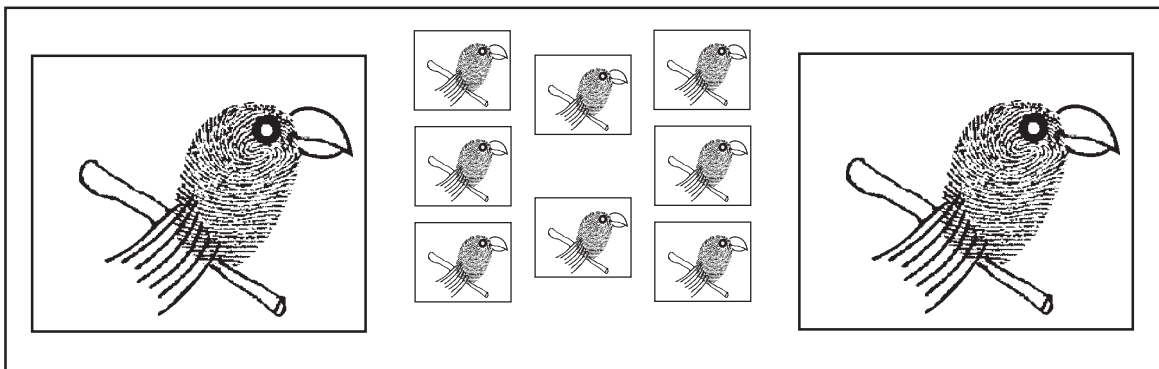


# Revive Learning Network – Feb 2005



February 10-12, 2005

Digantar, Todi Ramjanipura, Jagatpura, Jaipur District, Rajasthan 302017

## **The Learning Network**

The Learning Network explores various approaches towards holistic learning. This network helps learn about and share new perspectives, strengthen existing efforts and is a resource for interested groups, educators, and parents seeking meaningful approaches to education. The network was formed at the "Alternatives in Education" conference (Bangalore, January 2003).

### **Year in review**

2004 started with the Learning Network Conference in February. There were presentations by several new groups and updates since the first conference in January 2003. The conference was an interesting meet with lectures on distinct topics, hands-on workshops and an exhibition by participating groups. Sessions included arts in education, democracy and conflict resolution, nature and environment in education. In addition, there were three workshops in 2004.

#### ***Conflict resolution***

There was a two-day workshop in February 2004 around resolving conflict and the role of schools that touched on topics of diversity, conflict, inequality and peace. This workshop was led by Ankur and Pravah with vast experience working with children and schools.

#### ***Storytelling workshop***

A storytelling workshop was organized in September 2004 at Chennai by the Learning Network with resource support from Geeta Ramanujam and Lalu Narayan from Kathalaya. The workshop focused on the history of story-telling and how it can be used in schools.

#### ***Piaget workshop***

There was a twoday workshop titled "Understanding cognitive development of children" in May 2004 at Chennai. The workshop introduced the theory of cognitive development put forth by Jean Piaget, Swiss philosopher and psychologist, and provided a theoretical framework for children's processes of learning and creating knowledge. It was led by educationist L. S. Saraswati, who has worked with teachers and educators for over 25 years. The workshop enabled the teachers to comprehend Jean Piaget's theories through their own experiences with children.

More information on all these workshops and the Network Conference can be found on our website [www.learningnet-india.org](http://www.learningnet-india.org).

### **February 2005 Conference**

We are happy to welcome new members. The upcoming Feb 2005 conference, promises to be an interesting meet with presentations by members, lectures on special topics, hands-on workshops and an exhibition by participating groups. Apart from having a platform to understand individual contributions and exchange ideas, participants can engage in discussions and activities that will deliver a greater outreach.

Over the last two year we have built a virtual resource centre of members representing their philosophies and approaches. The network has also organized several workshops and facilitated in-depth exchanges amongst various groups. The virtual resource centre is available at: [www.learningnet-india.org](http://www.learningnet-india.org).

We need your contributions via articles, activities, news, reports, analyses, experiences, etc., to update the website with all relevant information. You can contact The Learning Network at [info@learningnet-india.org](mailto:info@learningnet-india.org).

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This issue also carries some stories, songs and experiences related to the tsunami that struck 15 countries on December 26, 2004.

# Digantar

*As written by Rohit Dhankar for Revive, Vol II*

Digantar is committed to develop suitable ways of educating children in a multicultural democratic society. It has been working in the area of primary and upper primary education for over twenty years. The teachers of this school trained under the late Shri David Horsburgh, who also guided the school in its initial years. Digantar has a campus spread over more than two acres, that includes office buildings, a training centre with adequate facilities and a good library well-equipped with well-chosen books on elementary education and several journals. The major aims of Digantar are to conduct research in all aspects of elementary education, to establish and run schools to provide good quality education to children, to function as a resource centre for other organizations and to work for the advancement of society in general.

*The Philosophy:* We see education as the most potent means of creating a just society and sustaining it. Education is a typically human endeavour that aims at (a) the development of rational understanding of the world (with all its socio-historical as well as physical aspects); (b) the development of sensitivity towards the others; and (c) the development of the capacity/ability to transform an idea into action. These three things put together will bring about a commitment to humane, democratic and rational values and the capacity to work towards their actualisation.

The development of understanding as well as the ability to transform an idea into action is a life-long process – we can call this a process of learning. We feel that the objective of elementary education should be to ‘help the child become an independent and motivated learner’. We believe that education is a right of every human being; this implies that it is the responsibility of every human society to create conditions so that each member receives what is due to him/her i.e. good education. Therefore it is not enough to create educational facilities assuming that children will use them. The system had to be sensitive and responsible enough to ensure that each child actually receives that education.

No system that is incapable of developing desirable capabilities in children can actually reach all children. For an education that fails to attract children and to win the communities faith it is sufficient ground to say that the education system in question is fundamentally flawed in the area of capability development as well. We also feel that an educational system has to recognise that lifelong learning is possible only if the learning process is based on the child's life experience. Any kind of grafting (disguised or otherwise) is bound to stun the process of increasingly sophisticated organisation of the child's experiences.

# PROFILES

Up in the morning and off to the sea  
We run to watch the sun rising slowly.  
As the waves come in and play on the shore  
We watch with delight and want some more.  
We will jump and swim in the sea, in the sea  
And fish for a living, that's the way it will be.  
And fish for a living, that's the way it will be.

*– excerpted and translated from the Tamil which is set to the tune of a popular Rajanikant song. It will be published in a specially created workbook for tsunami-affected children in Tamilnadu. The workbook is being compiled by the Goodbooks Teachers' Centre, Chennai.*

We are standing in the blue sea  
We are living in the blue sea  
We are people of the blue sea  
So why have you immersed us in this untold grief?

— a poem by Dhanalakshmi

She sells fish in Periyaveerampattnam village, Tamilnadu

The shrine of Our Lady of Matara has a compact with the ocean. They say the Lady came from the sea and made Matara her home. At the end of the first mass after Christmas, the sea came to claim the Lady. The water surged in and grabbed the Lady from the sanctum. For three days Father Charles Hewawasam and his parish were frantic. The Lady was gone; this surely portended darker things than what had arrived on December 26. Then, says Father Hewawasam, the Lady came ashore, miraculously intact, on a beach three kilometres away. “We knew this was a message from the gods. And it is, isn’t it? For decades now, our country has been plunged into crisis because men have been fighting men. The Sinhalese with the Tamils, the Buddhists with the Muslims, the Buddhists with the Christians. Now, suddenly, here’s a wrath that’s hit all men alike. It’s a message for us to sink differences, close ranks, that’s the real reconstruction Sri Lanka needs, psychological reconstruction after the physical one has been taken care of.”

— from ‘The Jagged Edge’ by Sankarshan Thakur



# Centre for Montessori Education

*As written by Uma Shankar, Director, edited for Revive*

Centre for Montessori Training was established in January 1998 with the following objectives:

- to provide teacher training for adults to work with children 3 to 6 years of age
- to enhance the skills of working teachers by helping them form a clear classroom methodology, realize the importance of the process of learning and focus on it rather than on the end result
- to help set up Montessori environments and enrich existing classrooms
- to create an awareness of the Montessori philosophy and method, develop a collaborative relationship between parents and teachers in schools and to organize parenting skills workshops
- to understand the needs of the child at different stages of his/her development and create experiential learning centres and child-centered programme

We believe in a caring, socially responsible education that supports the child's effort to become fully engaged in his/her own learning. The Montessori method assists children in their development and helps them grow in independence at all levels. The activities those are available to the child in the Montessori environment help in developing his motor coordination, as well as his social, cognitive and affective skills.

## **Teacher training programme**

The students undergoing the course, besides gaining in knowledge and experience, are given ample opportunities to participate in group discussions to exchange ideas and perspectives and to help to integrate theory and practice. CMTC is affiliated with the Indian Montessori Centre that awards the diploma to the students.

We are now training our sixth batch of students. All of our past students are either employed in existing schools or have started their own schools in Chennai or other parts of Tamil Nadu.

## **Other activities**

CMTC regularly conducts short workshops/ orientation programme for teachers of traditional schools in Mathematics, Language and Science. We have provided in-house training for teachers in schools like B S Mootha, Crescent Matriculation, Chennai, Brindavan Public School, Athur, Bharati Vidya Bhavan, Erode, Mahatma Montessori, Tamil Nadu, and Vidyaniketan, Bangalore. We have worked with Government of Tamil Nadu to enhance their teacher training programme and make it more child-centred and appropriate for each age group.

We are at present working with Sneha, an NGO in Nagapattinam to help them train their teachers to adopt the Montessori method in their 33 environments known as "Balar Palli" (pre-school).

In the first two years we ran "after-school" programme for children of the age group 4 to 10 years. Now some of our students offer such programme in their schools. We also run workshops for parents to help them understand the developmental needs of their children.

For more information please visit us at <http://education.vsnl.com/cmte>

# Jodo Gyan

Jodo Gyan is a self-supporting not-for-profit organization working in the area of activity-based education since 1998. Our efforts arise from the conviction that quality education can be provided to children only by linking their thought processes with their own experiences. The focus is to provide complementary services for the formal education imparted in schools by developing/making available materials and modules for activity-based learning.

We reach out to children, parents and teachers of Delhi through schools and community organizations, display and demonstrations and fairs in schools and community centres to promote changes in classroom practices, and joint-activity between parents and children.

The objective of Jodo Gyan is to support the development of educational materials based on actual classroom experiences and we look forward to collaborating with teachers. We have designed some educational materials based on our own experiences of the teaching-learning process and we produce them with the participation of community members in

Shakurpur, a resettlement colony in north-west Delhi. These teaching aids and other learning materials are developed within the process of meaningful construction involving adults and children.

For mathematics, we have drawn on research by the late Hans Freudenthal and his colleagues at the University of Utrecht. We also make available various innovative educational materials and teaching practices from different parts of the country developed through the creative activities of organizations such as Navnirmiti and Eklavya.

In Jodo Gyan we combine the spirit of non-profit motive with the decision to face the challenges of the market. Jodo Gyan itself is a learning organization with a vision of promoting human cooperation, autonomy and accountability. We also collaborate with similar organizations working to promote activity-based education in other parts of India. Ours is a modest attempt to support the challenge that our teachers and parents face in providing quality education to our children.

When Fias Mohammed, 28, heard that her aunt and cousin were killed, she didn't rush to them. She accepted the news and got back to her first responsibility, children. She teaches primary school children in Malacca, Car Nicobar. "I was also a child once. My job is to ensure that a child learns. They were the worst affected by the tsunami," she says.

"You know, a teacher is one who makes a child feel safe. They grow in that security. They learn, and have fun. How can we teach them anything when we come across as weak in a crisis like this," says her friend Tamar Habard.

"But they will grow. That's life. They will seek answers to their questions and help people like us, the adults, who find it tougher to let go. Children are wonderful therapy," says Fias.

– from 'A lesson in love' by Vijay Simha

# Lord Scudamore School in England

*As written by Paul Whitcombe and Martin Chapple of the Lord Scudamore School*

Lord Scudamore Primary School (LSPS) is situated in the centre of Hereford, the principal city of Herefordshire, England. LSPS is the largest primary school in the county with approximately 650 pupils on roll. The school has a 60 place Nursery, for 3 and 4 year-olds, and a Learning Support Centre for children with moderate learning difficulties. The children are drawn from a relatively deprived area. We also have a lot of children from out of this area due to our reputation for excellence within the county. The county is predominantly rural, with small village schools and then larger schools in the two main urban conurbations of Ross and Hereford. LSPS is the lead school for a networked learning community of 10 schools and leads 'what if' groups which reach out to 46 schools.

The two head teachers of this school are Peter Box and Paul Whitcombe. Peter Box is a consultant for Primary Strategy, a Government initiative to raise standards in schools. Paul Whitcombe is an 'innovation champion', an initiative linked with industry to investigate creativity in education management.

Our overall focus at LSPS is to create 'Active Learners' at all levels of the school community. Our education system means we work in a highly structured and

accountable environment which can limit creativity. We endeavour to work in an environment where people are encouraged to take risks. We follow a model of action research to develop initiatives which we believe are worthwhile for teachers and pupils. This enables staff to experiment and not fear failure.

Our research-based approach focuses on collaborative learning and the consequent development of thinking skills. Our hypothesis is that intelligence is not fixed and can be improved upon if the learner is actively engaged in the process.

We are investigating the impact of child-based assessment procedures as a tool to increase motivation, raise self-esteem and raise standards. We are developing the use of success criteria and assessment for learning. A greater involvement in learning for pupils is linked to an emphasis on creative thinking.

We strongly believe that children need firm foundations in the basic skills but also need opportunities for fun and creativity. This is reflected in our planning. We are very proud of our school.

The little ones, Roopa and Suman, who escaped miraculously, trapped inside the house, want to go back to school. The school is in ruins, but "we will build that too," says Palani.

Roopa and Suman speak about the tsunami as if it's a lucid folktale; they smile easily, their innocence yet another sign of hope in a ravaged landscape.

"Suman is brave," says Roopa, his sister. Yes, Suman is brave. His friend Manikandan and Honest were swept away when they were flying kites.

– from 'Tempered Steel' by Amit Sengupta

# Vigyan Ashram

Indian Institute Of Education, Pune started Vigyan Ashram (vigyan means science and ashram symbolizes simple living) in 1983 to develop the science and technology-based educational system for rural India. The late Dr S. S. Kalbag took it as his life mission to develop an education system that would be useful not only for India but also for the other developing countries. The programme evolved into the Rural Development Education System (RDES). The model of education in Vigyan Ashram seeks to build on the natural systems of learning and to provide opportunities for activity-based learning.

Vigyan Ashram offers a basic (introductory) rural technology course (IBT) with a curriculum that includes water resource development, construction, workshop, technical event and agriculture-animal husbandry, human health and engineering drawing. This was offered to school drop-outs from the rural and tribal areas. The basic principles of the syllabus are multi-skill training, learning while doing, community payment for services and trainee entrepreneurship. Multi-skill training provides the child an opportunity to act and, in many cases, a multi-disciplinary approach is necessary for a solution. Multimedia are used to supplement the information provided by the teachers. The children learn by actually doing. By involving the children in providing various services, the community gets the benefit of the various services at a modest cost. The students

get their training in real life. In the trainee entrepreneurship scheme, a skilled person works with the school as an instructor. Using the facilities of the school, the instructor provides services to the community. Any surplus from this operation goes to the instructor as incentive. After sufficient experience, the instructor leaves the school to start his own enterprise.

Vigyan Ashram extended this programme to the formal school system in 1985. This began with an 'Introduction to Basic Technology' course from the 8<sup>th</sup>-10<sup>th</sup> standard. Introduced as an optional subject, students get classroom training for five days and work for the IBT on the sixth day. Each school will have Engineering, Electrical (Energy & Environment), Agri-Animal Husbandry and Home & Health sections. Starting with one school in 1985, it went to three schools in 1998 and is up to 23 in 1004. The secondary board has approved the syllabus.

This programme is very popular in the community and parents withdraw their children from other schools and enroll them in IBT schools. School performance has improved and drop-out rates have reduced. Besides, the community gets the services.

To make the impact more visible and make a policy change in school system to include vocational training programme, Vigyan Ashram plans to scale up the programme to include 500 or 1000 schools.

# A Breath of Fresh Education!

*written by Andrew Smallman for PSCS January 1995 Newsletter*

The Puget Sound Community School (PSCS) is a small, private, non-profit school based in Seattle, Washington, USA. Currently, the school has 30 students between 11 and 18 years old and 6 staff members. In its 11th year now, PSCS was founded upon the belief that people are intrinsically compelled by their own curiosity and desires to learn, and when provided a positive and supportive environment will enthusiastically pursue meaningful and challenging tasks.

To create such an environment, at PSCS there is respect for all aspects of a person's life – emotional, social, intellectual, interpersonal, moral, spiritual, artistic, and physical – in a collaborative and encouraging community of staff, students, parents, and volunteers. In addition, PSCS students independently choose how to spend their time without interference from anyone. They may play, read, work on academics or other projects, reflect, talk with friends, apprentice in the community, etc.

With such freedom comes responsibility. Community members expect freely given commitments to be honoured. A high standard of respectful behaviour and mature conduct is both expected of the students and modeled by the staff. Instances of discrimination, prejudice, and assumption are addressed. The vitality of PSCS depends heavily on the regular involvement of parents and other adult members of the community. Opportunities to participate in teaching, learning, and other activities abound, thus providing our students a diversity of skills, interests, and enthusiasms, and a strong network of physical and emotional support. The responsibilities of governing the school are shared among the staff, students, parents, volunteers, and representatives of the community.

PSCS is part of the greater community. As such, students develop a deeply felt sense of connection to both the human community and the natural world. People who have been involved in this type of education are confident, know what they want, and know how to create things for themselves. PSCS maintains a flexible structure, free to adhere to valid traditional forms and also free to create new ones.

During the final meeting of our Physical Education tutorial before the winter break I had one of my favourite moments (of many wonderful moments, I should add) of the fall. While most of the students were exploring Marymoor Park, one of the students and I went for a walk. During the walk we talked about the programme, what choices she had made for the fall and what she was planning on doing during the winter quarter. We talked about the structure of PSCS, and how students have the freedom to decide what classes they take. I told her that this is the philosophical principle that people have the hardest time understanding. Since that conversation I have been thinking it would be helpful to put the reasons why we operate this way in print.

Educator Daniel Greenberg has written about the character traits that schools should endeavour to

nurture in children. Among them, he says, are independence, self-reliance, confidence, open-mindedness, tolerance of differences, the ability to concentrate, the ability to focus, and resilience in the face of adversity. If those are the desired outcomes, then the question is how to nurture them. Greenberg asserts, and I wholeheartedly agree, that they cannot be nurtured in any environment that prevents children from making the important decisions about their lives, which is the environment that exists in most schools.

Our school system is built on fear. Fear that if children are not made to do specific things then they will not learn them. Fear that if left to their own choices, children will cease to develop, that they will sacrifice their futures to indulge themselves with trivial pursuits in the present. From that fear a list of required subjects is created, as if students would not learn to read and

write, add and subtract if they were not required subjects in school. We haven't learned the lesson that every baby and toddler can teach us — that human beings are born with the innate desire to learn.

The truth is that in their good-intentioned efforts to provide children with a well-rounded data bank of knowledge, schools are educating children to hate learning, to distrust adults, and to not listen to their own inner voices. Tragically, most educators think this is a worthwhile trade.

I have the daily pleasure of watching my 22 month-old daughter as she interacts in her environment. As a teacher I see the most motivated, independent learner I have ever witnessed. She (and every one of us) was born with the character traits I mentioned earlier. No, she would not survive without the help of adults and she does need boundaries in which to grow. But I would never tell her to put down the book she is thumbing through to make her pick up her crayons and colour, or force her to surrender the doll she is holding because I think she should be shaking a rattle. It sounds absurd, but it is exactly what schools do to children every day. I know that the spark of life I see in my daughter's eyes would diminish if each of her activities were externally regulated.

Greenberg also wrote, "Freedom of choice, freedom of action, freedom to bear the results of action — these are the three great freedoms that constitute personal responsibility." In traditional school settings these freedoms do not exist for students. Without them it is impossible for people to learn to be responsible for their actions and, as Greenberg goes on to say, "Ethics begins from the proposition that man is responsible for his acts. ... To be ethical you must be capable of choosing a path and accepting full responsibility for the choice, and for the consequences." Ethics are at the core of feeling empowered in society, especially one built on the precepts of democracy. When people are raised in a system that denies them the opportunity to be responsible, it prevents them from feeling

empowered as adults. The end result is a citizenry that feels disconnected from the important decisions that guide their lives. This is why it is so difficult to get people, especially young people who have just finished school, to vote.

The goal of PSCS is to tap into the students' inherent desire to learn by providing them activities in which they have a strong interest, to combine students with community members knowledgeable in a subject, and to expose students to the diversity of the community by having our activities take place in a variety of locations. For the reasons just stated, we believe that the education of young people can best be accomplished by following the individual and collective interests of our students. To that end we work to find apprenticeships, community service projects, on-line activities, field trips, and tutorials that appeal to the students. From that appeal, we believe students will naturally learn all they need to know to function as effective citizens. Further, we believe that they will develop a strong sense of responsibility, as well as the traits of independence, self-reliance, confidence, open mindedness, a tolerance of differences, the ability to concentrate, the ability to focus, resilience in the face of adversity, having been allowed to participate in the important decisions of their lives.

# ARTICLES

The sea is our mother  
We live in the lap of the sea  
The sea is the destroyer  
But how can you hate your mother?

– by K. Stalin, a boy who lives in  
Periyaveerampattnam village, Tamilnadu

In Panjalapuram in Devanampattinam, Cuddalore, made famous by Bollywood star Vivek Oberoi's exemplary relief work for tsunami victims, 22-year-old Velvizhi, daughter of a fisherman, is devastated. The tsunami took away her thatched house with all their clothes, utensils and other belongings. But what Velvizhi is mourning is the loss of her B.A. certificate, the books and papers for her M.A. (history) course, and the receipt for Rs 1000 that she paid for the examination she is due to write this April. Having seen her mother slave all her life, caught between an alcoholic father and a spendthrift brother, Velvizhi wants to complete her M.A. and do a computer course so that she can make "a life for myself that is not like my mother's".

In Sonamkuppam, a fishing colony in Cuddalore Old Town, a group of little children is discussing how the tsunami "will return on January 26 to kill all of us". Seven-year-old Priya was playing near her house that morning. She and her mother took refuge on a bridge near their house. "I'm very scared of the sea," she says. "Everybody here, as well as the man on tv, said the tsunami will come back to kill us all on January 26".

Eight-year-old Sajid Kumar agrees with Priya. He is busy adjusting the straps of his brand new school bag which he got at the distribution centre in his school. He is thrilled with it and carries it wherever he goes. He tells us that the sea killed his father, but the villagers tell us he is hallucinating because his father passed away two years back.

In Panjalapuram, 11-year-old Vidya flashes a brilliant smile and asks if she can accompany me around the fishing village. She was washing vessels in her house that was close to the sea and is now totally devastated. She is in class seven and determined to continue her education. "I don't want to wash vessels in other people's homes like my mother. I want to study well and get a job," she says.

– Rasheeda Bhagat



# Crossroads with a Difference

by K Madhavi, Janaki Iyer and N SreeKumar

Ananda Bharathi was started in 1989 as a non-formal school located in Tarnaka, Secunderabad, for girls who work as domestic help in and around Tarnaka. Girls come to the school at the age of 5-12 years without much literacy. All of them are from poor families and most belong to Scheduled and Backward classes. After the 5<sup>th</sup> standard, children who are found to be ready are sent to residential schools after clearing the entrance examination conducted by the State Government. Ananda Bharathi continues to provide emotional and moral support to these students even as they continue their schooling. This article is a result of discussions about career options for four girls from Ananda Bharathi, when they graduated from 10<sup>th</sup> class with First Divisions.

Students who have just completed 10<sup>th</sup> class often find themselves at a crossroads. Their background, the path taken that leads them to the crossroads, the destination and the route to it are crucial factors to consider. Since the long-term direction of the child's education and career depends on the courses taken during the Intermediate, a serious discussion after the 10<sup>th</sup> is warranted. Most of the middle and upper middle class children evaluate career options in terms of what they are interested in and how well they have done in the exams. While the choice may be difficult, the mechanism of exercising that choice is not.

For students coming from poor families, things are very different. Their family background, how and where they have studied till this point, the career they choose and the means they use to achieve it is not the same as with their privileged peers. These children are quite often first generation literates. There is a lot more to think and many more constraints to be considered. For them it is a crossroads with a difference.

One of our students, Nirmala, had joined a diploma course in a reputed government polytechnic in Tirupati. The college did not have a hostel attached to it because of which she did not have a proper place to stay. Insufficient nutrition made her anemic and she found it extremely difficult to cope with the studies at the college and eventually dropped out of the course after one year. Later she joined intermediate with Biology,

Physics and Chemistry in a government residential college in Hyderabad and passed with a first class. Another student, Satish, who had joined a diploma course at a government polytechnic in Hyderabad, faced discrimination from his classmates. With help in studies as well as moral support from the friends of Ananda Bharathi, he completed his diploma with good marks and is now working in a private firm.

## Lessons from these experiences

From these experiences we realized that it is not enough for these students to just get admission in a course. They have many disadvantages like inadequate exposure to English, insufficient communication skills and lack of support from the family. Adding to the difficulties of these students are the caste bias, class bias and gender bias prevalent at the college or institute. All these damage the student's self-esteem. We observed that in Nirmala's case, all these biases worked against her. She could not get accommodation as a paying guest despite our efforts. In Satish's case, in the face of discrimination, he needed continuous counselling to stand-up and face the situation.

*Need for support:* These students need support in studies, help in dealing with new situations, apart from practical support in terms of access to a hostel and occasional counselling. A mentor at the institute or a local support group would be of immense help.

*Need to avoid a long career plan:* These students and their families cannot afford to follow the 'usual' career path projected for middle class students. Many factors that are assumed or taken for granted for middle class students are major stumbling blocks for underprivileged students, for whom higher education is an advantage they must fight to gain. Intermediate stops and evaluation (certification or qualification) would give them opportunity to take advantage of the time spent in case they drop out. Otherwise, it would be a waste of time. The career choice should involve the family as they would need to understand the time and resource commitments involved. A support group should be able to provide to the family details of the duration of the course, apprenticeship period if applicable, finances, amount of family support required, demands of that profession in terms of time, travel, etc.. They should be given an estimate of how long it would take to settle in that field and earn a decent living, and what professional hazards they should be prepared for. For example, we evaluated the option of a career in law for one of the girls. After consideration of the time of study and the time required to establish a career, we realized this was a very difficult option for this girl.

*Medium of instruction:* The medium of instruction should not be changed in Intermediate because the student may not be able to compete successfully.

## **Social structure**

Social values or the larger societal good is rarely considered when looking at job options. Emphasis is usually on what benefits the individual. We felt that the larger societal interests need to be kept in mind while discussing career options for these students as well as their privileged peers.

## **Employment scenario**

Government jobs are rare or very difficult to get. Private jobs are based on competitive skills and there is no special consideration for the socially disadvantaged.

To make it worse, corporate employers often give more value to external looks and life-style of the employees, where these people are at a disadvantage. Recruitment by small-time private employers like tailors, small laboratories, hospitals, small offices, etc is through influence and is not easy to come by for these students. Their best bet would be to start with somebody known who understands and appreciates their background and calibre.

We also discussed the all-prevalent concern about shrinking employment opportunities. In this context, it is necessary to look at the larger employment scenario. Encouraging people to take up sustainable jobs which would also help them to form a network or a community for mutual support seemed a good option. In addition to skills in their respective jobs, marketing and management skills need to be developed among the group members to make the group independent. Self-employment options should be evaluated. It would be an advantage if people could work with their families. Networking with micro-credit groups would help.

These young people could be gainfully employed in traditional, sustainable areas like herbal medicine, handlooms and dyeing. This needs a commercially viable, stable set-up to support them. They could work with NGOs doing community work, and form co-operatives.

It was clear that making a career choice is not very simple, especially for poor students with social, economic and academic roadblocks in their lives. With some luck and hard work we may come up with solutions for one or two students. But finding a sustainable solution to this problem needs participation and involvement of as many people as are willing. Then perhaps the student can turn in the right direction at this crossroad, which has so many roadblocks and stop signals.

# The Animal School

by Arvind Gupta

## From the book 'The IITians' by Sandipan Deb, Penguin 2004

'Meet Arvind Gupta,' Dunu Roy told me as I was taking his leave. 'Who is he?' I asked. 'What does he do?' 'Oh, he's a mad guy,' Roy said. 'He makes toys.' Toys! An IITian making toys?

Arvind Gupta, after graduating from IIT Kanpur, went to work with the Hoshangabad Science Programme. This was a programme committed to teaching science the proper way. Gupta started devising toys for children from simple and local materials that would allow them to experience science in a more direct way. He has made several films on science and has written several books as well. He spends a lot of time translating good science books into Hindi.

'Any fool can make a thing complicated, right!' he says. 'It's simplicity which is difficult to achieve.'

The following are some articles / abstracts from his website. The complete list of articles and books can be found at [www.arvindguptatoys.com](http://www.arvindguptatoys.com).

Once upon a time the animals decided they must do something decisive to meet the increasing complexity of their society. They held a meeting and finally decided to organize a school.

The curriculum consisted of running, climbing, swimming and flying. Since these were the basic behaviours of most animals, they decided that all the students should take all the subjects.

The duck proved to be excellent at swimming, better in fact, than his teacher. He also did well in flying. But he proved to be very poor in running. Since he was poor in this subject, he was made to stay after school to practice it and even had to drop swimming in order to get more time in which to practice running. He was kept at this poorest subject until his webbed feet were so badly damaged that he became only average at swimming. But average was acceptable in the school, so nobody worried about that – except the duck.

The rabbit started at the top of her class in running, but finally had a nervous breakdown because of so much make-up time in swimming – a subject she hated.

The squirrel was excellent at climbing until he developed a psychological block in flying class, when

the teacher insisted he start from the ground instead of from the tops of trees. He was kept at attempting to fly until he became muscle-bound – and received a C in climbing and a D in running.

The eagle was the school's worst discipline problem; in climbing class, she beat all of the others to the top of the tree used for examination purposes in this subject, but she insisted on using her own method of getting there.

The gophers, of course, stayed out of school and fought the tax levied for education because digging was not included in the curriculum. They apprenticed their children to the badger and later joined the groundhogs and eventually started a private school offering alternative education.

Source: [www.arvindguptatoys.com](http://www.arvindguptatoys.com)

## Book Reviews

*The Sangam Age: South India 2000 Years Ago*, Malini Srinivasan and S. Suresh, Macmillan, India, Rs. 98

This is a comprehensive, innovative and commendable effort on the part of the TVS Educational Society and Macmillan to provide an insight to young readers regarding the efflorescence of ancient Thamizh culture in South India. The book, first of its kind, combining narrative style with excellent supportive illustrations based on in-depth research of the period, provides challenging material both for the teachers and the students. Based on authentic sources, the book reveals the unbroken chain of traditions of Thamizh culture even today and is bound to inculcate heritage awareness among the readers. The lucid and candid style of presentation is descriptive, interesting and thought-provoking.

Social history primarily concerns itself with the daily life of the people in the past, the character of family and household life and their interaction in a community. It examines how the prevalent conditions of war and peace and the general nature of the administration influence the everyday life of the people. It comprises the human as well as the economic relations of different classes to one another, the social stratification and groups, occupations, crafts and trades, and the evolved cultural dimensions in the field of religion, art, literature, architecture, learning and thought. The book under review truly constitutes the social history of the Thamizh people.

The highlight of the book is the unfolding of the Sangam Age (rarely provided in earlier books) in a narrative style by describing the life of Chaathan, a merchant of Madurai. Describing his lifestyle, family, home environment and daily activities, interesting features of the lifestyle, amusements, festivals and the vital economic and socio-cultural aspects of the Sangam people are gradually revealed. The tour to Vanji, Uraiyoor and Puhaar and back to Madurai undertaken by Chaathan and his family is described in a lively manner. This description provides the reader with a travel tour of their own along with the family,

experiencing the journey in a bullock cart, enjoying the countryside sights, the flavour of urban life and having a peep into the bazaars, temples, festivals and ceremonial activities of various cities. Be it the hospitality of the Thamizh people, the worship of Maal and Cheyon, the visit to the bead workshop or participating in a wedding, the reader along with the family celebrates every event, with the befitting finale: a visit to Puhaar, the busy trading centre and administrative capital and port of the Chozhas. One gets unforgettable vistas of ships laden with goods, the variety of stacked goods and attractive wares at a bazaar and the peaceful magnificence of the Buddhist Vihara. The cities of Madurai, Vanji, Uraiyoor and Puhaar come alive and one keeps admiring and comparing the scenes presented.

Good strength to the rendering has been provided by brilliant, imaginative and explanatory illustrations. The maps especially are very educative and thorough. The special effort taken by the authors to provide supplementary material regarding the sources, archaeological and literary, the language and script of the Sangam people is exemplary. The section on follow-up activities provides opportunity for a dynamic classroom interaction. The questionnaire, research topics and projects offer a challenge and will make learning an enjoyable experience for children.

The section 'More About the Sangam Age' that provides extra information on the Sangam period, is a researcher's delight and a storehouse of information on a variety of topics including landscapes of Sangam poems, structure of Sangam society, politics, administration and dynamics of trade and commerce. The brief notes on poets, Vel chieftains and dynastic rulers provide role models worthy of emulation. Glossaries provided strengthen the academic content of the book. The authors deserve praise for meticulous planning, the effort in providing interesting and innovative illustrations, recognizing women's role in society, in the subtle use of Sangam poems to enhance the message conveyed, and the thought-provoking and exhaustive worksheets. This book would serve as an

excellent supplementary reader for school students and the additional information provided may be of use to young researchers and the interested public. For the teachers, it is a gift as it would make their task enjoyable and rewarding. Kudos to Dr Malini Srinivasan and Dr Suresh.

*The Age of the Pallavas: South India 1500 Years Ago*  
Malini Srinivasan and S. Suresh, Macmillan, India,  
Rs 98

This is a systematic, elaborate and in depth account of the period. In an adequate political background, the rich and varied socio-cultural history of the people is unfolded with meaningful illustrations and explanatory photographs. The simple, clear diction, the logical sequences provided and the flavour of administrative cultural heritage enhance the academic content of the book. The remarkable achievements of the Pallava rulers in every sphere – political, administrative, socio-economic and cultural – are vividly portrayed in the book.

With the passing of the power and influence of the Guptas and their immediate successors in northern India, the centre of interest shifted southwards again to the western Deccan and further south to Thamizhnadu. The most significant events of the period took place south of the Vindhyas and in spheres other than purely political. A synthesis of the dominant cultural strains of the time was to emerge – ‘the assimilation of the Aryan pattern with Dravidian culture’. The institution of South India was more firmly established this time and was to maintain a remarkable continuity. The Pallava period, therefore, also saw the emergence of what might be broadly described as the ‘Thamizh personality’ which was to contribute substantially to the development of Indian civilization. The process of assimilation and reaction can be seen for instance in the use of Prakrit and Sanskrit earlier, to be replaced by Sanskrit and predominantly Thamizh in the corpus of inscriptions of the Pallavas. The kingdoms of the western Deccan maintained their historical role of acting as the bridge between the north and south facilitating the transmission of ideas from one area to another. But this was not a passive role as is clear from the example of architectural history in this period, where the Deccan style provided new forms both for the Northern and for the Dravidian style.

One must also take note that the political history of the Deccan and Thamizhnaadu evolved a pattern based on the geo-political influences of the region—a rivalry for ownership of fertile resources, waterways as well as territorial and cultural competitions. Though politically and militarily balanced, the Pallavas had to face the rivalry of the Chalukyas of Badaami and later the Rashtrakutas of Malked and the Pandavas with their constant bid to assert independence. The Pallavas, though successful for a period, fell prey to the enervating process of constant conflicts and were taken over by the resurgent Chozhas. This aspect has been outlined meaningfully in the text.

Introducing Mallai (Maa-malla-puram) the well-known tourist centre of Thamizhnaadu, the book directly delves into the sources, origin, life and times of the Pallavas. Sources are the roots and indicators of historical evidence. The illustrated epigraphical sources set an authentic tone to the narration. In simple exposition the theories of origin of the Pallavas are presented, keeping in mind the young readers. The ‘Great’ Pallavas, Vichitra-chitha Mahendhra Varman, Maa Malla Narasimha Varman I and Raja Simha Narasimha Varman II provide a magnificent array of achievers in political and cultural spheres. Wars and conflicts of the period and administrative duties of the king and his council, the queen’s role in the royal scenario and a well-defined governance of the Pallava land are explicitly covered. Special highlights are the Grantha script evolution under the Pallavas, the contributions of great writers like Bhaaravi and Dhandin, and a conjectural plan of Kanchi with palaces, temples, Jain pallis, Buddhist viharas and Ghatikas, promoting a cosmopolitan atmosphere.

The economic activities of various artisans, farmers and traders are clearly defined based on literary sources. Descriptions of houses, family, clothes, hairstyles and jewelry make interesting reading. Notes on astrology, vaasthu shashtra and measurements record the traditional and intellectual prowess of the Pallavas. The accounts of famines and water management through irrigation provide a practical and modern outlook. The chapter ‘The Rhythms of the Pallava Age’ delineates the efficacy of the Pallavas in the field of dance and music.

The in-depth study into the religious conditions of the Pallava times – the flourishing of Jain and Buddhist

orders guided by teachers of great renown, and the resurgence of Hinduism under the Bhakti movement headed by the Aazhvars and Naayan-maars evince the moral and ethical character of the environment enriched with gems of devotional literature.

Bhakthi led to unprecedented activities such as temple building, sculpture (metal and stone) production, rituals and celebrations of festivals which are exposed with suitable illustrations. The temple as 'the central space of culture and religion' is explicitly recorded.

The greatest contribution of the Pallavas in the field of art and architecture is extensively represented through a detailed and excellent account of the Pallava style of architecture from cave temples to structural temples, from wondrous bas-relief presentations to beautiful individual sculptures with suitable illustrations and photographs. The colored supplement of the monuments is really a bonus to the reader. The book provides an excellent coverage of the art techniques and monuments in varied locations.

The appendix is resourceful and meaningful. The follow-up activities really challenge and provide inspiration for a good learning and understanding process. The authors are to be truly congratulated for the thinking and analytical work that has gone into this section. The task before the students and teachers in mastering this text is immense but not formidable. Commitment and enthusiasm should combine to enjoy the fruits of this rewarding labour.

These two books have been reviewed by Dr Prema Kasthuri, a well-known professor of history. The reviews were published in 'Teachers Talk', a publication of the TVS Educational Society.

*Little Science*: Arvind Gupta, Illustrations by Avinash Deshpande, Eklavya, Bhopal, Rs. 20

"Once a parent gave a gleaming plastic new toy to a child with instructions to handle it carefully. The little girl made a very intelligent assessment of the toy within three minutes and was merrily playing with the box." Written by Arvind Gupta, *Little Science* describes how children love to play and learn. The book is a description of the wonderfully simple activities that can be done for learning mathematics and science. One of the most interesting activities in the book is a Chinese puzzle called Tangram. A paper cut into pre-determined seven shapes can be combined in different orientations to make shapes of animals, birds and human beings. This is a very interesting document with a wonderful list of activities for children.

*Totto-Chan*: Tetsuko Kuroyanagi, translated by Dorothy Britton, National Book Trust, Delhi

"You are really a good girl". This line summarizes the school experience of Totto-Chan in an ideal school in Tokyo that combined learning with fun, freedom and love. Removed from her school at first grade because the teacher could not deal with a student that spoke with the sparrows and the street musicians, Totto-Chan thrived in the school run by Sosaku Kobayashi. The railroad cars that served as classrooms, the farmer teacher, the camp inside the school, the ghost hunt and the nature walks all combined to make this school a unique experience for children. This is a very interesting first-hand account of a school (*Totto-Chan: The little Girl at the Window*), run by an extraordinary man committed to freedom of expression and activity.

These two reviews were taken from the website [www.arvindguptatoys](http://www.arvindguptatoys).

Thais are firm believers in what they call *jai yen* — cool heart. They have lost family members, their homes have been swept away, hope has been washed away, but they are summoning the ability to keep a cool heart.

It is a daunting task. Rubble is stacked two storeys high — as high as the waves that roared in.

— from 'I'm not the only one' by Harinder Baweja

# Storytelling tapestry

## Kathalaya Trust

Kathalaya Trust based in Bangalore is an NGO that strives to revive storytelling and in the integration of storytelling into the school curricula. Kathalaya, founded in 1999, works with over 60 schools in Bangalore, including 50 rural schools with a project to integrate storytelling into the curriculum.

The organization has trained over 6000 teachers in the art of storytelling and the use of storytelling as a powerful educational tool and reached out to over 30,000 children. Kathalaya conducts regular teacher training programme, children's workshops and offers consultancy in storytelling. It has taken its stories to countries like Japan, South Africa, Switzerland, Poland, Singapore and the USA.

## Teacher Training

Kathalaya has developed 12 teacher-training modules to enable teachers to effectively use storytelling as an classroom-teaching tool. Each module requires a minimum of two to three days and the entire course would entail a six-month Diploma course. Kathalaya is the only centre in India to offer such a course. Affiliated to the Jonesborough International Institute of Storytelling, Kathalaya has developed its own course contents to meet the local requirements of teachers, parents and children in schools.

## Storytelling tradition

Centuries ago a wise old man began a story, seated on the earth outside his house around a fire. It was under the starlit vastness of a winter night when the earth, plants, animals and people were quiet; storytelling was a significant part of our lives.

'Why does an elephant have a long trunk? What did the sparrow tell the crow? How did the peacock get

its eyes?' These were stories that kindled awe and wonder in children's minds.

Young people would gather around the listener and would listen carefully to the stories and feel the characters. Wide-eyed and open-mouthed, they often carried these memories which triggered their young intellect. To question and wonder became a part of learning through observation and listening.

Many stories unfolded during this time, of crops and birds and animals and folks during the quiet unending story hours. Those who listened to them remembered to tell them to their children and kept the stories alive. Each generation saw to it that the oral traditions were passed on virtually unchanged for uncounted years. Earlier, aunts, uncles, mothers and fathers would quietly work or sit and listen, for the telling was neither ritual nor entertainment; poetry or prose. Rather, it was all these things and more, much more. As the storyteller wove his tale he was also knitting a new generation to its long past, maintaining a cultural tapestry in a way that the most advanced printing, computer or video technology has yet to match.

Storytelling is as old as our civilization. From time immemorial, ancient wisdom has been passed on for generations through this medium of oral tradition. Through myths, legends, folklore, ballads, the storytellers in the past have rendered this traditional art to transmit age-old wisdom through various performances and art forms. The stories were told aloud and the words were clear and contained words that had a repetitive tendency or a rhythm. Recalling the stories was easy; stories were retold as proverbial saying, riddles or sayings. This was storytelling in its purest form involving the teller and the listener. Later, the stories and the storytellers celebrated the tradition

of telling through art and expressive forms of performances. Music and rhythm added flavour to the telling.

Expressions and performances like *Harikatha*, *Yakshagana*, *Kathakali*, *Thogulugombe atta*, *Chitrakathis*, *Burrakathas*, music and dances have helped us keep our stories and its traditions alive.

Every region around the world has a treasure of stories created from significant facts that existed in people's own lands. They were indigenous stories created out of the soil and related to the environment. People learnt of their environment, soil and folk traditions whilst listening to the tales every evening under the shade of a vast tree.

### **Story telling today**

We tell stories all the time of our lives and experiences sharing matters close to our heart – the listener and the speaker. Today we spend more time chatting silently with our technological friends who only answer us through beeps and tones. We spend less and less time each day to talk to our neighbours, vendors across the street, friends and family, thus losing the art of pure conversation and simple communication. Where is then, the time to tell a story?

The pure art of storytelling is slowly dying...with very few people practising the art and very few occasions for storytelling sessions. Storytelling has been compressed into animated cartoon series, TV serials and movies that have great visual impact. Attention is diverted into watching the spectrum of colours and rapid action on a screen rather than interacting live with a storyteller sharing the feelings and words and of the characters.

Is storytelling redundant in this age? one might ask. But considering the power of storytelling to attract a child and keep the child in rapt attention, storytelling cannot be redundant.

A well-told story will any day attract an adult or a child. Any art would die, if there is not application or

relevance to the present times. The teller and listener share the same platform, share their feelings, and understand each other. There are many unsaid feelings which form deep down in the hearts of the listener and the teller that blossom into a shared moment of togetherness.

### **Storytelling in schools**

The use of storytelling for entertaining masses is nothing new. But the integration of storytelling into the curriculum is slowly gaining acceptance in schools. Storytelling has once again found credence as more and more schools use it as an integrated teaching tool. One could see a clear change towards this direction in the present day textbooks where there is more emphasis on storytelling and verbal communication.

Storytelling in a classroom addresses many issues in education—:

- To generate interest in the subjects of study and improve the attention span of children
- To have better conceptual understanding of subjects
- To address multiple intelligence in children and to facilitate creativity
- To awaken 'learning' in education
- To enable interactive and participatory learning
- To help improve methodologies of classroom teaching
- To facilitate creativity in children
- To use storytelling as a new tool of communication
- To develop a story-based curriculum for better understanding of subjects and concepts

However, the acceptance by schools for such an idea has its challenges and hurdles. "Oh...we tell a lot of stories to children..." is the most common of all responses. Or... "How could stories be integrated into the curriculum? ..." "Our teachers are already burdened by the syllabi..." is the other common

response. We already have a lot of extra-curricular activities! Storytelling is not viewed seriously and the relevance questioned.

Does storytelling increase the burden of teachers? It is a misconception that doing storytelling sessions in addition to the lessons increases the teacher's work. Well, a teacher needs to undergo an initial training to be able to experience it. In order to be an effective storytelling educator a teacher needs to be convinced about its use in order to feel motivated and interested.

Storytelling in a classroom does not require a stage or lighting or any elaborate preparations. Stories could be told using picture stories, glove Puppets, masks, mime or a simple shadow play. The teacher needs to spend a little time in creating these story modules and she can mix and match the characters in the stories. For example, if the teacher has a set of pictures of animals and birds, she could use it to tell a wide range of tales.

When linked to the curriculum, the story depends on the subject to be taught. Usually when a teacher reads up many stories, one could see the themes emerging from the stories and she could, to start with, use these stories as an introduction to the lessons. After gaining a grip of the stories and storytelling, one could create a lesson plan based on the story and achieve the objectives of the particular lesson. The stories provide a link to the lessons and the teacher could use the link to recall incidents from the story and extrapolate

it to the lessons. Similarly the teachers could frame activities based on the story and lesson. This technique will make the child enjoy the learning process and appreciate the lesson much better than the conventional method of teaching. Children become more expressive, learn to recall, use appropriate words and find creative expressions to their thoughts.

Effective storytelling depends on the teller, than the story. The teller's belief in the story, confidence, voice, body language, the grip over the story and the focus topic, spontaneity, expressions and gestures, the method of narration...all put together form the basis of a good storytelling session.

Around the world, especially in the developing countries, storytelling is being revived with special focus on classroom education. A number of storytellers today weave stories for a wide range of audience ranging from little toddlers to adults. Storytelling is being used in management training, HR, and new areas of application of this wonderful art are being explored.

In an atmosphere of imparting learning by achievement of prescribed competencies by the curriculum, storytelling is one of the competencies that a teacher cannot do without. And for children, what best gift could they have, than a teacher who tells them wonderful stories?

There was a 10-year-old non-tribal boy with a deep gash on his thigh.

“We had to suture him up. He had lost his parents. He had no relatives. We had no idea where he was coming from. I gave the local anaesthetic but the pain would not go. He kept crying. I told one of my assistants to simply hug him. The child didn't know the man holding him. But he hugged him back, the pain was gone. While they were hugging, I sutured him up. It was not physical pain that was making him cry.”

– Dr Sameer Kapoor, Port Blair,  
the Andamans quoted by Vijay Simha

# Mathematics and Civil Rights

*The following is an article by Reshma Madhusudhan, a Learning Network volunteer*

In the summer of 2003, after a one-year hiatus from employment, I debated on whether or not I should go back to corporate work or switch gears. I had harboured the desire to work towards providing quality education. Living in Chicago, I was eager to learn about the local education system and its ups and downs. I wanted a chance to participate in the education system by directly witnessing change initiatives around me – not just by hearing or reading about them.

I remembered seeing an interview of Robert Moses, an African-American civil rights leader on public television the previous year. In that interview, he talked about the Algebra Project and the Young People's Project (YPP). I called Omo Moses, his son, who had recently moved to Chicago to start the YPP program in the area and voila! – I jumped right in. The mission of YPP: "to organize young people to radically change their education, and the way they relate to it". I couldn't have asked for a more meaningful experience!

## Mathematics and civil rights

In the 1960s as a grassroots leader of the Civil Rights movement, Robert (Bob) Moses appealed on behalf of black Americans living in the Mississippi Delta for the right of one person, one vote. He voiced that "fairness meant that the United States could not turn its back on the flagrant neglect of an entire citizenry's literacy education and then demand that literacy be a necessary condition for their citizenship – in this case, their right to vote." His sustained efforts lead to the voter registration act of 1964, giving all African-Americans the right to vote. In 1982, Bob founded the Algebra Project after witnessing the inequality in the education system as his own kids grew up.

In the United States today, math literacy has become vital for communities to participate in the processes and decisions that change their lives, and for their

own economic stability. To give an idea of the US education system, if a child is not prepared enough by eighth grade to study higher level mathematics (algebra, geometry, calculus, and trigonometry), he/she is not allowed to take courses or subjects in mathematics or sciences subsequently. The majority of the population is unaware of such weeding mechanisms. The lack of resources at the elementary and middle school levels renders most students and teachers unprepared for high school. Even if a child is interested, in most city and rural schools these subjects are not even offered at the high school level, eventually shutting down their access to higher education that is relevant to the technological advances of today.

So many Americans, especially African-Americans, Latinos, and poorer white communities, are being systematically coerced into serf-like positions in society. Bob Moses says, "As was true of the southern civil rights movement, where sharecroppers, maids, day workers, and others who were expected to be silent found their voice, meaningful school reform will require the voices of students and communities demanding the quality education that too many assume they can't handle and don't want." Little did Bob Moses know that as he taught algebra to his daughter and her friends to help them have enough skills in algebra to qualify for honours courses in high school, the Algebra Project would become his next civil rights crusade—for education as a fundamental structure for opportunity and citizenship.

Mathematics is a symbolic language – a regimented and structured language. There is an inherent fear of mathematics that develops during childhood due to its methods of presentation. The Algebra Project relies upon parents and teachers to join hands in classrooms and outside to form a network that addresses mathematics without blindly accepting its regimented structure. The organizers render mathematics as an

experiential process where the students take ownership of their work and the mathematical models they create. In this process, students engage in an activity or physical event, create and share stories and pictorial representations of their experiences, communicate, collectively select and code features of the event that they deem necessary for a complete representation and come up with their own symbolic representation! What fun! The relation the student makes between real life experiences to the symbolism and meaningful expressions created dissolve his/her fear of mathematics and gives them a collective ownership.

The founding members of YPP all witnessed this process during their formative years and grew up feeling the need to organize themselves to sustain and grow the communities' rightful demand for quality education. As they moved from middle to high school to college, their development and those of the young people they've attracted, has formed the basis for the evolution of a true youth driven organization. Founded in 1996, YPP is currently active in Jackson-Mississippi, Yuma-Arizona, Chicago, Miami, and Boston in the United States.

Each YPP (city or rural) site trains high school and college students (Math Literacy Workers) that serve elementary and middle school students in their communities through a variety of on and off-site programme. The high school and college students work in teams, planning math workshops along the lines of the experiential process, which they present to the younger students at the outreach sites. The students meet in the evenings, at schools after regular school hours, at community centres, churches, etc. – wherever they find a place to engage, learn and have fun. Each workshop is sought out to be strong conceptually and delivered effectively. The students often design the activities on their own, after receiving adequate training on relevant curriculum. The team members observe themselves and the younger students during the workshop, and debrief at the end of each day. The debrief sessions allow them to comment on the strengths and challenges faced, and

recommend ways to improve their own understandings and organize themselves better for the next workshop.

Learning math is not the only goal of the engagements. By planning and presenting workshops, the math literacy workers develop leadership, facilitation, and communication skills. They are inspired by their own work to recognize and address their community's demands for meaningful education and quality life. A large part of the YPP network depends upon the support shown by the communities served. The math literacy workers also involve themselves in civic issues by engaging in observing, reading, writing and documenting projects. They work in teams, video documenting and interviewing people in the communities they work in. They collect revealing data and sincerely discuss some of the biggest issues facing their neighbourhoods – drugs, violence, racial tensions, unsafe environments, unstable family structures, housing, economic instability, neglect by municipalities, etc. To see these students spend their free evening hours every day at YPP, consciously make a choice to constructively and collectively develop, rather than be a part of the very issues they talk about – is truly inspiring and heartwarming! Their numbers, sweats, smiles and tears are real!

Every few months, the students showcase their efforts and run an evening of math activities inviting friends, families and others in their communities to rejoice in their development. The support is usually overwhelming, encouraging students at all levels to continue their incredible work. The high school and college students are monetarily provided for by the funding agencies that support YPP. Many of these students honestly explain that they would rather be at YPP earning minimally, than work long hours at a grocery store or shopping mall. They know very well that while developing themselves, they are motivating the younger kids of their communities. By engaging young people in a process in which they learn to “lift as they climb”, YPP is seeking to “raise the floor” for what students expect of themselves, and what schools, families, and communities expect of their children.

# Margabandhu

Margabandhu Joys Pvt Ltd was launched by Murali, and his wife Anuradha, with a strong desire to keep their kids away from television and video games. They saw people sitting in front of TV in their own houses. This set them thinking and led to the discovery of many ancient games from different parts of the world.

## Importance of games

It is said that the Japanese have a curious way of recruiting soldiers for the army. Candidates are asked to play an ancient board game called 'Go'. If they show good strategy skills, they're hired! And even after being recruited, the game is played to further hone their skills. Such is the importance given to traditional games in some countries.

India has a huge repertoire of games that have sadly been neglected. "These games involve the entire family and are a great source of joy as well as learning," says Mr. Murli Eshwar of Margabandhu Joys, who teamed up with architect wife Anuradha Eshwar to revive forgotten games.

They found that children preferred to play board games to computer star wars, if introduced to these board games. They spell out many games—Pachisi, Halluguni Mane, Huli Katta, Aane Katta, Chowkabara, chess derived from the original Chaturang and the 4000-year-old Japanese game 'Go' which tests strategic, logical and creative thinking abilities. They have revived

games played by Red Indians, African tribes and peoples of Ireland, France and China. After all, who wouldn't like to dream of playing Latrunculi (civilian or army version), a Roman game played during 27 BC, or Puluc, a game played during Mayan civilization?

They have manufactured 17 of these games and have also put up information about these games on their website <http://www.margabandhu.com/games.htm>, with directions on how to play these games. They however do not want to have electronic versions of these games as this would mean that their purpose will be defeated, as the charm and fun of playing these games is one which has to be felt and experienced.

The games have shown to increase creativity, strategic thinking and mathematical skills. Apart from this, social interaction gets enhanced and children from wanting to win slowly grow towards wanting to play and interact. The emotional intelligence in such children is definitely much higher than in children who have not learnt enough of social skills. They are also trying to see if autistic children enjoy playing these games.

Erik Luingman, who came to the Phi Phi island resort from Stockholm, has been a volunteer since day one and stayed back even though he had a flight home. His reasoning: "Every time I think of taking the flight home, I think of all the Thai people who will never see family members again. I'm reluctant to leave because there's work to be done and because my mind is occupied. I know I'll hit high depression the day I get home."

– from 'I'm not the only one' by Harinder Baweja

# Growing with Qudrat

*By Sumi and Chandresh*

The following two articles 'Growing with Qudrat' and 'Regenerating our Creativity in India' have been written by Sumi and Chandresh, activists with Shikshantar, a learning group in Rajasthan.

Chandresh <Chandreshsumi@yahoo.com> is presently supporting Shikshantar as a Learning Activist. He has vast experience of working with children and youth all around India. Chandresh believes that every individual can be a self-teacher and a self-learner. He is in a process of de-schooling himself, and his practices-interests include experimenting with life, practicing yoga-sadhana, interacting with nature, and engaging in a search to know him.

## Growing with Qudrat

"You are committing a sin." "You will spoil and ruin your child's life." "You are mad."

These are the reactions of a few people when we tell them that we will un-school our child, Qudrat, because we believe that the present schooling system is harmful. The natural learning spirit of all children gets suffocated as soon as they enter the four walls of school and their innate search for meaning is reduced to mindlessly preparing for 'big' exams. In the name of competition, they are made to suspiciously view their fellow classmates as enemies. In the name of discipline, they are forced to see, hear, speak, behave and act in a certain manner. Moreover, the teacher takes on the role of someone who should be feared (like a jail warden). Such experiences instill nightmares of jealousy, dependency and fear that prevent children from becoming healthy, honest, collaborative and creative human beings.

We are not alone in our decision to un-school Qudrat. We have many role models in Gujarat who have been successfully un-schooling their children for several years. For example, our friends Raju-Deepti have made a conscious decision not to send their son Ruchir to school. They explain, "We believe that nothing can be taught. Learning is an intrinsic process and right from birth children want to expand their learning horizons and even parents should not interfere in their natural self-learning processes. Therefore, as parents, our responsibility is only to nurture our child's diverse

learning interests." Ruchir is now 11 years old and he also says that he doesn't want to go to school. Since his birth, Raju, Deepti have facilitated Ruchir's learning by seeking to provide an atmosphere where he is encouraged to take risks to learn things by himself. Every year, they design their own family learning programme with Ruchir – exploring and creating new ways of living together. Ruchir also publishes his own children's magazine called 'Phoolzar'.

## **"If you don't send Qudrat to school, he will grow up illiterate and uneducated."**

At the outset, it is important to question who is a 'literate' and an 'educated' human being. The entire framework of modern schooling is designed around processes of transmitting, coercing, manipulating, controlling, etc. If viewed objectively, the schooling system represents one of the most violent forms of child labor as it brutally represses most children's mental and physical abilities and seeks to fit into a pre-set mold. Furthermore, it provides no space for them to organically develop their emotional, psychic and spiritual dimensions. It is interesting to note that the Yashpal Committee (1993) reported that in schools around the country, "Much is taught but little is learnt or understood." If this is indeed true, then it is questionable whether those who have degrees can really be called 'educated'.

We have a deep faith in processes of self-learning, collaborative learning and inter-generational learning – which have all been totally misunderstood by so-

called education experts. Children have the intuitive power from birth to understand and develop their self-learning potentials throughout life. For this, no teacher, no school or no NCERT is required. Moreover, our understanding of literacy is not naively limited to only reading / writing, but it is extended to and integrated with all forms of communication, art, aesthetics and creative expression. We believe that to live a meaningful life, one must be self-confident, imaginative and be able to do things practically and sensitively. It is our responsibility as parents to support Qudrat in processes that develop these capacities.

Un-schooling doesn't mean that Qudrat will remain trapped within the four walls of our house. Rather, he will interact, learn and understand with many diverse kinds of people and be able to create dynamic and lasting relations with them. Lastly, un-schooling doesn't mean that we become Qudrat's teachers. Instead, we see ourselves as co-learners — sharing and growing together.

**“You are denying your child his right to a bright future — without a degree he will be nothing.”**

Degrees are necessary only for those who wish to fit into the System. For those who choose not to fit in the System, the lottery ticket of schooling has no value. We draw deep inspiration from friends of ours (in Gujarat and Madhya Pradesh) who, a few years ago, together burnt their academic certificates. This was a form of resistance against (and liberation from) the present System. They are now engaged with diverse social and spiritual movements, experimenting with different ways of living.

The dominant rat-race model of Development forces people to adopt the toxic worldview that they can survive only by exploiting themselves or others. We do not want to participate in or take any benefits from this kind of System. It is our conscious decision to seek out ways to disengage ourselves from it and to create our own ways of being.

We have been thinking about and discussing these larger processes of swaraj in our family since 1996. It

began in the context of our own individual lives as we sought to heal our natural learning spirits from the damage done to us by institutions of thought-control and to re-discover our infinite potentials. We must understand that the swaraj process is not about meekly fitting into the System, but involves radically challenging and questioning it. Swaraj ultimately requires that we embrace deep changes in our own lifestyles and create new patterns of livelihood and self-governance. This can only be done by clarifying our life visions and priorities i.e. how we want to live. And by understanding the self-deceptiveness and futility of, on the one hand, trying to challenge the System while, on the other hand, keeping our or our family's options open to join it.

### **Invitation to those in search of meaning...**

As we ourselves are 'schooled', we have to seriously unlearn many things that have been instilled in us by schools and other institutions of thought-control. Those individuals, parents, teachers, researchers, policy-makers, etc. interested in exploring meaningful and non-exploitative living can start by:

- Making time to reflect on one's own personal strengths, weaknesses, potentials, learning styles, learning experiences, needs and wants, and sharing these with others;
- Organizing a group of parents so that they can collectively facilitate their own and their children's learning in unique ways and start processes of rethinking their lifestyles;
- Conducting applied research studies to understand the phenomena of un-schooling and the diverse forms it takes in communities;
- Creating a base of public pedagogical resources that can be easily accessed by those who wish to undertake un-schooling processes;
- Fighting against policies of compulsory schooling and de-linking schooling and degrees from public/private benefits.

# Regenerating Our Creativity in India

By Sumi-Chandresh

I was good at singing when I was in 5th grade. But whenever I sang in front of my class I was always demotivated by everyone, who said, "You don't know how to sing! Just sit quietly." I was also very curious to know who I am, why are we living, and what is a meaningful life? When I asked my teachers such questions, they totally dismissed me and said, "These questions will not come in your exam. Just cram whatever the text book says." Similarly, whenever I played the harmonium, my family members were always screaming, "What nonsense are you playing? It is not your cup of tea. Keep it aside." I was interested in exploring and experimenting with different ideas, but each time I tried to do so, I was forced by my peers, my teachers, and my family, to do things in a conventional manner.

When I failed in 12th grade, my family members and other friends made comments that implied that I was a failure and good for nothing. These comments tortured me deeply. Shortly after, one of my cousin brothers, who was good at crafts and had an excellent sense of humor, committed suicide due to examination fear and family pressure. His only fault was that he did not do well on his 12th grade examination paper. We lost a person who could have spread happiness all over the world.

The incidents I have been describing are not only limited to me or my brother. The majority of children and youth in India today are facing such problems. They are constantly being suppressed and frustrated by their families, schools, and peer groups. Every human being is a potential creator, thinker and experimenter. But often, our vast human potential remains hidden due to lack of opportunities, oppressive surroundings, and mechanical thinking/living. How do we get beyond these obstacles to create

a united, peaceful, loving and creative India?

## The Demise of Creativity

India, a civilization of diverse cultures, languages, and spiritualities, is a unique role model for the development of indigenous creative forces. According to Devi Prasad (*Art: The Basis of Education, NBT, 1998*), "traditional India did not compartmentalize art and life." The pursuit of knowledge included wisdom, a capacity of discretion, control over the ego, humility, truthfulness, self-dignity, social service, and creativity. For centuries, people explored and shared the meaning of life through creative living expressions and divine creative power in various forms: chores, relationships, farming, cooking, decoration, festivals, games, crafts, music, dances, prayers and yoga. Yet, today, there seems to be a dearth of people who value and seek out creativity in their daily living. In fact, instead of developing and nurturing creative processes in our lives, we are being mechanically conditioned to become more egoistic, rigid, insecure, and dishonest. I see several institutions as responsible for this demise.

*Factory schooling:* In the present model of factory-schooling, no more than 4-5% of pupils are declared 'successful' or 'educated'. Yet of these, very few can creatively think/judge/analyze/synthesize by themselves. The imposed standardization of MLLs (Minimum Levels of Learning) force us to 'fit' into the system – to all follow the same goals in exactly the same way. In the name of examinations, children's diverse abilities/potential/talents are judged in just a three-hour, extremely limited didactic question paper, which punishes students for their creative answers. Pre occupied with performing in the exam, a child's mind is full of tension, fear, and depression. When we can see that schools are nearly as inhumane as prisons

and that they nurture a false sense of superiority/ inferiority, why do we continue to send our children to them?

*Mass Media:* Today, what we should wear, eat, buy, do, is defined by the mass media. We no longer think for ourselves; instead we copy those whom we see — who themselves are usually copying from someone else. The media also makes us passive observers. We are so busy watching others perform, we have neither the time nor the inclination to reflect or to do things ourselves. Moreover, the mass media manipulates our diverse senses of aesthetics and beauty. In today's world, for example, the creative expression of women has been reduced to distorting and destroying one's face and body to win beauty contests. How can we engage with the media in ways that offer us opportunities to develop our aesthetics, imagination and creativity?

*Family and Samaj:* In the name of *samaj* (community/ society), we are constantly told to behave in 'the right way;' that is, to be 'respectful', to be 'silent' and 'submissive', and to seek 'security'. *Samaj* tells us to remain within certain 'safe' boundaries that close us off to diversities which may threaten our narrow identity. It has become a rat race, where people are forced to blindly follow a path of greed, competition and materialism. 'Success' is judged by how much money one has, rather than by creativity or compassion. Can we create such a *samaj* where creativity is valued and everyone has the chance to explore their unique human potentials?

Today there are very few constructive or open channels for children and youth to fully express them. All around us, the world is pressuring us to think in one way: one uniform, one hairstyle, one language, one culture, one identity, one Truth. How do we get out of this system which is designed to homogenize us and kill our diversity?

## Rediscovering Creative Living

To adapt from Paulo Freire (*quoted in bell hooks, Teaching to Transgress, Routledge, 1994*), creative living is a process "to begin always anew, to make, to reconstruct, and to not spoil, to refuse to bureaucratize the mind, to understand and to live life as a process — live to become." Facing the challenges of the future will indeed depend on an artistic, aesthetic, and creative attitude towards life. Though we have much to learn from the past, we cannot copy it. Generating (and regenerating) 'Creative Indias' will depend on our ability to engage in processes of learning, unlearning and relearning. We can begin these processes together by initiating the following steps:

- Very little research has been done on creativity in India. We must carry out applied research on indigenous creativity that can nurture common peoples' aspirations and that can transform the 'systems' before us.
- Instead of simply adding a 'creativity' subject to an already homogeneous/stifling curriculum, policymakers, teachers, parents, students must collectively begin to rethink both the vision of education and its structure.
- Schools can create a pro-creativity learning environment by eliminating competitions and by developing more participatory self-assessment techniques.
- As individuals, all of us must introspect and reflect on our own creative potential and how it can be applied for the regeneration of self and community.

# De-textualizing knowledge

*By K B Jinan*

K B Jinan is an activist-designer who has helped revive the traditional artisan community in North Kerala. Aruvacode is a small village near Nilambur famous for its potters. These potters had all but lost their traditional skills with the influx of cheap industrial substitutes. Led by a movement by K B Jinan, the potters explored the possibilities of terracotta. Kumbham is a result of this revival in artisanship. Kumbham is hailed as a rare instance of a traditional artisan community rehabilitating itself. More information about this group can be found on [www.kumbham.org](http://www.kumbham.org).

## Paradigms of knowledge

The whole tragedy of modernity, represented variously as alienation, boredom, etc., is a direct result of textualization of experience. For knowledge accumulation, autonomy of senses is very important. Knowing is an act of constructing knowledge and all attempts in 'teaching' takes away 'knowing', however sensitive the 'teacher' is. Text makes sense as a tool of experience instead of being otherwise. The digital age is reorganizing knowledge to suit its paradigm vis-à-vis 'software-ability' and 'organize-ability'.

Knowledge and process of knowing has undergone three fundamental cognitive shifts depending on the process of creating knowledge. The three paradigms of knowledge creation are experiential, textual and, most recently, digital. The knowledge in these three paradigms—experiential, textual and digital—are very different from each other even though for the people belonging to these respective paradigms their knowledge is very much real.

This very clearly shows how helpless human beings are in terms of their cognition and hence their knowledge. With each paradigm shift there is reorganization as to what constitutes knowledge and hence experience itself is altered and this further leads to further cognitive shifts. Some experiential modes are dropped and new ones are added.

Many years ago there was a shift from the experiential paradigm to the textual paradigm that went unnoticed.

Textualization of knowledge altered the notion of what constituted knowledge. When knowledge got textualized, feelings and emotions were dropped. The word, intuition, was out of use for many years and it came back a few years ago when textual cultures started addressing its fragmentation, alienation and the feeling of 'rootless-ness'.

The over-use of reason and logic and the neglect of intuition is due to textualization of knowledge and, by extension, to the corresponding experiential mode it created. Imagination is a word over-used by textual cultures as text demands imagination; whereas in experiential cultures, the reality is always present.

The textual experience is linear and fragmented, which is the only way text can convey. At several levels one can see the fragmentation in textual cultures. The self is fragmented as male and female, as body and mind and as childhood, youth and old age. Textual experience being personal and independent of others separated the self from community.

This internal fragmentation has led us to compartmentalize and reorder the world to suit our textual notions about life. Thus beauty and knowledge are divided into art, science and language, and into artists and scientists. Politics, ethics and religion were also separated. Spontaneous activities were broken up into planning and doing and entertainment and boredom have become the new dichotomies.

## **Education – Tool to textualize**

Education has been the most powerful tool to condition and colonize the people as it has completely overturned the worldview of the so-called educated people of the world all over. It just replaced religious superstition to scientific superstition. It turned us into believers of a different kind. It turned us from active creators and inventors of knowledge to passive believers of text and experts. We no longer use our senses and feelings and experience to know the world. We are taught about everything—including beauty. Beauty is the most fundamental thing of human existence and makes one authentic. Beauty is what binds us to the external world. Beauty is what creates culture, architecture, music, artifacts, various dance forms and agriculture. Even beauty which is an exclusive domain of the senses and experience got textualized and it became a matter for intellectual activities.

Textual experience is an abstract one. Experience (by senses) is authentic and original. It cannot become second-hand. Text by very nature is second-hand. Our relationship to the unknown which was of awe and wonder probably changed with textualization as the knowledge is acquired within the comforts of the non-threatening text.

The same must be the case with “controlling” nature. The spiritual state of being here and now became impossible with textual culture. A total act of being in the present encompasses both past and the future. Our relationship with the text is itself an absence of the present. Textualization removes the present and creates only the past or the future. Modernization and mechanization brought in alienation even at the level of one’s activity completing the disconnect between the person and the external world.

Children because of their natural tenacity remained outside the textual world; so did most women. The crisis in modern schooling is precisely due to this

conflict in these two (experiential and textual) paradigms. Education is attempting to textualize children as early as possible. This can also be seen as a conflict in intuition and reason. It is no wonder that there are no truly children’s books today.

With the removal of unknown from our experience predictability / planning and reasoning became the dominant relationship to the outside. Many people belonging to the textual culture do realize this crisis and are also coming out with several solutions but are unable to break free as all these solutions are textual. Approaches like systems thinking, holistic methods, their engagement with spirituality, etc. are attempts in overcoming this crisis.

The solutions to make the learning holistic is by adding more ‘sensitive’ subjects like ecology, gender, study of other cultures, etc. The whole is not a result of adding fragments. The infinite is not the addition of finites. This is the quality of the mind which is holistic, spiritual, in communion with beauty all the time.

## **De-textualizing**

De-textualization is essentially recovering the autonomy of the senses and experience. It is a reconnection to the life-sustaining knowledge accessible only to selfless minds.

If we consider knowledge to be a biological response to sustain life, then the present level of estrangement between man and nature is unimaginable. How could knowledge and destruction go hand in hand to the extent that the very survival of the earth now edges on the brink of cessation? Knowledge, devoid of the biological content, fostered the grounds for depredation.

Knowledge as a biological response to sustain life is inbuilt in the knowledge of experiential cultures. Indigenous knowledge is the result of collaboration between people and their surroundings guided by nature’s need to preserve all life. The biological

element in knowledge is what has led the indigenous communities to create 'life-sustaining' knowledge, guided by the autonomy of the senses. The so-called indigenous knowledge (a term invented by the textual world) is knowledge of the experiential paradigm.

For over a decade now—since 1988, to be precise—I have been in a process of unlearning, and creative engagement with the rural and tribal artisan communities. The unlearning process I am involved in is intended to scrub off the western influence that I had gathered through the years of “learning” in the alienating environs of some of the elitist institutions in the country. In 1991 or so I decided to stop reading altogether as I was only building on the already formed framework of the western knowledge.

In order to see clearly and authentically I felt the need to clean myself of all “isms” that dictated my cognition. After years of spending time with the rural tribal communities who were still free from modern schooling and were still very much part of the “indigenous knowledge” system I began to see the fundamental difference between the two knowledge systems.

Once, a few years ago while I was in the process of developing exercises and activities to help children learn pottery, I was intrigued by the way in which the master potters arrive at a form. I wondered how the things they make could be so beautiful. I was keen to know what guided them to arrive at a particular form. Mulling over it for several days I realized that there is a biological assistance that guides our sense of beauty. People undefiled by modern ways are far more open and receptive to this biological guidance.

This internal capacity and the external natural systems collaborate in some manner to produce a distinct aesthetic quality to their lives. The rural, tribal or non-literate communities seem to act holistically, endowing an aesthetic quality to their every act. What we understand as culture is a result of this collaboration.

In a profound sense, it is a community's sense of beauty that delineates its culture.

The classical forms in human culture came about by this process. The pyramids, the tombs, the ancient places of worship all over the world, the folk dances, traditional music, and traditional healing systems have all evolved by a very different process than that adopted by modernity. These must have been the intuitive leaps of humanity. When a society or community loses its authentic sense of beauty or subjugates its sense of beauty to the corruption of alien influences, it loses its authentic culture.

Children in natural learning cultures are like any other newborn animal. Nature has its ways to make them grow and all the skills of an adult world are introduced in the games they play, the toys they make. They explore the world of senses by interaction with nature, and the world of nature through the senses. Senses are a two-way tool to know outside and inside.

### **The latest shift in knowledge creation**

Now with information technology, text is being replaced by computer. The computers' criterion for dropping various elements from textual knowledge would depend on manageability and software-ability. Like text it would also bring in new elements to the realm of what they claim as knowledge.

The comfort in seeking knowledge is far greater and they can also fake part of the reality though miniaturized and frozen images. This could altogether remove imagination and bring in surety as they did see the event however miniaturized or unreal it may be.

The following is a quote from *Human Nature and the Digital Culture: The Case for Philosophical Anthropology* by Dennis M. Weiss of York College of Pennsylvania: “Where this world is chaotic and difficult to comprehend, the computer offers us the image of a world of order, logic, reason, and transparency. While

we may have lost our cosmological map in this world, the computer offers us a ready replacement: the pristine, orderly lines of the flowchart, which becomes the new image of an orderly and computable nature. ....They assure us that we too may once again master the world and hold it in our hands. .... While we may have little control over the world around us, we can define the world and our links to it via our own home page.”

The calamity of this virtualization of knowledge will be far more destructive and elusive than the textual paradigm. The ultimate loss is that of human creativeness and life at large. If our experience is destroyed, our behaviour will be distorted and destructive.

## Conclusion

The natural state of being is to be creative. And in the creative state one is authentic and original, to be inventing all the time, to be discovering all the time and to be new all the time. This brings in concrete and first-hand experience as the basis for what is knowledge. Senses are tools that connect us to the concrete experience as well as our inner nature. This demands then we sharpen or sensitize our senses as those are our primary tools for knowing. Beauty seems to be the spiritual way of relating to nature. Sense of beauty is experienced when the experience and experienced become one, however momentarily. It happens when all over senses are awake and we receive life in its totality.

I began to walk towards the gently lapping waves, no more than a hundred meters away. The Director took fright at this and called me back: “Don’t to that way, the tide is coming in. It’s time to leave.”

I turned to follow him and we were heading back towards the blazing palms, when he stopped to point to a yellow paintbox, peeping out of the rubble. “That belonged to Vineeta, my daughter,” he said, and the flatness of his voice was harder to listen to than an outburst would have been. “She loved to paint; she was very good at it. She was even given a prize, from Hyderabad.”

I had expected he would stoop to pick up the box, but instead he turned away and walked on, gripping his bag of slides. “Wait!” I cried. “Don’t you want to take the box?”

“No,” he said vehemently, shaking his head. “What good will it do? What will it give back?” He stopped to look at me over the rim of his glasses. “Do you know what happened the last time I was here? Someone had found my daughter’s schoolbag and saved it for me. It was handed to me, like a card. It was the worst thing I could have seen. It was unbearable.”

He started to walk off again. Unable to restrain myself, I called out after him: “Are you sure you don’t want it – the paintbox?”

Without looking around he said: “Yes, I am sure.”

— Amitav Ghosh, in the Andaman & Nicobar Islands



# Sensing and Knowing Nature

*Workshop led by K B Jinan and Kumbham*

K B Jinan has been conducting workshops over the last ten years for the children of Aruvacode to provide activities not available to children in regular government schools. From 2002, this workshop has focused more on awakening the senses in children. The idea behind the workshop is to enable the children to observe their surroundings more closely, the birds, the leaves and the general surroundings.

## **Seeing nature, Hearing nature, Tasting nature, Smelling nature, Touching nature**

The workshop is focused on sense awareness and is planned around experiences to enhance the sensory experience of each of the senses.

To heighten the hearing sense, children sit in silence and listen. They hear the sounds that usually go unheard. Good music is used to attenuate this sense. Other activities that extend this awareness are games children play using nature—whistles made of leaves, rattles, imitating birds, etc.

To work with colour, children collect dry leaves of different shades and grade them and stick them in order. Other activities include doing a colour scale with two colours, and mixing primary and secondary colours.

Children do similar activities for texture and the sense

of touch. They do a textural scale using objects of varying texture. They also make surfaces of different textures using clay.

The children have games for identifying different smells blindfolded. They are also encouraged to spend a minute in silence before they eat their meals to make their taste sense aware.

To get the idea of shapes and dimensions, children collect different types of leaves, objects of day-to-day use and draw them in detail. Children also make portraits. They also trace the lines in nature. Three- dimensionality is introduced through clay work.

Other activities (that bring together all the senses) include making a model of the village with clay, making things using paper, leaf, etc., and introducing them to medicinal plants. Children are introduced to games, poetry and storytelling. Pottery is offered too.

It's here, among the largest tribe in the land, the Nicobarese, that the simplicity of thought is compelling. It's a happy society. No one owns land here. The community gathers and elects elders among themselves. The one at the top, the most revered, the one with powers of mercy and punishment, is called 'captain'. He has an assistant captain, and three others — captain 1, captain 2, and captain 3.

The captain allots land to each family on the basis of number of mouths to feed. Thus freed from the desire to own land, people spend on other stuff. Like motorbikes, scooters, mobile phones, and televisions.

There's an astounding tolerance to pain in this society. There are no complaints. There's no snatching at relief material. People wait for their turn. They take what is given to them. If nothing's given, they walk away. This is how life has been, and this is how it will be in the future.

– from 'Fortitude unleashed' by Vijay Simha