, Kanavu is making waves and drawing the attention of authorities that see it as a role model. The school discards conventional practices; there is no classrooms, no syllabi. Their aim is to teach self-reliance to these children who've no access to the opportunities offered by society to a more privileged class of children. To prove that tribal kids capable of learning the same skills as 'mainstream' children, they first teach them to respect themselves.

The children are taught to confront their past not through textbooks but by invoking living examples drawn from the life of the community. The next step is to initiate them into the process of skills development. They learn music, painting, dance, theatre and martial arts tribal folk songs and rituals form the core of the effort to reinforce their sense of identity. Farming is integral to the process of picking up a traditional, gainful occupation.

Baby says his objective is not to produce a generation of students obsessed with passing exams. At Kanavu, students learn to appreciate and celebrate their rich tribal heritage, and rise above the oppression and marginalization that their people continue to face. The priority is to build the children's self-confidence and provide avenues of self-

expression. Coming from disparate tribal groups with a history of mutual hostility, the children are taught to bond with each other and rise above divisive tendencies. Essentially, Kanavu teaches children to integrate the best elements of community and enhance the quality of life and awareness levels of the tribal. These objectives are woven into the daily regimen. You cannot go to this school without knowing their past, and forefathers.

### ***The Social Landscape***

Wayanad is on the borders of Kerala, Karnataka and Tamil Nadu. There are many tribes of aborigines in Wayanad. Paniyas, Adiyas, Naykas, Kurichias, Kurumas, Pulayas and Kanaladees are some of them. These different tribes have distinct dialects, customs and clothing. Most of them live in colonies made up of small huts huddling together. The Paniyas and Adiyas are two of these tribes- considered the lowest of the lot by themselves and others. They own no land. In olden days, masters would allot a small plot for each colony on the border of their plantation or paddy field. After a year or two when the surroundings are cleared enough, the masters will ask them to move on to another plot. Thus always on the move, forever dependent on the masters for food and shelter, they have reached the present. Today a plot of a few cents is crowded with as many huts as possible. This is their colony. There is nowhere to move on to. It is a helpless permanence.

These Paniyas and Adiyas have their own languages, but these have no alphabets or written symbols. They have their own customs, rituals, songs and legends. A small drum called *Thudi* is part of all these rituals. Each ritual calls for a different rhythm from this *thudi*. And like all languages, these too are the results of the evolution of their collective thinking through centuries. Tribals of Wayanad are aborigines-turned - slaves. Their racial origin is still a topic of discussion. With their dark complexion, curly hair and flat nose looks almost like a Negroid. How far back can we trace their history in Wayanad? They would stay at one place till the food there is over and then move on to another place

The Paniyas, the majority tribe in Wayanad, never seem to have used the bow and arrow. There are other tribes in Wayanad like the Kurichiyas and Kurumas who use the bow and arrow. The Paniyas lived in fear of them too. Their hunting consists of catching small animals with traps. Long ago, no idea how long, there lived the Uthappan and Uthamma, the great great grandfather and grandmother of all Paniyas. Above the navel they were brother and sister. Below, they were man and woman. One day they were wandering through the jungle in search of food and fruit. They were seen by the Ippimale Gowda, a traditional landlord. He decided to bait them with the remains of his food. A fibre net was fabricated, and

the net was cast. Uthappan and Uthamma were lured by the smell of cooked food. They were caught.

The Gowda asked them, "Of which caste are you, which clan?"

And they replied, "We are the lowest caste, lower than all castes, all clans"

The Gowda made them his slaves. He wanted more slaves and so he asked them to increase the tribe. It seems a trick was played on them. The powder of a certain herb was sprinkled on them. It made them itch all over. They tried to soothe each other, were aroused and mated. They gave birth to five sons and five daughters. The eleventh child died. The first slave burial took place accompanied by the first slave dirge. That was the beginning of the Paniya and his rituals. Even if this story is only history-become-legend, it does yield certain facts regarding the time of tribal enslavement.

Please read the following court document, and have an idea on the nature of enslavement.

*Malayalam District*

*Case No: 92/1834*

*Decree of the Sub-court of Wayanad Munsiff Court*

*Plaintiff Ayya Swami Patter of the Pyngattiri Village*

*Defendant 1. Edachana Achu of Kammom.*

*2. Kannan, brother of Edachana Achu of Kammom.*

*On Meenam eight, 1007, the defendant borrowed Rs. 18 from myself the plaintiff. For Rs. 8 of that debt, the defendant leased us his jenmam property, the Paniyan Kayyippadan. For the amount of Rs. 10 and its interest, a bond was written. Accordingly the aforesaid Paniyan was brought to my Kalam and kept there for about 15 days. Then the defendant sent his Paniyas and reclaimed the Paniyan he had leased to me. Whenever I demand of him either to return the Paniyan or to pay the due amount with interest, the defendant puts me off by promising to pay the amount, but goes not. So I filed a petition on fourteenth Mithunum 1009 (16th June 1834) requesting the court verify the facts and procure from the defendant the aforesaid amount and its due interest amounting to Rs. 46 paise 44 along with its interest up to the date of judgement.*

In this system, the slave was treated as an object. A mere piece of property. The masters owned the whole 'Janmam' (birth) of the slave. If the enslavement is a reality of their forefathers, for students in Kanavu it is subject for their street play to learn a lesson and earn a living. One such street play is conceived around the festival at Valliyoorkavu Temple where slaves were traded. The Valliyoorkavu festival is from Meenam first to fourteenth of Malayalam era. The landlords know that the tribesmen will certainly come for some money to go to the 'Kavu'. He will come and stand a few feet away, in silent expectation. The master will remind him

of all his failing in the last work year. This is also warning for the next year. After this list of do's and don'ts the slave is given Nippupanam, a token money for slavery. This varied from place to place from Rs. 5/- to Rs.10/-. Once this money is accepted from a master a tribal has to work under him throughout the next year. This is followed by a formal pledge before the deity.

“Whenever they saw the master, their lord, they had to move away a certain distance sine they were of the lower caste. That was the law. Just as the master's figure frightened them, his voice, his word, and his language frightened them. The first thing any educator should do is to dispel the backlog of these fears from the psyche of the children, ” believes Baby. “That is why we are dramatizing the very painful experience of their forefathers before the world”

### ***The Scheme of Learning***

The school's children are divided into seven groups and are allotted chores like sweeping the premises, cleaning toilets, tending the cows and preparing food for the other kids. The day starts with lessons in *Kalaripayattu*, the traditional martial art of Kerala, which is intended to erase the fear and sense of insecurity that accompany generations of brutal oppression. Training in music and classical dance take up the post-lunch phase, followed by academic instruction in specific subjects scientific awareness is inculcated by stimulating interest in the local environment, supplemented later by books, slides and pictures. The students, with a formidable reputation as performers of traditional tribal dances and folk songs, are much in demand in neighbouring schools and even in elite social clubs as far away as Thiruvananthapuram. The proceeds from the performance are just enough for the school to balance its budget, but it's the impact on the audience that's more important. It's an important forum for cultural transaction.

Kanavu mostly houses children, a majority of whom belong to the Paniya tribe of Wayanad. Set up in 1993 with about 30 children, the school now has about 80 children who live by the gurukulam or commune tradition where students and teachers live and learn together. The students' families contribute with grain and a little cash if they are able to. Donations from well-wishers, fund-raising through work as farm labourers and the sale of handicrafts made at Kanavu have so far managed to keep Baby's dream alive. The emphasis is on all-round development rather than book learning. Eminent poets, writers, educationists, musicians and experts from various fields in Kerala and from other parts of the country visit Kanavu from time to time, stay with the children and impart their special skills to them. In addition, elders from the tribes also visit the children, teaching them traditional skills, tribal rituals, stories and songs. The students are encouraged to keep

alive their relationship with the land, the forests, birds and animals. Their innate skill in making traditional handicrafts, pottery, painting and bamboo work is also encouraged and developed. The focus at Kanavu is on learning through living, explains Baby's 15-year-old daughter Shanti, also a student at Kanavu.

"We cultivate the fields around our home and study the crops, plants, birds and fish in the river," adds Meena, another student, shyly. Practical learning seems to have made all the difference to these young people, most of whom are from the first generation to go to 'modern' schools. In fact, many students at Kanavu are dropouts from the formal education system which was completely alien to their tribal backgrounds. Some, like 16-year-old Saji, developed such a fear of school and learning that Shirley had to coax him just to stay inside the school compound. Her perseverance with Saji and others who had had similar experiences with formal schooling paid off. Many children stayed on to encourage other dropouts to attend this 'new' school. At Kanavu, the child's identity and sense of belonging within a tribal community is valued. So too is the traditional wisdom handed down through the generations. In fact, Wayanad's tribal languages and folklore have found new life through Baby's efforts.

The children of Kanavu are natural musicians; they pick up songs and art forms with ease. The music also serves as a means to collect donations for the school. Indeed, the Kanavu troupe travels all over Kerala singing songs composed and set to music by the children themselves. The songs are lyrical tales about their lives, their loves, their pain and their laughter. With Leela passionately playing the tabla, the rest of the troupe breaks into song - it's a song about their home, their land, Wayanad. They describe the rich earth, the breeze, gurgling rivers and the forests that teem with animals and birds. They sing about the symbiotic relationship of the tribals with nature. And it is more evocative than any lecture on ecology could ever be! Another haunting melody about the breakdown of tribal society tells of the dispossession of their land. It's the heart-rending tale of the tribal who from being king of the forest now is a marginalised labourer eking out a miserable existence on the fringes of society. Most of the parents of the children at Kanavu are daily-wage labourers who work on the pepper and cardamom plantations and remain jobless for a better part of the year. But the children of Kanavu are not cowed down by the legacy of oppression. Having broken out of the formal schooling system, Kanavu offers them hope that they will steer their own futures. Here, they dare to dream.

The guided discovery-based approach used experiments performed by students to generate knowledge. It changed the traditional architecture of the classroom from rows of children listening to a lecture to small groups

interacting with each other while performing experiments. Instead of memorising a body of knowledge, students discussed their observations, leading to a conceptual understanding of scientific principles. Children are encouraged to conduct experiments and find their own answers - there are no guidebooks or question papers with readymade answers. Examinations are conducted with open books and children do not know how many marks they will get for each question.

### ***Saga of Migration***

In the forties, the settlers from Travancore and Cochin pervaded Wayanad. It was the fertile soil of this earth that attracted them. They were an adventurous lot willing to endure any hardship during the pursuit to their dream. And their dream was to transform this wilderness into plantations and paddy fields, to earn their bread by their sweat and, if possible, by that of others too. And another facet of Malayalam language was revealed to the tribals through these settlers. This was different from the language of commands they were used to.

The settlers desperately needed workers. And it was clear that the cheapest labour available in Wayanad was tribals. Thus in the nineteen-forties, the Adiyasis of Wayanad were exposed to many new registers of Malayalam language. At least some of them welcomed it as an enjoyable experience that expanded their horizons. This language of command must have ebbed and flowed into their midst for many a generation. Amidst this flow of commands in Malayalam, the same language used to reach them once in a while in a softer mode - via the traders who appeared at the Valliyoorkavu. And besides these the Malayalam language had no contact with them during the second half of the 19th Century and the first quarter of the last (roughly 1850 to 1940)

One fact is evident: the one facet of Malayalam language that communicated effectively with the tribal of Wayanad, is the language of cinema. There are few who can resist succumbing to its visual spell. (This fact holds good for most Indians whose main, if not, the only form of entertainment is the soap-operas handed out by popular cinema makers). Such a potent medium could certainly be used as an effective medium of education.

“Even today the tribal is reluctant to get in touch with an ordinary government office such as the panchayath office or the village office. The task is so awesome to them. Many a birth or death among them goes unrecorded for this simple reason. The ‘official’ contempt and ridicule is more than they can stomach. The tribal in Wayanad has to endure quite a lot of it, even for such a simple thing as a ration card. It is a herculian task necessitating a series of queueings up before a number of government offices. Here they get exposed to another register of

Malayalam language conveying contemptuous commands. We rightly decided to teach children in their own ethnic dialects, even while Malayalam is used as common language” says Baby

### ***Far from Formal Education***

The Government has launched many projects for the uplift of tribal people, their health care, vocational training and education, as well as for the protection of wild life and reforestation. Also there are many non-governmental organisations(NGO) doing active selfless service in these fields. Yet if we take an account of the total money spent and the manpower utilised for all these schemes, the results are far from satisfactory. The living conditions of the tribal people and the eco-balance have both deteriorated to an alarming extent. So it is high time that we review the present scenario for initiating new schemes and for proper implementation of existing schemes.

A very small percentage of these tribals get exposed to the formal education of the state. The concessions and reservations prompt their parents to send them to school and even to compel them to continue. But the majority of these kids drop out even before acquiring a limited Malayalam Vocabulary. Very few stick on to learn the language, the accepted version of history and accomplish the feats of passing examinations. And the certainty of a job granted as a concession to the ‘backward’ tribal prod them on.

The formal education recounted to the tribal the stories of kings (crowned or capped) and the adventures of the masters. His own races and similar races seemed out of place in history as well as classrooms. And this deliberate distortion of history does not arouse him to anger or protest. His complacent acceptance of the standards of the masters expresses itself in his voluntary imitations of the master’s heroes, in his mortification at being accompanied by his chela-clad sister and his reluctance to identify himself as a tribal.

This sham attitude remind us of this story in the Adiyas’ Pelapattu. The kids in the story told their mother, “We want to learn to write”.

The mother replied, “*Evuthachante Evuthu Nee Padikonda, Evuthachan Evuthachante Evuthukolu Kontu Thachu Ninte Basa Keduthikalayum*” (Do not to to learn writing from the scribe. He will strike you with his writing rod and destroy you language). But the kids did go to learn writing. Not only that later they said want to learn singing from the pattachan (song master).

The mother forbids them again. “*Pattchante Pattu Nee Padikonta, Pattachan Pattachante Pattukolu Kontu Thachu Ninte Pattu Keduthikalayum*” (Do not go to learn singing from the song master. He will strike with his song rod and destroy your song.)

But the kids go to learn singing too.

Most of the educated tribals are reluctant to do any sort of manual work. They just idle away their time waiting for the replies of applications sent. These white collar aspirants refuse to support even themselves. Being vulnerable to any promises of acceptance, they fall easy prey to the psuedo politicians. And they get installed as cub leaders of the different political parties.

The tragic situation of tribals led Baby to organise a class for them 15 years back. His pupils were mostly Adiyas ranging in age from ten to thirty. "My first attempt was to create an awareness in them by speaking to them. The reaction was very disappointing. So I changed tactics. Instead of speaking to them, I tried to make them speak of them. "Tell me how, you spent the day, from morning till evening?" It sounded very simple, and even silly. At first, they were rather shy and hesitant. He prodded them on with questions. Within a week, a few came forward with the description of their daily lives. A fortnight passed. Slowly the realisation dawned on them: these was not much difference between the description of one day and the next! The monotony of it really struck them for the first time. A faint restlessness at the state of affairs began to annoy them - a restlessness that is the first awakening of a thinking being".

Whether they once had a developed system of communication or not, one fact is evident: the present stagnation in their life is reflected in their language too. The language has lost its dynamic quality. Baby had an idea! Pumping new blood into their language could be an easy way to bring these lives back to the course of natural growth.

It proved more effective than he imagined. New ideas struck them with an intense force when conveyed through their language. He made a translation of the "Song Internationale' into the Adiya language and situation. The reaction was overwhelming.

### ***Reaching into the Tribal Psyche***

But thinking was a strange and difficult process and the fatigue of it began to show upon them. So he came up with a few songs. The themes were closely connected with their daily lives. The words and tunes were his own. "They were very different from the film songs they were used to. So they could not, at first, accept them as songs. They would giggle and tease me about 'my songs'".

*"This attempt to educate them was being done with no outside help. I having a go at it all by myself. I hoped that some social recognition would help to boost their self confidence. So my pupils and myself adopted the*

*name 'Zero club' and took part in a musical competition organised at the district level. I taught them a song about Wayanad and another one that 'praised' the masters for all their 'benovolent' deeds. I was the only non-tribal in our troupe. A tribal troupe taking part in a regular competition (not exclusively meant for them), was quite an event."*

### **The Film**

Over these years the children of Kanavu have been featured in many a documentaries and films. They include the national award-winning documentary of Sarat Chandran. The Bangalore-based India Foundation for the Arts and University grand commission have also made documentaries on Kanavu. After being featured in many award-winning films and documentaries, these children are now busy with Guda, the first ever feature film in India, scripted, directed and done by tribal children.

The theme of the film is their own issue. More exactly, on the tribal custom of segregating every girl in a separate thatched enclosure on her first menstruation. She has to lead a lonely life inside the Guda, as the enclosure is called, till her parents are able to give a feast to the community members. When the girl comes out of Guda, the tribal members of Paniyas and Adiyas celebrate it with dance and songs. It is a celebration of the fact that one more is ready to perpetuate the tribe. This is known as Theruntu Kalyanam. The film centres around the 14-year-old Lachchu, whose parents are unable to bear the cost of the ritual, forcing her to remain in the Guda for six seasons. From their vantage point, Lachchu and her best friend observe life in their own community, drawing their own conclusions. "It is not just a cinema. There are no professionals involved in the film, except the cameraman and his assistant. All the actors are the students of Kanavu, and some of their family members", says K J Baby, school principal and the nominal director of the film. "They wrote the script. They selected the locations. They are making the film knowing it is all about them; that they have no land; that their parents are prisoners to alcohol; that some of them have no even fathers to name; that they deserve a better deal from the world around".

Almost all of the students are involved in the film. Cameraman Kannan and his assistant Deepu were quick to appreciate their talents. "They were creatively critical of the rushes of the first day's shooting of Guda. They were ready to work hard to any extent. That's when I became convinced this film is going to work", says Kannan, best known for his work on Shaji Karun's films and M T Vasudevan Nair's Ente Swantham Janakikutty. "We are very glad to be part of the project", he adds.

EDUCATION  
Hoshangabad Science Teaching Programme  
MADHYA PRADESH

*Vijaya S. Varma*

***Introduction***

The two fundamental problems facing our education system since independence have been firstly that so many of our children continue to remain outside its ambit and secondly the poor quality of the education that is imparted in the overwhelming majority of our schools. In recent times efforts have been made to address the factors responsible for preventing the universal education of our children, although how effective they are is moot. However, no more than token attempts have been made to address the question of the quality of education, of how to make education more interesting, more enjoyable and more relevant for our children - so that once they enrol in school, they are less prone to succumb to the various pressures working on them to drop out. In this article, we will try to recount our experiences of being associated with programmes of innovation and reform that attempt to do this in the context of school science and mathematics education.

Our earliest encounter with such an effort was through the Hoshangabad Science Teaching Programme (HSTP) which was started jointly in 1973 by two voluntary agencies, Friends Rural Centre and Kishore Bharati, in 16 government middle schools of the Hoshangabad district of Madhya Pradesh. These agencies convinced the state education department to allow them the freedom to run a programme of teaching science, based on experimentation and activity, in classes VI to VIII (11 to 13 year olds). This initiative was a response to the challenge posed by the conditions then prevalent in government schools and which unfortunately continue to be true in large measure even today. We may summarise these as:

- A school, in a rural area or a non-privileged area in towns and cities, is characterised by the fact that its building is poorly constructed, that it has no library, no laboratories, no equipment and no facilities. The teaching of science is usually done without performing any experiments and comprises a body of received knowledge being transmitted to children, validated by the authority of the textbook and of the teacher, who brooks no questioning.
- Teachers are often untrained in science. They have no resources and enjoy no support from the system. They have no inputs into the curriculum and

yet are expected to be the repositories and the source of all knowledge. It was not surprising then that they adopt authoritarian modes of teaching.

- Children are docile and submissive. This is almost a cultural imperative, one that dictates that elders have to be respected and their authority is never to be questioned. There are no rewards for showing initiative and all independent enquiry by children is suppressed in the name of maintaining discipline in the class.

### ***Basic Assumptions and Premises***

The philosophy of educational change that guided the programme can be characterised by

- A decision to operate within the framework of the existing government school system, rather than in individual schools, so as to try and bring about a systemic change by operating as outsiders within the government system.
- A commitment to teach science through experiments which children themselves perform in the classroom. This was eventually elevated to a guiding principle, which said that nothing that could not be demonstrated by such experiments would form part of the curriculum. This meant, for example, that we decided not to teach atomic theory and chemical formulae in the middle school. That this did not lead to a deprived curriculum was ensured by including topics like probability and positional astronomy which did not form part of the conventional school curriculum but for which suitable experiments could be devised. The processes of science have been stressed rather than the products. Science is not taught as a received body of knowledge, authenticated by the authority of the textbook and the teacher, but as a co-operative process of discovery by students and teachers based on experimentation, observation and discussion.
- A belief that it is as, if not more important, to change the attitude of teachers as to train them in the use of new curricular material because no programme of change or innovation can succeed unless teachers are convinced of the need for such change and become active agents in the process.
- The realisation, from the beginning, of the almost complete intellectual and academic isolation of the schoolteacher. It has consistently striven to provide them all the support that is possible by networking them with the larger academic community of high-school teachers, college and university faculty and scientists working in research establishments. It has tried to do this through an extensive programme of teacher orientation workshops, monthly meetings and school follow-up visits.
- The awareness of the complete lack of resources available to the school teacher which it has sought to overcome by providing to each of its schools all the equipment that is required to perform the experiments and investigations in the curriculum in the form of a kit of materials and by a

sustained programme of publications of magazines for children and teachers. It has also provided an opportunity for a local discourse on science articulated in the local idiom through children's writings, drawings and paintings.

These basic premises have resulted in what can be termed as a set of guiding principles and non-negotiable components of the programme. For example, it is guaranteed that all the equipment necessary for children to perform the experiments and activities in the curriculum are made available to each school in sufficient number. A specially developed kit of equipment is provided to each school so that children can perform each of the experiments in the curriculum. To reduce the cost of the kit, as much use is made as possible of locally available material.

All teachers in the programme are trained in not only doing each of the experiments in the curriculum but also in guiding discussions with children about the implications of the results of these experiments. This is done by holding special 3-week training programmes for every teacher every year for 3 years. Continued support to teachers is provided through monthly meetings and through regular school follow-up by trained personnel to help with problems encountered in the day-to-day implementation of the programme. Feedback is constantly collected from teacher training sessions and classroom observation and used to modify the curriculum.

The annual and final middle school examinations has both a written and an experimental component, with the programme teachers setting the question papers. Permission has also obtained to make the examinations open-book and of unlimited duration. Children are allowed to take with them their workbooks and their class records and could take as much time as they want for the examination.

The curriculum requires children to do all their own experiments, working co-operatively in groups, and discuss their findings among themselves and with their teachers. It encourages them to go on field trips, gather information about their surroundings and exhibit their work in their schools and even in village fairs.

As we stressed earlier, the major thrust of the programme is to focus on the process rather than the products of science, on how to make scientific enquiries rather than on committing scientific facts to memory. Since for many children, middle school is the end of their formal education, the emphasis is on teaching them how to learn for themselves so that they can carry on learning even when they leave school.

One of the strategies of learning that is adopted in the programme is to address the misconceptions or rather the alternative conceptions that children bring

with them into the classroom. These alternative conceptions do not arise as a result of any formal instruction but rather develop from children's own attempts to make sense of the data that they constantly receive from their immediate environment. For example, many rural children believe that flies are born spontaneously from cattle dung. Instead of directly contradicting this belief or ridiculing it, we get children to cover fresh cattle droppings with polythene bags. They are asked to observe them over a period of time during which little flies are born in similar droppings that have been left uncovered and visited by flies. This forms an interesting prelude to the study of the life cycle of a fly. Similarly, rural children often believe that butterflies suck out all the goodness of flowers and that the flowers die as a result. We therefore get children to enclose some flowers in perforated polythene bags as soon as the flowers have budded and before they start to bloom. This allows the flowers to 'breathe' but prevents butterflies from visiting them. In time, children see that these flowers shrivel up and give no fruit while those that were not covered give rise to fruit after they die.

To take one other example, we start our unit on astronomy by asking children the minimum length of the shadow cast by a vertical stick and the time of the day at which this occurs. Invariably the answer is that this happens every day at noon when the sun is directly overhead and then the stick of course casts no shadow. You can imagine how surprised children (and many adults) are when we get them to do this experiment and let them discover that neither of these beliefs is correct.

### ***Expansion***

Over a period of 10 years, the programme grew from the initial 16 schools in which it started to cover all the middle schools in the district of Hoshangabad (around 200 in 1978) and then to school clusters in 14 districts of the state (over 500 schools and involving about 3,000 teachers and 40,000 children annually). It is currently being run by Eklavya, a non-government organisation based in Bhopal which was set up to manage the programme when it underwent its second expansion. During this time special structures have been set up in the offices of the state department of education and many administrative procedures have been altered to bring them in greater consonance with the needs of the programme. The initial resource group has been supplemented by others drawn from local colleges and high schools to help with teacher training, monthly meetings, school follow-up and curriculum development.

We realised soon after the inception of the programme that improvement in science teaching could not be brought about in isolation. How other subjects are taught feeds into the science classroom. Teachers cannot be expected to become less authoritarian and more child-friendly in the science classes if they are not also trained to teach the other subjects in the same manner. Also, if the children are not taught mathematics and language properly, it is unrealistic to

expect that they will either be able to analyse properly the data they collect or be able to adequately record or describe in their own words the experiments they conduct.

Eklavya as one of its mandates initiated similar interventions in other subjects which led to a social sciences programme in the middle school and an integrated programme for the teaching of language, mathematics and environmental studies in the primary school.

One realisation we arrived at after years of engagement with these programmes is that a good curriculum must not only be responsive to the demands of the discipline and to the cognitive development of children, but it must also take account of the capabilities of the school teachers who have to transact it in the classroom.

Another realisation that has emerged from our experiences is that of the intellectual isolation of the schoolteacher and how important it is to try and remove this isolation. This is why we have encouraged the involvement of teachers from high schools, colleges and universities in our programme and laid so much stress on in-service training, orientation and continued academic and intellectual support of our schoolteachers. It would be no exaggeration to state that every instance of success in our programme can be traced to an involved, committed and capable schoolteacher.

In the last few years we have seen similar programmes inspired by these experiences starting off in the states of Gujarat and Rajasthan. There is now, as compared to when we started, a greater acceptance of the need for change in our educational system. I would like to believe that our efforts have had, in some small measure, a role to play in bringing about this change. However, it is appropriate to point out at this juncture that terms like discovery method, activity-based learning, child-centred curriculum which were furiously opposed by agencies like the NCERT in the early days have now become clichés that are freely bandied about at every official conference on education, yet the fact of the matter is that the curriculum and teaching practices in most government schools have changed little in this regard over these years.

### **Outcomes**

Perhaps the clearest achievement of HSTP is that it has set the tone for an alternative discourse in the region in which it operates. It has fostered a climate of debate and discussion on education that extends beyond the rarefied atmosphere of conferences and seminars.

Has it made any difference on the ground? In the absence of systematic studies, we can only cite some impressionistic and anecdotal evidence. Children are freer, more questioning and accept that learning requires an effort on part of the learner. They enjoy doing experiments. In a district level quiz in

which children were asked to try and prove or disprove a given proposition, many of the teams devised on their own, experiments to test the hypotheses, sometimes even providing for control in their experiments. The question-and-answer column *Sawaliram* in the children's magazine *Chakmak*, which is brought out by Eklavya, is flooded with questions from children in the HSTP area.

Replenishment of the material in the kit has always been a problem for the government. After arrangements were made for such replacement (each child has started contributing 50 paise a month to a science fund), the Hoshangabad centre has sold items worth one lakh in one year, indicating that indeed the science kits are being used in schools.

School follow-up would appear to indicate that between 20-30% of the teachers are seriously pursuing the programme. The younger schoolteachers in Hoshangabad district who are themselves products of HSTP accept that experimentation and enquiry are the main ingredients of good science teaching. A network of schoolteachers is in place. These teachers appear to be more receptive to suggestions for change. At least those that have been inducted into the resource group seem to have developed a sense of ownership of the programme. They resist attempts that would appear to reduce the importance of the role of experiments in the curriculum as evidenced in the curriculum revision workshops that have been conducted.

Let me stress again that these observations are anecdotal and point to the importance of developing suitable tests and rigorous evaluation procedures which will either validate or refute these claims. Clearly this is not an easy task otherwise it would not have hung fire for so long.

### ***Open Questions***

HSTP started off as a programme of innovation in science education. It is an open question as how this spirit of innovation can continue to be maintained and how the programme can be prevented from getting set in its ways so that there always remains space for new initiatives. If this cannot be done then it will not be able to attract the fresh new minds that are essential for its survival and continued vitality.

HSTP has gone through two rounds of expansion, each accompanied by debates within the core resource group, and a third round of expansion has been inconclusively debated for the past few years. A basic question thrown up by the HSTP experience is: if a school education programme is found to be successful - by whatever definition of success - at the micro level, what should its future be? Should it be expanded to the macro level, and, if so, what should be the mode of expansion?

Many models of expansion have in fact been considered but so far no consensus on the desirability, the feasibility, the modality or the scale of such expansion has as yet emerged. Should it be done by seeding other areas with similar voluntary groups which would act as the resource agencies for such expansion? Where are such resource persons in adequate numbers and willing to take on such responsibility to be found? Should such expansion be attempted through the government system of DIETs? They neither seem interested nor indeed seem to have the capability. In any case how does one get the government to buy into such a scheme? The technique used so far, the palace intrigue method, has been to find some key person in the bureaucracy or the ministry who you convince either by the force of your arguments or because of past association, who then issues or gets issued the necessary orders. But such methods never bring about any systemic changes and when that key person is either transferred or is thrown out of power at the next elections, the whole programme is threatened with imminent collapse unless the process can be repeated.

### ***Limitations***

The programme did not and does not address questions like

- The impoverished conditions of schools, the almost total absence of support facilities.
- Large-scale teacher absenteeism and its impact on the programme.
- The lack of accountability in the system - no rewards for work well done, no penalties for non-performance. That this is a great de-motivating factor for many teachers has been repeatedly brought to the attention of everyone connected with the programme.
- The lack of basic competence in many teachers, even after the extensive training that is part of the programme, particularly in being able to guide discussion in the class after children have performed their experiments and are trying to assess what it is that the experiments have taught them. Given the present circumstance of government schools in our country this is an inherent feature of any model of intervention that does not select the teachers that it interacts with. On the other hand, it is possible that the programme is too ambitious in terms of the changes it expects in the classroom.

### ***Community Criticisms***

Often demands have surfaced that the programme which has been running now for almost 30 years should either be extended to the whole state if it is considered to be successful or should be closed down if it is not. Why should only the children of Hoshangabad district be experimented upon, argue the residents? Community criticisms of the programme have also been made on other counts. These have rightly caused concern to the organisers. However, it is important not to forget that the community is not just one of concerned

parents and guardians of children. It also consists of kunji writers, publishers and sellers of conventional textbooks whose books don't sell. It also consists of schoolteachers who suffer economically because children don't take tuition in science any more and of schoolteachers who are disgruntled because they have to work harder in the science classes without any monetary rewards. It also consists of organisers of satta who don't like the idea of children being taught probability and chance and therefore get questions raised in the Assembly and Legislature claiming that we are teaching children how to gamble when in fact they are being taught what the odds are on their ever winning a lottery.

It has become popular in recent times to talk of community participation and even of the community control of education. Whereas the former is desirable and probably even inevitable, the latter is not without problems and needs very careful consideration. Those who advocate community control of school education even to the extent of formulating school curricula would do well to ponder on the following:

- The demand that the community should control the curriculum is to devalue the role of teachers and professional educators in curriculum design.
- How would one resolve the contradiction between teaching for better understanding and teaching for better performance in examinations so long as one can't ensure local community control over national or state level public examinations?
- Experience in England and the USA would indicate that there is a real danger that the Government will use this as an excuse for requiring that the community should then also raise funds for education. Among other things, this would mean that the schools in richer communities would be endowed with better facilities, better libraries, better laboratories and, in a market driven society, even with better teachers. Instead of a more equitable school system we would end up increasing the disparities between different schools.
- The most worrying aspect of such a development is the very real danger that the curriculum would come under the control of the forces of mindless majoritarianism. How would you counter demands that eclipses of the sun or moon should not be taught as arising from shadowing but due to the action of Rahu and Ketu? If you think this is far fetched, then consider that not so long ago the value of pi, the ratio of the circumference to the diameter of any circle, was fixed by legislative fiat to be equal to 4 in some mid-western states of the USA. Or that even today it is forbidden to teach Darwin's theory of the evolution of species in four States of the USA because it is contrary to Creation as described in the Bible.

### **Conclusions**

Experiences arising from the programme have thrown up a number of issues that we need to take cognisance of. Here is a list of those that I consider to be

the most significant. If we wish to develop a science curriculum which encourages children to explore the world around them and ask them to accept things **not** on the authority of the teacher but on the basis of their own investigations; if we wish to emphasise as we have said, the processes of science rather than the products of science; then, the content of the science curriculum has necessarily to be very different from the standard curriculum followed in our schools. This is inevitable and one has to be prepared to defend such a choice.

If our aim is to develop the spirit of scientific enquiry in our children, then this cannot be achieved by encouraging questioning and experimentation in the science classroom alone. You cannot encourage inquisitiveness and initiative in the science classes and not worry about what goes on in the mathematics, the language or the history classes. We know that skills acquired in one discipline do not transfer very easily to other disciplines. But you cannot ask teachers to be friendly, open and encouraging in science classes and let them continue to be authoritarian and rigid while teaching other subjects. This implies that science education cannot be viewed in isolation from the rest of the curriculum. Curricular reform must proceed hand in hand in all subjects. This is quite apart from the fact that in order to negotiate a science curriculum successfully children need to develop commensurate skills in other subjects like mathematics and language. You cannot make children memorise essays in their language lessons and also expect them to be able to cognise their personal experiences in their own terms in the science class.

Even if we agree that the spirit of enquiry needs to be encouraged not only in science but throughout the school curriculum, the question at the heart of the matter is, are we as a society prepared to accept this? Given the way our society is structured, is it realistic to believe that by reforming our school system alone we shall be able to teach our children not to accept anything as true only because a teacher or an elder says it is so, but to accept it as true only after subjecting it to a process of critical enquiry? How realistic is such an expectation?

If we want teachers to identify with the curriculum, to feel that they “own” it, so that there is a sense of personal commitment to its success or failure, it is important that the process of curricular change and reform be decentralised and that the ordinary schoolteacher be involved in it in a meaningful fashion. A further corollary to this is that the schoolteacher must be given a greater role in the management and organisation of the school system. In fact, our worldview of the schoolteacher has to change. Why is it, for example, that at symposia after symposia on school education, there are no presentations from practicing schoolteachers?

Another lesson we have learnt is that the success or failure of the programme lies ultimately in the hands of our schoolteachers- where the schoolteacher is

motivated, it succeeds; where the teacher is not, it fails. It is also true that motivating many of our teachers is a very hard thing to do. This is not only because of the additional demands the programme routinely makes on the teacher who has to handle such a curriculum in the class, but also because the teacher needs that much more training and orientation in order to make such an enterprise succeed. Yet the present government system of schools does not permit even an iota of reward to those that teach well, nor the smallest calling to account of those that don't. We must not forget, however, that although good teachers are expensive, they are not as expensive as bad teachers! The basic question is, are we as a nation prepared to make the investments that are necessary to get better teachers?

Another equally daunting task is the integration of the science curriculum with society. It is important that science be seen to relate to issues of everyday life, to solve real life problems, that the science curriculum be responsive to the world of children and the society they live in. It cannot therefore remain divorced from issues like those of waste management, garbage disposal, malnutrition, air and water pollution, and adulteration of foodstuff, to name just a few.

It would be desirable to design the curriculum to be made responsive to what people want but then it is imperative that we get the system of examinations - whether end of school or for entrance to medical or engineering institutes, away from the current emphasis on rote learning, information retrieval and rapid arithmetic calculations, to a test of aptitude and of the ability to think. Otherwise the current prevailing paradigm of competing in such public examinations so skews what people want from school, that any meaningful curricular reform becomes well nigh impossible.

The problems of expansion and replication of the programme have been many and a model for expansion, which maintains quality, has not been easy to agree upon. However, the major failure that continues to haunt all programmes of education, whether traditional or innovative, remains the failure to deliver on the constitutional promise of universal education. No programme of improvement of education can ever be considered to be successful if it remains silent on the question of how to reach the vast numbers of children who continue to remain outside the fold of the formal system. This is not only a matter of renegeing on a constitutional guarantee. It is most importantly a question of whether or not we can afford to continue as a nation in which the majority is kept away from the stupendous tasks of nation building because we can't find the political will to invest enough in education. Future generations will scarce believe that we could have been so stupid.