
Part Five

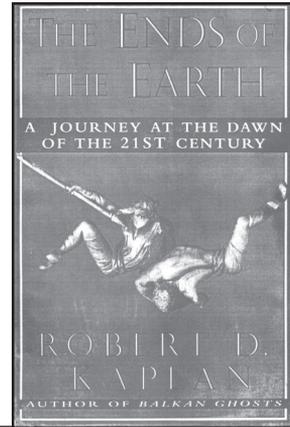
**MGML TEACHING EXPERIENCE
IN RISHI VALLEY - PAPER CLIPPINGS**

The Ends of the Earth

Journey at the dawn of the 21st Century

'Rishi Valley and Human Ingenuity'

by Robert D. Kaplan (Random House 1996)
Excerpts from Chapter 24



Friends ... [told me] Rishi Valley was a place where the local inhabitants had found solutions to such ills as overpopulation and environmental degradation ... [This] shows that there is hope, that we as a species will not necessarily destroy ourselves. But it also taught me that if these hopes are to be realized, then solutions must emerge locally. Hope and solutions cannot be imported ... [from] bureaucracies thousands of miles away ...

In the early 1930s, J. Krishnamurti ... established an elite boarding school on a barren patch of pebbled earth covering 240 acres ... This went against the prevailing Indian trend of locating boarding schools in picturesque hill stations. The school's approach to education, and its evolving relationship, with the surrounding villages ... is unique. Besides the English-speaking boarding school, there is a day school for one hundred village children where the language of instruction is Telugu ... [This] is the hub of an expanding network of 'Satellite Schools' for the surrounding villages. I visited one of these village schools and was amazed.

It was a simple, one-room schoolhouse of lime-washed mud brick with a corrugated-iron roof, surrounded by a garden of marigold and hibiscus. Inside the schoolhouse I saw four groups, of about five children each, sitting in circles on the floor and quietly working with instructional cards and small chalkboards. I heard no shouting and saw no bored or sleepy faces, just low, steady whispering as children tutored each other with minimal help from the teacher, who appeared almost superfluous. Paper cutouts of flowers and birds dangled from the ceiling a few feet above the children's heads. Shelves holding a neat arrangement of student's files and craft boxes were set against one wall. Against another wall were colorful charts that listed the number of people, plants, and animals in the village, each broken

down into various categories. From the charts, I learned that this particular village has 271 inhabitants, of whom 106 are women, 97 men, and 68 children. An exhibition of the children's paintings hung from the third wall. Though only a year old, this school was already more than a hut — it was a 'home', with a deeply personal touch both in the garden and in the classroom, which, with its wall charts, reflected an accumulation of knowledge and experience. I could not recall another classroom that seemed so calm and conducive to self-motivation. It was especially impressive when one considered the poverty of the students' background and the wide age-span within the class, in which children of various grade levels were working together.

I spent an hour in the classroom just watching the children. From time to time, for a minute or two they stared at me—an unfamiliar and foreign face that had sparked their curiosity. But then they returned to work. Not one child had an expression that seemed sullen or lost, the way many children appear in schools in poor neighborhoods in the United States. I observed closely from outside the door: Not one child was pestering the other. By American standards, the class was an anomaly—a room full of underprivileged kids of varying ages who were all well behaved. Because discipline was not even an issue, let alone a problem, everyone could concentrate on learning.

That classroom was not an accident. I was to visit several village schools in the area during various times of the day. The atmosphere was always the same. Just as the day school on the Rishi Valley campus was the hub for this Satellite School network, each Satellite School was the hub for a village, where courses in adult literacy, land reclamation, reforestation, hygiene, beekeeping, etc., are conducted in the evenings, and where students work with their parents to tend the school garden and plant a nursery and to build contour bunds and check dams to stop erosion.

The oldest of these Satellite Schools is in Eguvaboyapalle, a formerly deforested village of 250 families ... Since 1986, when this school opened, literacy in Eguvaboyapalle has climbed from near zero to 70 percent. The incidence of disease has dropped dramatically. The residents have adorned their thatched-roof huts with bougainvillea and hibiscus gardens. They have donated a gold [coloured] clock, among other items, to the school, which is never locked at night. Trust among the villagers is growing. The student dropout rate here and in nearby villages has been falling to almost zero. Ninety-five percent of the students pass the entrance examination for advancement to upper grade levels ...

A school need not be ... a lecture by one big person to thirty little people, whereby teacher and textbook perform as if they were magicians and everybody else sits in rows and listens. A school is not about rote learning or memorizing. Oral cultures, the Raos asserted, already do too much of that. Only when children are taught to categorize and to analyze, rather than merely to memorize, can they achieve anything in the modern world. Intercommunal and tribal hatreds, the Raos explained, arise from too much faulty oral memory and too little self-motivated analysis.

According to the Raos, the ideal school in the developing world at the turn of the twenty-first century must be cheap, portable, easily replicable, and able to teach children to think as if they had been brought up in a literate home. It must also inculcate, 'deep in the learning process', the values of family planning, concern for the physical environment, and tolerance for other cultures. And all this can, literally, 'fit in a box.' ... The 'School in a Box' consists of ... illustrated instructional cards in Mathematics, Telugu Language, Science, Health, and Environmental Studies — and a manual for the teacher, who, for the most part, is a 'facilitator,' since the children end up teaching themselves ... Children go on to the next level of cards only after completing the one before it. 'The children are in the driver's seat, motivating themselves in groups,' Mr Rao said. ...

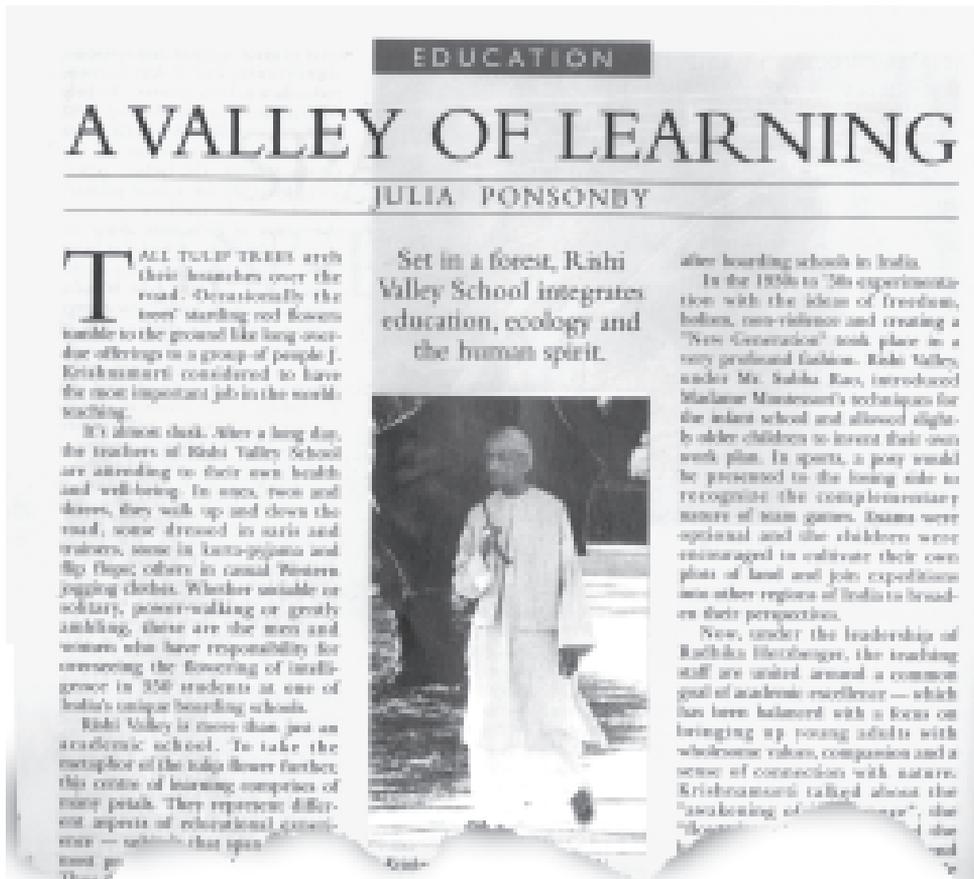
The neat and well-organized classrooms that I saw were no accident. 'The classroom,' Rama Rao told me, 'must be an extension of the ideal home: A functional household is an orderly one. The children must make activity files for themselves ... We make the children study their own village. They make statistical charts on the number of men, the number of women, the number of people who can read, the number who can't ... In short, the children learn to constantly compare. Thus, they develop objectivity, by finding out things for themselves, through research.'

Just as the classroom is an extension of the ideal home, the garden outside is an extension of the classroom. Each Satellite School has a flower, fruit, and vegetable nursery, which the students and their parents are responsible for. Like the Rishi Valley fruit fields whose incomes help subsidize the campus, the nurseries generate income so that each school is nearly self-sustaining. More important than the income—and the charts the children must maintain on plant growth—is the development of an aesthetic instinct. 'The planting of bougainvillea in and around the school,' Rama said, 'teaches the children to appreciate beauty. People who appreciate beauty are less likely to be violent.' ...



A Valley of Learning

by Julia Ponsonby
Schumacher College, Dartington, U.K.



... J. Krishnamurti was passionately interested in education and was involved in the creation of several schools in India ... Rishi Valley ... is the oldest of [these] schools ... One of the most visionary programmes to emerge out of Rishi Valley concerns the creation of rural village schools. The arrival of Padmanabha and Rama Rao in the eighties triggered a concerted

development of one-room village schools throughout the valley and beyond ...

These schools are designed specifically to work with first generation learners, to be locally orientated and to make it possible for children to work at their own pace in mixed age groups. The teacher-facilitator is typically an adult who has some local connection and has undergone a simple training ... A colour-coded system [of cards] allows children to monitor their progress up a 'Ladder of Learning' .. Children sit in groups, well behaved, enthusiastic and occasionally whispering questions to each other. They want the teacher to mark their work immediately ... so they can move on to the next thing. The drop-out rate is almost zero ...

Children look forward to many collective activities ... when they all join together in specific learning events, which have been delightfully turned into 'Festivals' ...

Sixteen small schools have now been established. These schools have been turned into treasures of beauty and life, with gardens lovingly tended by parents and children alike ...

The system is very flexible and easily adapted to other languages and localities. The latest plan is to work with government schools to help them revitalize their approach. Students are encouraged to develop a respect for their own culture and environment and a healthy capacity for discrimination and analysis. This stands them in good stead as, increasingly, multimedia bombards them with images of luxury from all over the world. Often successful students who go on to higher education return to work in their own communities and in these rural primary schools ...



A Novel Approach to Primary Education

by Laxman Rao. Puzzles and games are integral to new primary education methods that are posing a challenge to the approaches adopted by the government in Andhra Pradesh.

PRIMARY SCHOOLS WITH A DIFFERENCE have sprung up in some villages around the elite Rishi Valley School in Andhra Pradesh. These Satellite Schools, started by the Rural Education Centre (REC) of Rishi Valley School, use instruction cards, puzzles and games instead of standard textbooks. The instruction material was designed, produced and distributed by the REC and the children are taught by village youth who have passed the 10th or Intermediate Class.

The REC was started about 20 years ago for the children of Rishi Valley School workers ... Padmanabha Rao, Programme Coordinator of REC, and his wife Rama, Coordinator of the Training Cell, have transformed it from a mere extension centre of Rishi Valley School to a role model for effective primary education to remote rural areas.

'Government schools have failed to provide effective education in remote areas,' Rao said, 'and in spite of their good qualifications and reasonable salaries, government teachers are not always enthusiastic about serving in remote areas.'

The teaching material in the Satellite Schools has been graded to suit individual children. The teacher assigns appropriate instruction materials, consistent with the level of progress, to each child. 'Children also learn from their seniors in the class. In effect, we create an atmosphere of learning so that in a class of 30 students and one instructor, there are virtually 31 students and 31 teachers,' said Rama Rao. 'We avoid rigid examinations or grading and instructors in each school are free to choose their own method of evaluating the progress of each child.'

The school year begins with the children conducting an environmental survey of the region, collecting data on flora, fauna, soil types, resources,

occupations and trades. The children are then guided to organize the data systematically into educational charts. 'The science education of the child begins by discovering relationships in the data collected,' said Rao. 'Our science programme is linked with action programmes that require the children to participate in community efforts currently under way in the region, such as afforestation and watershed management.'

A Satellite School ... is started in a village on the initiative of its residents. In almost all the schools built around Rishi Valley, villagers contributed land, labour and building materials. The teachers are trained and supported by the REC with grants from the government.

The REC is also trying to revive the folk art of puppetry by inviting puppeteers to perform in the schools. Children are taught the craft so that puppetry can not only be a medium of mass education but also provide employment to artisans. REC's puppet group focuses on diverse themes, including environment awareness.

REC's successful experiments have motivated other Rural Development agencies to adopt their model ...



A Garden of Learning

by Nuria Verde, Originally published in Spanish

Abridged and edited from a translation by Stephan Harding



La escuela en el cajón es un sistema tan básico como eficaz. Todo lo que se necesita para enseñar cabe en una caja, de la que se extraen letras de goma para aprender a leer o semillas de tamarindo para aprender a sumar.

In Rishi Valley, from a parched land a splendid forest has emerged. In a miserable climate, warm hearts and newly-awakened young minds are developing ... through a silent revolution in primary education.

In the mid-eighties Padmanabha and Rama Rao, young and recently married, came to Rishi Valley. At that time there was little 'Joy of Learning' for the poor... They wanted to create new teaching materials, radically different from the books that had been used up to that time. On a table full

of papers, rubber letters, sheets with drawings of animals and local trees, with cards and educational posters they [began to develop] their 'School in a Box'. Rishi Valley now runs sixteen 'Satellite Schools' in neighbouring villages. Each village gives some land, often a most degraded piece, and there ... children plant trees and participate in making their school grounds beautiful and serene.

The 'Joy of Learning' [enables] children to begin reading and writing within six to eight months. They begin by touching rubber letters to gain familiarity with their shapes. Instead of learning letter by letter, they learn whole words and phrases from familiar stories and from plays they have acted out in class. When they can write, they ask their illiterate mothers to tell them stories, which they write down and read back to their mothers. In this way they motivate their mothers to learn along with them.

Addition is learned by counting tamarind seeds. Multiplication is done with interwoven bamboo reeds. Instead of memorising tables, children can calculate the answer for themselves by counting intersections. During their annual *Metric Mela* children learn the concept of length by measuring visitors' noses with a special measuring device ... To understand the concept of time they are asked to move pebbles from one box to another, and see how many they could move in one minute. Children measure the cost of foods they are going to consume during the Fair.

In a conversation held at Rishi Valley School in 1984, J. Krishnamurti spoke to students about changing the world, about the enormous needs of poor children in the countryside around them. 'Don't ask me how you can change the world. Do it', he said. Two years later, the Raos arrived, and within a few years hundreds and later thousands of children who might have had little chance for education were participating in this new approach ...

Editorial Note: 'Ideas That Change the World'

Human Planet reports about people whose ideas contribute to changing the planet. We look for them in all areas of human activity (culture, economics, solidarity, politics, environment, science) and send teams to write their stories. Practical solutions are being developed in Rishi Valley to problems as important as poverty, ecological restoration, water conservation and education. These are being worked out without the aid of foreign experts, and with minimal external funds. (Editors, *Planeto Humana*)



Smiles in the classroom

Magazine Weekly Edition - 2



Here is how an innovative experiment in the field of education began. Launched in 1995 as a UNICEF-assisted pilot project in Mysore, Nalikali was the creation of 15 district, block and village-level teachers and administrators. As the aim was to search for ways to revitalize primary schools, the group went to Rishi Valley to study the experience of children learning in a creative environment. Could such a scheme be replicated in a government establishment, the teachers wondered. VIMALA RAMACHANDRAN writes about what they did on their return.

For many years now, the discourse on primary education has been conducted at many levels and fronts. Administrators and development practitioners focus on enrolment, availability of schools within walking distance, teacher availability and absenteeism, dysfunctional schools, infrastructure, and so on. Educationists and practitioners are concerned about whether and how children learn in thousands of rural primary schools across the country. Development professionals — especially those concerned about health and family welfare — discuss the number of years of schooling and its impact on age of marriage and family size. Economists direct their attention on financing and questions related to government, aided and private schools. In fact, in the last 10 years, the debate on privatization and the responsibility of civil society and corporate bodies has gathered momentum. The national press and the media focus on middle class children and the burden of the school bag, textbooks and results in board examinations. There is no doubt that the education system attracts a lot of attention — positive and negative. But what is unfortunate is that, like other media debates and political campaigns, public interest, and indeed even administrative interest, invariably dies down after some time, till another crisis or a sensational event tugs at everyone's memory. The painstaking work of people who have tried to sustain the momentum for change is often lost to the world — especially if it is the work of ordinary government functionaries — from district and block education officers to the much maligned primary school teachers.

Nalikali (Joyful learning), a unique pedagogic renewal programme under way in Karnataka, is the creation of a group of highly motivated district, block and village level schoolteachers and administrators. Started in 1995 with 15 teachers of the H.D.Kote *Taluk* in Mysore district, it gradually expanded to 270 schools in Mysore in 1995-96 to 4,000 schools in Malavalli *Taluk* in Mandya district, Chikaballapur *Taluk* in Kolar district, Lingasur *Taluk* in Raichur district, and Soudatti *Taluk* in Belgaum district by 1998.

Nalikali started in 1995 as a small UNICEF — assisted pilot project in H.D.Kote. Searching for ways to revitalize primary schools, a group of 15 primary school teachers and administrators went to Rishi Valley (Madanapalle, Chittoor district, Andhra Pradesh) to study the Satellite Schools where children in multigrade classrooms were learning to read, write and unleash their creativity in a joyful and exciting environment. The teachers of H.D.Kote were concerned about the learning achievements of children in standards one to four and also about how children can relate to

the content of textbooks. The passive and one-way communication that characterizes most schools was yet another area of concern. These problems, they all realized, get accentuated when one teacher is expected to manage multigrade classes — even in schools with two or more teachers. The net result is that in most rural primary schools, a large number of children go through four or five years of school without acquiring the ability to read and write with comprehension. Children, who clear the standard five examinations and move on, are well below par — as compared to their counterparts in better endowed schools. Low educational achievement and a lack of the relevance of education in the daily lives of the poor have been a major area of concern across the country.

What the teachers saw in Rishi Valley was quite different. Operating in small groups, children in these rural schools were working on their own, tracking their progress from one alphabet/numbers to another, moving from simple to complex language and mathematics, enjoying their ev.s., and taking an interest in what was happening around them. The teachers in the schools were also moving from one group to another, assisting, supporting and encouraging children to get on the path of learning. Teachers were innovating as they moved along, guided by broad learning levels that were stipulated. The content of environmental science was remarkably open-ended; they drew upon local resources, stories, songs and knowledge to make it relevant. Children in standard two could read simple words, do simple arithmetic, and sing and dance with abandon. The sheer energy and creativity of children was an eye-opener.

On returning to H.D.Kote the teachers wondered if such a joyful learning programme would be possible in a government establishment. For many years now, all of us — educators, the media, common people and administrators — have shifted the blame from the system to the teachers and *vice versa*. Blaming the system or the social situation is common — an apology for the dismal state of primary schools. The group of 15 did not want to fall into the familiar trap of blaming it all on the system and sitting back when thousands of little children lose the sparkle in their eyes as they step into school.

So this group sat down and analyzed the ‘ills’ of the system and made three lists — one, where the reform is dependent on government machinery (State Government and National Government), two, those that are within the scope of the district level educational administrators, and those where teachers as a group can make a difference. A huge problem was broken

down into manageable parts. The larger educational climate in Karnataka was favourable as the District Primary Education Programme (DPEP) was launched in a few districts — and State level administrators were open to innovative methods to revitalize primary schools. DPEP has acknowledged the importance of encouraging and empowering teachers to initiate changes from within. The idea of joyful learning was not new and had been accepted as an important dimension of educational reform.

This group of 15 discussed its study tour with a larger group of 36 teachers. All of them realized that initiating a new method involved four interlinked reforms:

- (a) Minimum levels of achievement prescribed by the government would have to be renegotiated. Understanding how children learn and motivating them to get on a path of discovery and learning demands a lot more of the system. The conventional method of teaching the alphabet — including the '*matra*' (an integral part of all Indian languages) introducing complex compound letters in standard one was jettisoned in favour of an incremental and step by step learning mode in Rishi Valley. Discovering the joy of reading simple words propels the child to move on to more complex levels —the motivation and the excitement comes from within.
- (b) Curriculum and textbooks breaking away from them would not be easy and near impossible unless there is a willingness to give broad guidelines to the teacher, and allow him or her freedom to adapt and innovate. Using cards and posters (initially made by the teacher) supplemented with workbooks instead of textbooks is indeed a radical departure.
- (c) The absence of an organic link between training teachers and the production of teaching-learning material. Unleashing the creativity and active interest of teachers would become possible if teachers were involved in the process of generating accessories needed in the classroom.
- (d) The rethinking conventional notions of discipline and order, and a willingness to explore alternative approaches to classroom management. Allowing children to move around the classroom, take the initiative, sing and dance, write and draw on the floor and on the blackboard - all these were alien to the conventional pedagogic tradition where children sat silently in rows and listened to the teacher.

In fact, the new method witnessed in Rishi Valley demanded a lot more from the teacher — he or she has to transform himself/herself from an authoritarian figure to a fun loving and creative facilitator. Outdoor activities, music, free expression with chalk on the floor and painted walls, dance, role-play, conversation, quiz and games — these were central to the new method.

Teachers of H.D.Kote participated in internal discussions and from the first group of 15, the core grew to 36 teachers, who in-turn worked with (trained) 300 teachers in 278 schools in the academic year 1996-1997, and 322 schools in 1999-2000. When Mysore district came under DPEP Phase II in 1988, the Government decided to upscale the H.D.Kote experiment to cover the district. To this end, the block resource centers and cluster resource centers (envisaged and approved under DPEP) were established and staffed with trained teachers who in turn imparted training to their colleagues. The entire load of continuing training and resource support to teachers was handled by the highly motivated cadre of primary school teachers and trainers in existing establishments in the district.

The key to the new approach is the teacher. The teacher is the fulcrum around whom the programme revolves. There is an annual intensive 12-day training cum material production workshop where all primary school teachers (teaching standards one and two) prepare the cards, games, puppets and other teaching aids, learn/modify songs, games and activities, and, above all, talk about how children learn. Simple home truths, like all children do not learn at the same pace since there are differences — children from illiterate families have little support at home, absenteeism (especially girls from very poor families) during festivals/agricultural seasons affects learning outcomes — are discussed. The basic idea is to help the teacher understand the family and the larger social context of their students and try not to be judgmental and help children move from one level to another without fear of censure, failure or fear. A five-day refresher programme is held every year, and the administration is planning to supplement the teaching material with workbooks and printed cards.

What is pedagogic renewal? At the heart of this reform is a simple principle. The curriculum is seen as a continuum from standards one to four. The content in language and arithmetic is broken down into small capsules, and children are guided to move from one capsule to the next. Recognizing that all children do not learn at the same pace — at any given point there are groups working with different levels (capsules/modules) in

small groups. Therefore, if a child is absent from school, he/she just joins in where he/she left off. At the end of each capsule, children are tested for mastery of that particular capsule and, then, they move on to the next level. A learning ladder — displayed prominently in the classroom — is a ready reference point for children, teachers and also inspectors and other visitors. Children easily point out their level in language and mathematics. By the end of each year, barring a small group of slow learners or children from difficult circumstances, most children complete the expected level. As they continue to sit in the same room (standards one and two), the children pick up where they left off in the next year.

In language, the alphabet is broken into 10 levels in standard one — covering the alphabet, and in standard two the '*matra*'. Each of the 10 levels follow a four-step cycle — preparatory (familiarization with shape and sound), instructional, reinforcement and usage and evaluation. At the end of each cycle, children can read simple words and sentences. They do not have to wait to learn the alphabet to read or make simple sentences. Complex words using joint and half-alphabets are introduced in standard three. Children familiarize themselves with shape, sound, usage and joining them together to read and write. They use the 'basement' — three feet of the blackboard that runs along the entire length of the classroom — to write, practice and draw. Each child has her designated space on the blackboard.

Similarly in mathematics there are seven levels and 100 activities in standard one. Starting with preparatory activities, children move from familiarity with basic numbers (one to nine) to the concept of zero, 10 and then up to 19. They are encouraged to understand numbers, use them to count (for example they do a survey in the village of the number of animals — goats, cows, chicken, horses). They also learn simple concepts like more and less, sequence, ascending and descending order, simple arithmetic, and so on. Teachers have adapted 'snakes and ladders'; 'ludo' and other board games to enable children to grasp basic concepts, and also to test their learning achievement. As a result, children are continuously tested and assessed. One of the more interesting aspects of this method is that most children know which level they are at in language and in mathematics.

Teachers admit that this method demands more of the teacher — who has to be on his or her toes and alert all the time. Similarly, the resource persons (drawn from the cadre of primary school teachers) are also expected to visit every school for an entire working day every month, meet the teachers in their cluster to share problems and facilitate innovations (new songs,

games and activities). This method also demands greater sensitivity from headteachers and trained teachers. Allotting standards one and two to untrained teachers and over loading Nalikali teachers with other duties could prove disastrous. An untrained teacher would be at a loss in a Nalikali classroom just as tearing teachers away from classroom would hamper learning outcomes. The programme is thus vulnerable to insensitive teacher management, and could lead to chaos in the classroom.

Why then are teachers willing to go along with this new method? Talking to teachers across Mysore district, it emerged that the teachers are acutely aware of the shortcomings of the conventional system — they admit that barely 50 percent of the children learn to read and write properly. The rest drop out of the system. They also admit that children enjoy coming to school and look forward to activities. ‘Action songs’ and activities help canalize the abundant energy of children. Absenteeism has come down and parents have also responded well. Teachers admit that parents ask for some homework and books — and in the last year the teachers have started giving simple home assignments to practise writing. Workbooks will be introduced shortly. Teachers also reported that their interaction with the community has increased — partly because of the environmental science programme where the teacher accompanies the children to the village to gather information about their environment or look at plants and trees. Children also talk about the school, sing songs, and share their excitement with parents and siblings. This, teachers admit, has definitely led to better rapport with parents and enhanced their respect in the community.

In the larger context of DPEP in India, innovations like Nalikali have demonstrated that there is a lot more to primary education than bricks, mortar and infrastructures. We all know that a good, motivated teacher in an energized classroom can do wonders. And Nalikali is about giving teachers a chance to use their creativity, energy and knowledge. Karnataka is now on the threshold of an economic boom. Can this State afford to miss out on an opportunity to create an educated and creative human resource right up to the last village? There are reasons to hope and reasons to rejoice — Nalikali shows that ordinary people can make a difference, provided the Government continues to support and encourage them.

