

The Language Question in Education

by E. Annamalai

Prof. E. Annamalai is a member of the National Council for the Development of Indian Languages, New Delhi. He teaches in the Center for International and Area Studies and the Department of Anthropology at Yale University in the current year. During his tenure at the Central Institute of Indian Languages (Mysore), he was responsible for teaching and development of Indian languages including tribal languages. He is a visiting fellow at many international universities and is a member of panel of Endangered Languages Documentation Project, London and UNESCO's World Language Survey. Some of his important books are Language Movements in India, Dynamics of Verbal Extension in Tamil, Adjectival Clauses in Tamil, Lectures on Modern Tamil, Managing Multilingualism in India: Political and Linguistic Manifestations and (with R.E. Asher) Colloquial Tamil. He studies Tamil and Linguistics at Annamalai University and received Ph.D. from the University of Chicago. He can be reached at annamalai38@yahoo.com

Choice of language forms the medium of education

Tuition, unlike intuition, needs a medium to impart knowledge, skills and values. Education through formal means including schools is tuition by the teacher following a curriculum. Language is the versatile and flexible medium for codifying the curriculum and tutoring the pupils. It is obvious that the teacher and the taught must share the medium of language for any communication to take place. Everyone would agree that a traffic sign-like system without using any verbal language is not adequate to impart education for life. Needs of life are much more complex than the needs of traffic.

The question in education then is which language will serve as the effective medium. The effectiveness is not about the 'quality' of the language to be used but is about the quality of education that is aimed at, whether it is interactive, creative and critical. As in other aspects of life, the language of the powerful is often taken to be the effective medium of education as it symbolizes the success of the powerful. The cost of this choice to the educational process of the powerless speaking a different language must concern any educationist, even if the parents prefer the language of the powerful.

The question of choice of the language of the medium of education arises in monolingual situations also, as in the US where, for example, the white and black children speak the 'same' language. They speak different dialects and they come to school with their dialects, where education is through standard English. Standard English is none other than the dialect of the powerful group in the society. But it is accepted that the standard dialect is accepted as representing the language and it is expected that the children from the powerless groups in the society must learn it at any cost to move up in the social ladder. They learn it because the difference between dialects is not as deep as

the difference between languages. The children speaking any variety of Hindi like Mythili, Bhojpuri, Awadhi, etc, face similar problems when the Hindi used in schools is standard Hindi. So are the problems of Tamil-speaking children whose education begins with the written variety of Tamil that is quite removed from speech.

The language for the child

Leaving aside the problems of home dialects in education from consideration in this paper, let us take up the question of the choice of medium in multilingual situations. The basic pedagogical fact is that the learner must know the medium; otherwise she will have the double disadvantage of dealing with two unknowns simultaneously: the content she is learning and the medium through which she is learning it. She ends up in rote learning by which she can be creative neither with the language nor with the subject. There are other equally serious consequences as well, that are social and psychological, and we will see them later.

The crucial question is about the language known to the child, i.e. the language in which the child operates for relating herself with the social, natural and physical environment she lives in. Normally this language is called the mother tongue. The term, however, is problematic because it is used in different senses. The view that it is the language acquired first or the language acquired from the mother can be ambiguous when used in multilingual situations such as in India. This is because the child may acquire more than one language simultaneously or learn the language of the father in mixed families. More seriously, mother tongue may be used as a label of identity for a social group and the group may have no or just minimal knowledge of that language. This lack of knowledge of the mother tongue makes it unfit to be the medium of education by the principle mentioned above.

The language known to the child is the language of her early childhood experience. That is, the language with which the child gained her experience of the world around her before coming to school. It is the language of primary socialization by which process the child becomes a social being from being a biological being. If this language is more than one, any one will be fit to be the medium of education. Using this language as the medium in schools becomes an extension of the natural learning process of the child from home environment to school environment without hiatus. The child does not feel alien in the new school environment. For the sake of convenience of reference, we shall call the language of the child's pre-school experience her mother tongue. It is the language that nurtured the child cognitively and behaviorally like a mother until she came to school.

Besides the pedagogical imperative of using the mother tongue as the medium, there are many other advantages as well. It was already mentioned that the school becomes less alien a place to the child. The school continues the style of learning acquired at home. This brings the school closer to home. The number of homes is many times more than the number of schools. The middle class practice of making the home similar to school by the nature of literate environment, parental interaction, learning strategies, etc. is impractical and unfair to be expected to be extended to poor homes. Language is the most enduring bridge between home and school.

Use of mother tongue as the medium of education

The use of mother tongue as the medium dramatically changes the teacher-student relationship. The teacher can no longer force silence in the classroom by saying that the students should ask questions in the school language — the language they do not know. The students become independent readers sooner when they acquire literacy skills because they know the language. This gives students confidence. They also realize that their language is not condemned as unfit for school and they are not inferior to others because of their language. Such self-confidence and pride are great motivating factors in learning. There are any number of research studies that demonstrate that learning through the mother tongue increases the cognitive skills and scholastic achievement of students.

Education has as one of its purposes giving human dignity to people. Dignity cannot be given by condemning the language the people speak and through it the culture the language represents. This aspect is more significant in the case of people speaking tribal and other minor languages. When a tribal sees his language in a concrete form in black and white in a text book, he is filled with joy

and pride that his language is not ephemeral; that it has a status. Nevertheless, it is a common experience of educationists that powerless people want the language of power, be it English, Hindi or the regional language, to be the medium of education for their children. They admit the material uselessness of their language and they believe that their children should not be deprived of opportunities for social mobility and economic progress because of their language. The question of medium should take into account this concern also when seeking an answer.

Before finding an answer to this concern, we shall see whether there are any problems in using the mother tongue as the medium. This is important because any such problem is cited as the reason by the powerful for using their language as the medium. They make the powerless believe those reasons. Thus the question of medium is decided in favour of the language of the powerful by the 'consent of all'. The problems fall into two categories. One is about the inadequacy of the language and the other is about the inadequacy of the community speaking it. The arguments of language inadequacy include one or more of these claims: the language does not have a script; does not have grammar (i.e. a grammar book giving rules); does not have a big enough lexicon; has variation from village to village (i.e. no standard); does not have textbooks; does not have literature (i.e. written literature), etc. These arguments are based on a logical fallacy: the script, etc. are taken to be prerequisites for using a language for a given purpose; they really follow the use. Language development comes by use; without use there will be no development. When a language is used or decided to be used in education, the need for creation of script, grammar book, lexicon, a standard variety and textbooks can be met: it is a technical job. Creation of written literature will follow when the speakers of the language become educated and exposed to other written languages.

The arguments for the inadequacy of the community stem from the fact that there are no teachers to teach through the mother tongue. This is natural in a pre-literate community. The fault then is not really in the community but with others who are not willing to learn the language of the community, teach the first generation learners from that community and then train teachers from among them. There will be some time lag for the transfer of 'technology' and it is possible if the others are willing to be care takers for the period until the human resource from the community is developed. This strategy becomes difficult in practice not because of any drawback in the strategy but because the others do not want to give up their jobs. It may be seen that using the mother tongue as the medium

has an economic aspect that is not favorable to others. It is here the non-governmental organizations without any axe of their own to grind have a role to play. Another argument in this category is the parental non-preference of their mother tongue to be the medium mentioned earlier.

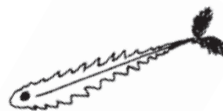
There is a serious misunderstanding among the parents about teaching a language and teaching through a language. They believe, wrongly, that teaching through a language is the best way of teaching it. It may be true that more exposure to a language helps to learn it, but exposure to a language as the medium of various subjects alone deprives the learner the ability to use the language for communication in real life situations. It is common knowledge that a graduate in India who can explain Physics in English as memorized from textbooks cannot converse in English about a happening in the family or in the country. There are many other things besides long exposure in learning a language. Moreover, the cost of learning through an unknown language and the social and psychological benefits of learning through the mother tongue were mentioned earlier. The parents must be made aware of these. They will be convinced when the language of power is taught well as a second language and the students gain a good mastery of it. There is proof of it in the educational background of many of us; many of us have a good command of Hindi, for example, but did not study through the medium of Hindi.

It cannot be denied that the language of power opens many doors and that the powerless should have access to these doors. They must learn the language(s) of power as part of their education. The language of power becomes the medium of education at higher levels purely for practical reasons given the current structure of the society, polity and economy. The media of education will have a pyramidal structure with a large number of languages at the bottom and a small number of languages at the top. It becomes then necessary to transfer the students from the medium of mother tongue to the medium of the dominant language. This transfer must be gradual and without hardship. This is technically called the transfer model of bilingual education. The transfer strategies will modify to suit the local conditions. The immutable condition is that for the transfer to begin, the student must have a good grounding in the dominant language taught as a language. The mother tongue must be continued to be taught as a language after it ceases to be the medium if the community wants to empower itself and its language as an instrument of knowledge and creativity.

Flexibility in the transition from one medium to another

may be built into bilingual education in various ways pedagogically. The medium of instruction covers the language of the textbooks, the language of classroom interaction and the language of examination. When the textbooks change to the dominant language, classroom interaction may be bilingual for some more years: the teacher's questions in the dominant language, for example, may be answered in the mother tongue by the student. Bilingual answers may be allowed in the examination until the student has mastered the dominant language. Passive knowledge of a language precedes its active use.

The axiom that the medium of education must be in a language known to the learner entails that it must be taught as a language also. It must be taught because the speaking skills in it must be improved and also because the reading and writing skills in it must be developed that are essential for using it as the medium. These literacy skills are taught formally in the school. In the Three Language Formula followed in schools in India there is no provision to teach the mother tongue as a language when it is different from the regional language. The three languages are the regional language, English and Hindi or a modern Indian language when Hindi is the regional language. Nevertheless, through a constitutional amendment, the mother tongue will be taught and will be the medium at the primary stage of education when certain requirements as to the strength of the mother tongue students in a class and in a school are met. There is dissonance between this constitutional provision and the formulation of the Three Language Formula and it has to be reconciled. The states are tardy in implementing the constitutional provision. The Linguistic Minorities Commission submits to the Parliament an annual status report about the use of minority mother tongues in education among other things but its recommendations are not acted upon by the states. Non-governmental organizations may function as pressure groups to make the state governments fulfill their constitutional obligations.



Shikshan Vikas Kendra

by Fr. Godfrey D'Lima

Fr. Godfrey D'Lima decided to do what's possible to help children save their personalities while acquiring the spoils of education. (He claims to have suffered schooling). His focus has been poor and especially adivasi children who cannot fit into the mainstream systems that force learners into a slavish conformism to market forces. He has worked briefly with formal school systems in Mumbai but mostly in adivasi areas of Thane and Dhule Districts. The Shikshan Vikas Kendra model is his present (15 years) undertaking.

Philosophy/Beliefs

The kind of learning experiment we have been trying out at Shirpur, Maharashtra for adivasi children in remote villages covers the following elements for a 'Model for Education':

- ✓ Organisational Framework for Implementation
- ✓ Fixing of Syllabus or Content
- ✓ Developing Teaching-Learning Material
- ✓ Training of Teachers
- ✓ Involvement of Community
- ✓ Attempts at Networking with other NGOs and Government
- ✓ Wider Community Development
- ✓ Fund Raising
- ✓ Evaluation, Course Correction

Organisational Framework

We have attempted to simulate the organisational structures of primary education as per the current government school network operated by the zilla parishads. This approach will give us vital experience in facing problems similar to that of the government educational system and make our strategies realistic and credible.

The implications of this organizational structure include (i) operating several learning centres (25 learning centres annually in varied terrain most of which is barely accessible), (ii) having a uniform reference point syllabus, (iii) fixed timings, (iv) regular supervisory visits (on the spot checking of functioning) and (v) mobile resource unit to reach stationery, teaching aids, resource persons to learning centres.

The differences between our model and the zilla parishad model are that (i) we function on a much lower budget, (ii) our teacher-activists are part-time, (iii) we contract to run our learning centres with community contribution or we stop the programme and (iv) we maintain maximum flexibility to include meaningful participation rather than only follow the formal system.

Fixing of Syllabus Content

The syllabus is set up with reference to elements of the formal system but treated as a reference framework always adapting to the learner and the teacher. Most of our learners are poor farmers' or labourers' children. Participation is seen as a key achievement. The overall principle of subject selection is that it must be linked to their interest and their livelihood. The syllabus includes literacy, general information, health topics, songs, stories and games.

Developing the Teaching Learning Material

We procure market-available charts and design our own charts. The charts are produced locally and we work with professionals to produce additional material. Our emphasis has been on picture-illustrated content to reduce the burden on learners from oral traditional backgrounds. We use the state language for literacy learning but also encourage use of local language where possible, especially for general information, songs and kits.

Recruitment and Training of Teachers

Teachers are recruited from Adivasi communities that have learning centres. Knowledge of the children's mother tongue is crucial. Academic qualifications do not matter as much as willingness to learn while teaching. A further qualification is regularity in teaching and interest in other developmental concerns is a further qualification.

There is an orientation training at the beginning of the academic year (June) followed by monthly trainings and evaluations. Additional topics like organic farming, goat rearing, kitchen gardens, local self-government are taken up and there are special trainings when needed. When affordable an educational excursion out of Shirpur is undertaken. There is also an emphasis on the teachers' role as community activist even as they are trained for specific academic competencies. Service motivation is a high value in the morale building of the teachers.

Involvement of the Community

The Adivasi community is clearly asked to contribute the following if the learning programme is to be started:

- √ Free classroom space.
- √ Fee per child in cash or kind from Rs 5 up to Rs 10 per learner.
- √ Purchase by parents of slates, books, pencils
- √ At times the teacher is even offered a meal besides the above.
- √ Ensure that 70% of the attendance is regular and also a report on the teachers' attendance

If community involvement is not satisfactory the learning programme is withdrawn. The community is encouraged to take up (and in several cases it has taken up) other developmental activity promoted by the teacher-activist.

Attempts at Networking with Govt and NGOs

We have met with several government officials including the Block Education Officer at the Taluka level, the District Special Education Officer and District Education Officer. Individual teachers have also been talked to. (We find that) it is difficult to establish links with the Govt system. We have conducted trainings for other NGOs. The Shirpur programme or Shishu Vikas Kendra experiences have helped other NGOs to set up their own learning systems. Teaching Aids have been sent from Shirpur to other interested NGOs.

It is useful to know how other NGOs approach the challenge of educational support to the poor. But we do not have staff and funds to further develop purposeful links with Govt or other NGOs.

Wider Community Development

Thanks to the credible work of teacher-activists the

communities have responded to other development initiatives like credit societies for men and women, microwatershed development, organic farming techniques, grain banks and goat rearing. With help from NGOs like AFARM (Pune), AFPRO (Ahmednagar) and MPSM (Nashik), these development inputs have resulted in small action programmes periodically initiated.

Fund Raising

Since we do not have any State help for the programme we look for both Indian and foreign sources of financial help. Besides institutional help from professional funders and church sources, we also gather donations from individuals. Efforts for fund raising are routine.

Evaluation

Although we do not embark on any statistical study annually we have an ongoing qualitative assessment of the functioning of the programme. The participation of the learners, teachers and the community is constantly motivated and appraised. Corrective actions are applied and where necessary the programme has been suspended. Without ever claiming clinching success we could posit the usefulness of our programme for nearly 400 Adivasi learners and their communities on the foothills of the Satpudas.

The Shishu Shikshan Vikas Kendra is an effort to complement and supplement the formal education system, when needed and where positively supported by Adivasi communities. Resource support for this programme comes from the Shirpur Vishwamandal Sevashram Trust, a voluntary organisation, entering its 15th year of existence in 2005-06.

True education must correspond to the surrounding circumstances or it is not a healthy growth.

Mahatma Gandhi

Listening to Gandhi

by Krishna Kumar

Krishna Kumar is the Director of the National Council of Educational Research and Training (NCERT). In his distinguished career, he has also been Professor of Education at the University of Delhi and Head of the Central Institute of Education (1988-91), besides having been a UGC National Lecturer and a Jawaharlal Nehru Fellow. His literary contribution include *Raj, Samaj aur Shiksha*; *Vichar ka Dar*; *School ki Hindi*; *Learning from Conflict*; *What is Worth Teaching*; *The Child's Language and the Teacher*; *The Social Character of Learning*; and *Prejudice and Pride: School Histories of freedom Struggle in India and Pakistan*. A columnist and a short story writer in Hindi, Professor Kumar also writes for children.

Excerpted from *Seminar #436*, December 1995, this article has been obtained from the compilation on VidyaOnline. More information and articles can be found at www.vidyaonline.net. The field notes, on which this article is based, were collected by Snehlata Gupta and Malvika Rai under the auspices of a study assisted by the UNICEF Regional Office, Kathmandu.

Gandhi's ideas on education

As the world approaches the close of this century, many ideas practised and preached by Mahatma Gandhi are becoming increasingly relevant as guides to state policy. The most interesting, and understandably controversial, of his favourite ideas is that of local self-reliance.

In a world said to have become interdependent, local self-reliance seems irrelevant, indeed heretical. Yet the fact remains that the world is not really interdependent. Many countries of the South are caught in a debt-trap which forces them to part with a substantial portion of their national income to pay the interest they owe the North. This ghastly compulsion impoverishes these countries further, rendering their labour force and natural resources steadily more vulnerable. In the so-called global village, the real village is dependent on the city for such essential needs of life as work and healthcare. Gandhi's insistence on local self-reliance was precisely in such basic aspects of life. The world is armed today with sophisticated technological solutions to every human problem, yet the majority of people suffer from malnutrition, unemployment and chronic illness. This obvious contradiction suggests that Gandhi's plea for local self-reliance in the matter of basic needs deserves to be heard again.

A second salient feature of Gandhi's legacy is the importance of imaginative action. If there is such a thing as a Gandhian theory, surely it is a theory of action which emphasizes role-playing with earnestness and imagination. All Gandhi's major political and social battles, starting with his work in South Africa, illustrate this point. In retrospect, these battles look crafted to perfection as localized socio-dramas with a universal appeal. The salt satyagraha is

probably the best known example of such a battle, but numerous smaller episodes occurred throughout Gandhi's life. For example, when the engine installed for running the press at Phoenix Farm in South Africa failed, Gandhi successfully mobilized his colleagues to run the press manually all night so that *Indian Opinion* would come out on time. This early event suggests two other aspects of Gandhi's theory of action, apart from commitment to one's role. One is his insistence on autonomy which translates into freedom from dependence on any single option. The other is persistence. If one looks at Gandhi's life from a pedagogical perspective, one can aptly describe it as a long lesson in the value of the freedom of initiative and tenacity to the cause at hand.

Finally, Gandhi's legacy must remind us of the significance of the spatial community and the family. Child welfare — indeed, all human welfare — has its locus in these two units of collective life in Gandhi's picture of the world. Democracy, both as a system of governance and as a way of living, depends on the expression it finds in these two units. As Marjorie Sykes, probably the best commentator on Gandhi's educational thought reminded a symposium a few years back, Gandhi's idea of democratic living depends on the possibility of a face-to-face dialogue among the members of a community. This ideal is, of course, ancient, having been established by the Greek philosophers, but its meaning and potential are yet to be realised in our age even though our world seems to have espoused democracy as the only worthwhile form of government.

In his last book, *The Public and Its Problems* (1927), John Dewey — whose educational theory meets Gandhi's proposal on many crucial counts — talked about the

difficulties that the 20th century was facing in letting the spatial community stay alive and relevant to human life. During the last decade or so, many nation-states have woken up to the damage modern planning of societies has done to local communities and the family, leaving the child to be cared for by the faceless state. As we plan redress, we can find an important resource of ideas and inspiration in Gandhi's legacy.

The model of children's education that flows from Gandhi's vision of a desirable society strikingly matches the most important implications that one might draw from modern child psychology for organizing or reforming the system of education. These implications can be listed in the following manner:

- √ The child's immediate milieu must serve as a resource for the re-discovery of accepted knowledge.
- √ Children must have the freedom to create their own models of knowledge about the world.
- √ Learning must provide for opportunities for children to be physically active.
- √ Classroom activities must resonate and extend the child's life at home and in its surroundings.

Gandhi's choice of the local as the appropriate context for the exercise of initiative and persistence suggests an obvious parallel to the concepts of exploration and reconstruction we find in Piaget's psycho-philosophy of knowledge. Parallels can also be drawn between the links that Dewey perceived between children's learning of subject matter and their milieu on one hand, and Gandhi's view of the school as an institutionalized forum of the community, on the other.

Nai Talim

These parallels were reflected in the proposal Gandhi made in the specific context of education, but the proposal had another item which was related to his economics and his own early experience of teaching children at Phoenix and Tolstoy farms in South Africa. This concerned the introduction of handicrafts as an organizing principle of the school curriculum. Much has been written on this aspect of Gandhi's *nai talim* or 'new education' which is also known as 'basic education'. In summary, the idea of traditional handicrafts providing an axis for the school's daily curriculum had in it the following elements which formed its rationale:

- Bridging the school with the world of work
- Imparting an activity orientation to the curriculum

- Inculcating a sense of self-reliance.

Historical documents concerning the attempt made between the late 1930s and the late 1950s to give a 'basic' orientation to India's education system refer to several questions and problems that arose in the wake of Gandhi's idea of using handicrafts as the organizing principle of the curriculum. Some of the questions might seem to have merely a historical value today, but they are nevertheless worth recording. The most controversial question was whether the introduction of handicrafts can make the school an economically productive institution.

Gandhi had, in fact, suggested that productive activity centred in traditional handicrafts could enable the school to sustain itself financially. A lot of hostility that basic education programmes had to face undoubtedly arose from this idea, its opponents arguing that productive schools would become factories of child labour. Historically, it would appear that Gandhi's emphasis on making schools self-sustaining was related to his understandable repugnance towards the use of revenue earned from the sale of liquor for children's education.

As time went by and experience showed both the practical difficulties and limitations of using children's manual work to generate financial resources, the idea took the form of contribution towards school upkeep. Apparently, even this was not acceptable to many, as we can deduce from an official publication written by G Ramachandran, an eminent exponent of Basic Education. In a monograph published by the Government of India in 1957, he wrote that "the main object of productive work is education through such work and income is only a corollary." He also took pains to clarify that the productive work given to children "should be such that children can do it without any undue physical strain... Sweated child labour is the very negation of Basic Education and will defeat it completely".

This controversy over productive manual work need not divert our attention today from an aspect of Gandhi's educational proposal which can be said to constitute its core. This was the idea of work as participative action. Gandhi believed in work as a means whereby human beings can realize not only their material requirements, but also their intellectual, emotional and spiritual needs. It is under conditions of social injustice and oppression that work becomes drudgery and a crude weapon directed against all that makes people human. Basic Education defined work in its broadest sense so as to make it a medium of socializing the child into a participative culture. Individual

autonomy and consent to participate in group responsibility were essential to this socializing agenda.

The role of the child in learning

In this emphasis on participative action, Basic Education was consistent with modern pedagogical theory which suggests that children's accomplishment in learning new skills and knowledge depends on their consent to learn, to value the teacher's effort and to work in groups. Two eminent contemporaries of Gandhi, Tagore and Gijubhai, devoted themselves to building institutional models where teaching with the child's consent and participation would be the norm.

Our present system of education fails so often to achieve its aims because the institutional atmosphere, the curriculum, class size, and the methods of teaching ignore the role of the child in education. An erroneous belief commonly reflected in statements of intent is that teachers must make the child active. Such statements reveal our neglect, or rather ignorance, of the child's nature which is to be active. All that schools need to do is to ensure that the child's natural desire to be active is not curbed; rather, that this desire is given the opportunity and the means of enhancement through convivial action.

The idea that schools should provide children with the opportunity and the means to undertake skilled manual work was obviously to establish in the minds of children the dignity of work, and not just the intellectual work traditionally provided by schools. But manual work, especially in the context of routine tasks related to school upkeep was also designed to inculcate initiative in place of indifference and reluctance to taking personal responsibility. Gandhi's life, and not just his educational proposal, shows that his ultimate mission was to awaken in a colonized people the courage to have faith in choice and initiative. Once he had succeeded in arousing this faith in the context of colonial rule, Gandhi extended the scope of choice to include in it a change in the culturally defined antipathy towards manual work, especially when it meant cleaning.

Gandhi's message is a refusal to cope with the given situation. It forms the first step towards taking personal responsibility for one's work. Translated in terms of pedagogical theory, it would mean habituating children to feel responsible out of a personal urge rather than out of the need to comply with someone's orders. Institutional ethos is the primary means of creating such a habit, but the curriculum must highlight this goal as a formal objective

ranking higher than literacy or numeracy.

The present school structure

Giving Gandhi's 'new education' a second hearing today would require that we look at autonomy and initiative from the teacher's perspective as well. It can hardly be imagined that teachers who are themselves not used to exercising autonomy can encourage children to be autonomous. The ability to take independent decisions and the desire to take personal responsibility must figure as major objectives of teacher training. This, however, cannot be sufficient to ensure that training in such objectives will be actually put into practice. The physical conditions under which elementary teachers work, the rule-structures that govern their career and the culture of the offices to which teachers are obliged to go in order to fulfil administrative routines — all of these constitute an important part of the legacy of colonial rule against which Gandhi had struggled.

The official routines and rules that govern lives and careers of teachers to this day almost prohibit independent thinking and ingenuity. Even in purely academic matters like shaping the curriculum and selecting pedagogical material, obsolete procedures and expectations continue to hold sway even as new ideas are mouthed as being preferable. Young teachers often get a shock when they discover that an initiative taken by them was not welcomed. During the '50s when Basic Education was widely practised, inspectorial norms and procedures were found to be faulty and problematic for pedagogical change. Teachers who attempted to switch from textbook-based instruction to organizing activities were often criticized for being over-enthusiastic. Even today, inspectorial expectations are tied to the old, syllabus-covering approach. More than teachers, it is often the monitoring officials who fail to realize that the two kinds of approaches are entirely different and cannot be evaluated on similar criteria.

Lessons from the 'Basic Education' experience

While we prepare ourselves to rediscover Gandhi's legacy and define it for our times, we can greatly benefit ourselves by drawing a few lessons from the past experience of Basic Education. The abandoning of Basic Education in the early 1960s in many parts of the country for its alleged failure need not be treated as a permanent stigma. The destiny of educational ideas, as indeed of all ideas, is shaped by historical circumstances. It would be foolish to disqualify an idea for a fresh trial just because the shape it

took at a certain point in history proved unsatisfactory. In any case, the judgement that Basic Education failed in the first round is problematic. Many Basic Education institutions carried out excellent programmes in the heyday of Gandhi's idea, and some continue their battle against all possible odds to this day. In Gujarat, Basic Education is still a part of the official policy, and at Siksha Niketan in Burdwan district of West Bengal, a Basic school was started as recently as 1987 in the memory of Acharya Pramathanath Mukhopadhyay. In the context of teacher training, the programmes offered at Gandhi Vidyapith at Vedchhi and Lok Bharati at Sanosara mark a considerable departure from the usual training available elsewhere in the country.

It is apparently as a 'national' system that Basic Education failed to live up to the expectations created by it in the 1940s and the 1950s. Such a feeling should inspire us to examine the nature of the expectations and the nature of the efforts that were made to fulfil them. The prime expectation was that Basic Education would bring about social transformation. For this kind of vast, rather amorphous hope to be fulfilled, one key condition would be a supportive socio-economic and political climate. A sustained trial for a long period is another major condition we can imagine. All evidence points to the fact that Basic Education had to face a hostile socio-economic climate, and that the quality of political support it received varied from region to region. Indeed, the main reason why Basic Education could not be sustained for more than a decade or so after Independence was the ambivalence of political patronage.

Political patronage apart, even popular appreciation of Basic Education was far from adequate. A rather limited attempt was made to create popular interest in the idea, especially to counter common misunderstandings about it which many parents evidently entertained. Perhaps it was assumed that the idea was simple, so it would be easily understood and appreciated. It also appears that concerted opposition to it was never expected. Some of those who supported Basic Education as a policy tried to defend it when it was attacked, others responded merely by staying quietly committed to their daily work. It is hard to find a case where the critics of Basic Education were asked to name some other alternative to the traditional system of children's education.

For a revival of Gandhi's concept of education as a guide to general reform today, the lesson is obvious: attention must be given to the creation of a receptive

socio-political climate. A second lesson we might learn from the past concerns flexibility and diversity of approaches. Looking back at the 1950s, one finds that an orthodox interpretation of Gandhi's proposal was common. It was reflected in the uniformity of curricular choices, training procedures, and administrative arrangements. This was obviously a major contradiction, considering that Gandhi was among the strongest critics of the uniformity that colonial rule had imposed on schools in India. In this matter, Basic Education became a victim of the bureaucratic culture entrenched in the education system.

Reviving the Basic Education programme

In a revived Basic Education programme, local and regional diversity of approaches must be encouraged as a matter of principle, not just tolerated. But diversity cannot be triggered by pressing a button, especially when it has been discouraged for so long and when the bias against it is so deep-rooted in policy and planning. Indeed, the capacity to evolve a local style has atrophied among teachers due to long disuse. And the capacity we are talking about is not an outcome of training alone; it also depends on mental attributes such as the desire to experiment, and culturally transmitted attributes such as self-reliance and acceptance of risk. A diversity of approaches will have to be encouraged in a sustained manner for it to become a part of the system. One step towards such encouragement would be to create a climate featuring appreciation of diversity.

The works of three eminent Indian philosophers can provide us with great help in creating a positive social ethos for a policy which might guarantee teachers' freedom to organize the daily curriculum differently around common themes. These philosophers are Sri Aurobindo, Rabindranath Tagore and J. Krishnamurti. Their writings on education, not easily accessible today, need to be widely disseminated as part of the initiative to promote a variety of approaches in a revived Basic Education programme.

Lack of diversity was reflected most sharply in the choice of agriculture and gardening as 'crafts' to be taught at school. This choice was apparently based on the requirement we have discussed earlier, namely that Basic schools should strive towards financial self-sufficiency. The fact that agricultural or gardening activity would generate usable produce and possibly cash perhaps clouded the recognition that this kind of manual activity could hardly be called a handicraft.

The training for precision and accuracy required by

traditional handicrafts cannot be easily associated with the manual work involved in agriculture and gardening. In fact, the excessive emphasis given to agricultural production at some Basic Education institutions led to complaints of children being used as labourers, lending further weight to the already prevalent prejudice against Basic schools. The joy of learning a handicraft and the refinement of senses that it can be expected to bring about in childhood cannot be conveniently associated with production-oriented agricultural work.

A crippling blow was suffered by the post-Independence programme of Basic Education when the schools practising it were denied recognition for higher studies and examinations in certain parts of the country. This structural discord significantly curtailed the options available to children studying in Basic schools. The denial of recognition to their work was based on the argument that they had not studied the syllabus and textbooks prescribed in the other schools. The attempt made in Basic schools to displace the prescribed textbook from its dominant position in Indian school life proved the single most problematic aspect of Basic Education as far as its image in state offices of education was concerned. Teachers of Basic schools were trained to develop their own daily curriculum of activities and their own material. They were supposed to avoid using the textbook in the early grades, and keep it to the minimum in later grades. In this practice they were following Gandhi's articulate distaste for textbook-centred instruction, which was clearly a part of his general rejection of colonial education. Gandhi had written, "If textbooks are treated as a vehicle for education, the living world of the teacher has very little value. A teacher who teaches from textbooks does not impart originality to his pupils. He himself becomes a slave of textbooks and has no opportunity or occasion to be original. It therefore seems that the less textbooks there are the better it is for the teacher and his pupils." But teaching without textbooks made the inspectorial bureaucracy feel uncomfortable, and that was one reason why Basic schools had so much trouble gaining accreditation at par with other schools.

Even today, when voluntary agencies engaged in innovative work attempt to replace the prescribed textbook with other material, they have to face the difficult task of convincing the bureaucracy that the work they are doing is as serious as the work normal schools are doing with textbooks. Apparently, the colonial practice of prescribing textbooks continues to fulfil some deep psychological

function in the system of education and in the society it serves. Even parents get apprehensive about the quality of instruction when it is not squarely based on the prescribed text. Understandably, parents belonging to economically weaker strata of society get particularly suspicious about such instruction because school textbooks are the only books in their houses. The textbook symbolizes authentic and approved knowledge, the ultimate proof of its indispensability being that the examination is based on it. The prescribed textbook, thus, forms the hub of a structure of relationships governing the system of education.

The past experience of Basic Education provides us with an excellent guide to train and motivate the teacher to plan his or her own daily curriculum and assemble appropriate material to execute the plan. The same past experience warns us that such laudable changes in teaching might create misconceptions among parents and officers if textbooks are denigrated or dispensed with. We need to look at the textbook itself in our search for a solution to this problem. There is no theoretical reason why textbooks should demean the teacher's work, as Gandhi had found they were doing, or the child's natural urge to be active. If textbooks have such tragic consequences, the fault might lie to a great extent with the textbooks themselves and with the syllabus which they supposedly follow.

The report of the Yashpal committee, which was appointed by the Government of India three years ago to examine the widespread problem of curricular burden on children, found Indian textbooks to be greatly deficient in terms of the capacity to arouse children's interest and involvement in learning. As this report suggests, our textbooks seldom require children to observe the world around them or to engage in purposive activity. Some textbooks do list classroom activities in a routine manner. Often, these activities are of the kind that cannot be organized in an ordinary classroom. And what children might learn from these activities is stated anyhow.

On the score of arousing interest, modern textbooks often fare worse than the textbooks written in Gandhi's day. But all such deficiencies can be overcome if textbooks are written with greater care and with the active participation of teachers. The training given to teachers in the old programme of Basic Education to prepare classroom material can be incorporated in future into an enhanced, more general preparation for participation in textbook writing.

New curriculum for the revived Basic Education programme

A fresh initiative using Gandhi's educational thought must break new ground in conceptualizing relevant knowledge for today's children. It should also mark an improvement on past experience of Basic Education in areas where it revealed structural and practical problems. The psychological insights into childhood that are available to us now should also be reflected in the new programme. The following core areas might form an attractive curricular design for a revived Basic Education programme:

Core area I: Health and hygiene, Nature study, Social study

Core area II: Heritage craft (e.g. weaving, Toycrafts, clay work or any other handicraft)

Core area III: Expressive arts, Reading, Writing

Core area IV: Mathematics Sorting and representation of quantitative information

The four core areas named can be expected to provide for opportunities to extend children's experiential base and knowledge as they advance from grade one to five. These core areas can also supply a basis for further classification of knowledge in the remaining grades of elementary education, namely grades six to eight.

Two aspects of this curricular design that deserve some elaboration are nature study and heritage crafts. In the present elementary-level science curriculum, nature study has the latent purpose of imparting a sense of conquest or control over nature. Such an idea is quite contrary to Gandhi's vision of a world where human beings and nature might co-exist. It also clashes with the widely accepted current knowledge of ecological balance and sustainability, for example in the context of disease-control with the help of poisons. The contradictions involved in such strategies are noticed by children long before they are acknowledged, that too reluctantly, in the school. The confusion and cynicism that this delayed acknowledgement causes can be avoided if school pedagogy provides for nature study in the context of a holistic vision of life and health.

The inclusion of heritage crafts in the elementary school curriculum can be expected to make a unique contribution which would combine several different educational aims. These would include the imparting of manual skill and dexterity, aesthetic sense, and the development of certain aspects of personality which the traditional school curriculum and culture routinely fails to

develop. These aspects relate to self-esteem arising from a sense of worth and confidence in one's competence. Teaching of heritage crafts in childhood can stem the large-scale de-skilling of young people that is taking place as a result of poorly conceived modernisation. In association with the expressive arts (such as music, drawing and painting), handicrafts can provide that much-needed training of the senses on which alone the development of meaningful literacy skills can take place.

Specific activities and topics of study that would fill up these core areas ought to be identified at regional and local levels. For this exercise, the following ideas can perhaps be treated as guiding principles derived from Gandhi's legacy and child psychology:

- √ The child's immediate milieu is treated as a resource for itemizing required knowledge and skills (for example, local birds, flowers, crops and trees; local language and folklore; and locally practiced crafts and expressive arts).
- √ All topics are taught with the help of activities. These activities may be the ones suggested in a curriculum guideline or they may be new ones, devised by the teacher.
- √ Children are trained to work in small groups.
- √ Classroom activities aim at extending the child's life at home.
- √ Some activities provide for opportunities requiring children to work outside the classroom every day.
- √ A few topics are selected for deeper probing which might take several days, taking the shape of a project.
- √ Children are given opportunities to work independently of the teacher.

The acceptance of these guiding principles will demand a major initiative towards changing present-day teacher training. In planning such an initiative, we can realistically hope to find useful ideas in the literature documenting the Basic Education programmes of the 1950s and in the ongoing training programmes of certain Gandhian institutions.

Organizational changes necessary for revival

One organizational change which might greatly assist in realizing a key goal of Basic Education would be to amalgamate community-level health services with the local elementary school. It is a common experience that village-level health workers have closer ties with the community than the school teacher. The situation does, of course,

vary according to region, but in general the health worker seems to have more personal acquaintance with parents and children than the teacher has. The health worker is also usually better equipped than the teacher to look after children's health-related problems and to advise them on such problems. Incorporating the health worker's services to the school will enhance the school's capacity to work for children's welfare. The isolated and meagre instruction which the school provides at present seldom succeeds in making health and hygiene prime concerns of practical knowledge for the growing child.

A similar step needs to be taken in the context of the services currently provided under Integrated Child Development Services (ICDS) programmes for early childhood care and pre-school education. It is ironical that the services made available under this programme in thousands of villages remain isolated from school even though the services are aimed at making children's transition to school smoother. Separating these services from the school has exacerbated the confusion in the community's mind over the nature and function of different institutions. Such confusion hardly helps in motivating the community to participate in the running of these institutions. A truly integrated set of child-related programmes will surely have a better chance of success in inspiring people to take active interest in these programmes and to feel responsible towards them. Such integration will be compatible with the holistic vision of community welfare embedded in the idea of Basic Education.

Finally, a new programme of Basic Education must address the task of creating conditions in which the teacher can establish contact with the community and the family. Planners of Basic Education in the 1950s had, for this

purpose, chalked out school designs that would include housing for teachers. We need to revisit the homework done at that time, for the problem it attempted to deal with still afflicts the system of elementary education. In fact, it has become more acute. The daily commuting by hundreds of thousands of elementary school teachers every day to their village school and back on public transport represents a tragic waste of their energy and modest personal resources. It also represents a major loss for the children and the community which the teacher is supposed to serve.

By enabling teachers to become a part of the spatial community we can hope to enhance their involvement in children's out-of-school life. The goal of a Gandhian plan of educational reconstruction can only be to make teachers responsible for the overall development of the children they work with. Progress in this direction will depend on the extent to which bureaucratic control over schools and teachers is replaced by a system of accountability, jointly managed by teachers and the community. The degradation suffered by elementary-level teachers at the hands of officials is the single most relevant reason why teachers greet every reform with cynicism and resignation. This attitude cannot be countered without making alterations in entrenched styles of financial and administrative control. Decision-making and power are involved in each micro-detail or routine functioning of the system. These micro-details can be visualised as so many screws of a giant colonial machinery. The best of ideas aimed at winning the teacher's heart and the community's support get crushed under these screws. A new programme of Basic Education can hardly be expected to work if these screws remain intact.



... the three tasks for which educators are required:
one must learn to see, one must learn to think, one
must learn to speak and write: the goal in all three is
a noble culture. — Friedrich Nietzsche

My School

by Rabindranath Tagore

Lecture delivered in America; published in *Personality* London, Macmillan, 1933. This article has been obtained from the compilation on VidyaOnline. More information and articles can be found at www.vidyaonline.net.

I started a school in Bengal when I was nearing forty. Certainly this was never expected of me, who had spent the greater portion of my life in writing, chiefly verses. Therefore people naturally thought that as a school it might not be one of the best of its kind, but it was sure to be something outrageously new, being the product of daring inexperience.

This is one of the reasons why I am often asked what is the idea upon which my school is based. The question is a very embarrassing one for me, because to satisfy the expectation of my questioners, I cannot afford to be commonplace in my answer. However, I shall resist the temptation to be original and shall be content with being merely truthful.

In the first place, I must confess it is difficult for me to say what is the idea which underlies my institution. For the idea is not like a fixed foundation upon which a building is erected. It is more like a seed which cannot be separated and pointed out directly — it begins to grow into a plant.

And I know what it was to which this school owes its origin. It was not any new theory of education, but the memory of my schooldays.

That those days were unhappy ones for me I cannot altogether ascribe to my peculiar temperament or to any special demerit of the schools to which I was sent. It may be that if I had been a little less sensitive, I could gradually have accommodated myself to the pressure and survived long enough to earn my university degrees. But all the same, schools are schools, though some are better and some worse, according to their own standard.

The provision has been made for infants to be fed upon their mother's milk. They find their food and their mother at the same time. It is complete nourishment for them, body and soul. It is their first introduction to the great truth that man's true relationship with the world is that of personal love and not that of the mechanical law of causation. Therefore our childhood should be given its full measure of life's draught, for which it has an endless thirst. The young mind should be saturated with the idea that it has been born in a human world which is in harmony with the world around it.

And this is what our regular type of school ignores with an air of superior wisdom, severe and disdainful. It forcibly

snatches away children from a world full of the mystery of God's own handiwork, full of the suggestiveness of personality. It is a mere method of discipline which refuses to take into account the individual. It is a manufactory specially designed for grinding out uniform results. It follows an imaginary straight line of the average in digging its channel of education. But life's line is not the straight line, for it is fond of playing the see-saw with the line of the average, bringing upon its head the rebuke of the school. And this was the cause of my suffering when I was sent to school. For all of a sudden I found my world vanishing from around me, giving place to wooden benches and straight walls staring at me with the blank stare of the blind.

The legend is that eating of the fruit of knowledge is not consonant with dwelling in paradise. Therefore men's children have to be banished from their paradise into a realm of death, dominated by the decency of a tailoring department. So my mind had to accept the tight-fitting encasement of the school which, being like the shoes of a mandarin woman, pinched and bruised my nature on all sides and at every movement. I was fortunate enough in extricating myself before insensibility set in.

Though I did not have to serve the full penal term which men of my position have to undergo to find their entrance into cultured society, I am glad that I did not altogether escape from its molestation. It has given me knowledge of the wrong from which the children of men suffer.

The cause of it is this: that man's intention is going against God's intention as to how children should grow into knowledge. How we should conduct our business is our own affair, and therefore in our offices we are free to create in the measure of our special purposes. But such office arrangement does not suit God's creation. And children are God's own creation.

We have come to this world to accept it, not merely to know it. We may become powerful by knowledge, but we attain fullness by sympathy. The highest education is that which does not merely give us information but makes our life in harmony with all existence. But we find that this education of sympathy is not only systematically ignored in schools, but it is severely

repressed. From our very childhood, habits are formed and knowledge is imparted in such a manner that our life is weaned away from nature, and our mind and the world are set in opposition from the beginning of our days. Thus the greatest of education for which we came prepared is neglected, and we are made to lose our world to find a bagful of information instead. We rob the child of his earth to teach him geography, of language to teach him grammar. He was born in the human world, but is banished into the world of living gramophones, to expiate for the original sin of being born in ignorance. Child-nature protests against such calamity with all its power of suffering, subdued at last into silence by punishment.

We all know children are lovers of the dust; their whole body and mind thirst for sunlight and air as flowers do. They are never in a mood to refuse the constant invitations to establish direct communication which come to their senses from the universe. But unfortunately for children their parents, in the pursuit of their profession, in conformity to their social traditions, live in their own peculiar world of habits. Much of this cannot be helped. For men have to specialize, driven by circumstances and by need of social uniformity.

But our childhood is the period when we have or ought to have more freedom — freedom from the necessity of specialization into the narrow bounds of social and professional conventionalism.

I well remember the surprise and annoyance of an experienced headmaster, reputed to be a successful disciplinarian, when he saw one of the boys of my school climbing a tree and choosing a fork of the branches for settling down to his studies. I had to say to him in explanation that “childhood is the only period of life when a civilized man can exercise his choice between the branches of a tree and his drawing-room chair, and should I deprive this boy of that privilege because I, as a grown-up man, am barred from it?” What is surprising is to notice the same headmaster’s approbation of the boys’ studying botany. He believes in an impersonal knowledge of the tree because that is science, but not in a personal experience of it. This growth of experience leads to forming instinct, which is the result of nature’s own method of instruction. The boys of my school have acquired instinctive knowledge of the physiognomy of the tree. By the least touch they know where they can find a foothold upon an apparently inhospitable trunk; they know how far they can take liberty with the branches, how to distribute their bodies’ weight so as to make themselves least burdensome to branchlets. My boys are able to make the best possible use of the tree in the matter of gathering fruits, taking rest and hiding from undesirable pursuers. I myself was brought up in a cultured home in a town, and as far as my personal behaviour

goes, I have been obliged to act all through my life as if I were born in a world where there are no trees. Therefore I consider it as a part of education for my boys to let them fully realize that they are in a scheme of existence where trees are a substantial fact, not merely as generating chlorophyll and taking carbon from the air, but as living trees.

Naturally the soles of our feet are so made that they become the best instruments for us to stand upon the earth and to walk with. From the day we commenced to wear shoes we minimized the purpose of our feet. For us it amounts to a grievance against God for not giving us hooves instead of beautifully sensitive soles. I am not for banishing footgear altogether from men’s use. But I have no hesitation in asserting that the soles of children’s feet should not be deprived of their education, provided for them by nature, free of cost. Of all the limbs we have they are the best adapted for intimately knowing the earth by their touch. For the earth has her subtle modulations of contour which she only offers for the kiss of her true lovers—the feet.

I have again to confess that I was brought up in a respectable household, and my feet from childhood have been carefully saved from all naked contact with the dust. When I try to emulate my boys in walking barefoot, I invariably choose the thorns to tread upon in such a manner as to make the thorns exult. My feet have not the instinct to follow the lines of least resistance. For even the flattest of earth-surface, has its dimples of diminutive hills and dales only discernible by educated feet. I have often wondered at the unreasonable zigzag of footpaths across perfectly plain fields. It becomes all the more perplexing when you consider that a footpath is not made by the caprice of one individual. Unless most of the walkers possessed exactly the same eccentricity such obviously inconvenient passages could not have been made. But the real cause lies in the subtle suggestions coming from the earth to which our feet unconsciously respond. Those for whom such communications have not been cut off can adjust the muscles of their feet with great rapidity at the least indication. Therefore, they can save themselves from the intrusion of thorns, even while treading upon them, and walk barefooted on a gravelly path without the least discomfort. I know that in the practical world shoes will be worn, roads will be metalled, cars will be used, but during their period of education, should children not be given to know that the world is not all drawing-room, that there is such a thing as nature to which their limbs are made beautifully to respond?

There are men who think that by the simplicity of living, introduced in my school, I preach the idealization of poverty which prevailed in the mediaeval age. From the point of view

of education, should we not admit that poverty is the school in which man had his first lessons and his best training? Poverty brings us into complete touch with life and the world, for living richly is living mostly by proxy, and thus living in a world of lesser reality. This may be good for one's pleasure and pride, but not for one's education. Wealth is a golden cage for children. Therefore in my school, much to the disgust of the people of expensive habits, I had to provide for this great teacher — this bareness of furniture and materials — not because it is poverty, but because it leads to personal experience of the world.

What tortured me in my school-days was the fact that the school had not the completeness of the world. It was a special arrangement for giving lessons. It could only be suitable for grown-up people who were conscious of the special need of such places and therefore ready to accept their teaching at the cost of dissociation from life. But children are in love with life, and it is their first love. All its colour and movement attract their eager attention. And are we quite sure of our wisdom in stifling this love? Children are not born ascetics, fit to enter at once into the monastic discipline of acquiring knowledge. At first they must gather knowledge through their life, and then they will renounce their lives to gain knowledge, and then again they will come back to their fuller lives with ripened wisdom.

But society has made its own arrangements for manipulating men's minds to fit its special patterns. These arrangements are so closely organized that it is difficult to find gaps through which to bring in nature. There is a serial adjustment of penalties which follows to the end one who ventures to take liberty with some part of the arrangements, even to save his soul. Therefore it is one thing to realize truth and another to bring it into practice where the whole current of the prevailing system goes against you. This is why, when I had to face the problem of my own son's education, I was at a loss to give it a practical solution. The first thing that I did was to take him away from the town surroundings into a village and allow him the freedom of primeval nature as far as it is available in modern days. He had a river, noted for its danger, where he swam and rowed without check from the anxiety of his elders. He spent his time in the fields and on the trackless sand-banks, coming late for his meals without being questioned. He had none of those luxuries that are not only customary but are held as proper for boys of his circumstance. For which privations, I am sure, he was pitied and his parents blamed by the people for whom society has blotted out the whole world. But I was certain that luxuries are burdens to boys. They are the burdens of other people's habits, the burdens of the vicarious pride and pleasure which parents enjoy through their children.

Yet, being an individual of limited resources, I could do

very little for my son in the way of educating him according to my plan. But he had freedom of movement: he had very few of the screens of wealth and respectability between himself and the world of nature. Thus he had a better opportunity for a real experience of this universe than I ever had. But one thing exercised my mind as more important than anything else.

The object of education is to give man the unity of truth. Formerly, when life was simple, all the different elements of man were in complete harmony. But when there came the separation of the intellect from the spiritual and the physical, the school education put entire emphasis on the intellect and the physical side of man. We devote our sole attention to giving children information, not knowing that by this emphasis we are accentuating a break between the intellectual, physical and the spiritual life.

I believe in a spiritual world, not as anything separate from this world, but as its innermost truth. Born in this great world, full of the mystery of the infinite, we cannot accept our existence as a momentary outburst of chance, drifting on the current of matter towards an eternal nowhere. We cannot look upon our lives as dreams of a dreamer who has no awakening in all time. We have a personality to which matter and force are unmeaning unless related to something infinitely personal, whose nature we have discovered, in some measure, in human love, in the greatness of the good, in the martyrdom of heroic souls, in the ineffable beauty of nature, which can never be a mere physical fact, nor anything but an expression of personality.

Experience of this spiritual world, whose reality we miss by our incessant habit of ignoring it from childhood, has to be gained by children by fully living in it and not through the medium of theological instruction. But how this is to be done is a problem difficult of solution in the present age. For nowadays men have managed so fully to occupy their time that they do not find leisure to know that their activities have only movement but very little truth, that their soul has not found its world.

In India we still cherish in our memory the tradition of the forest colonies of great teachers. These places were neither schools nor monasteries in the modern sense of the word. They consisted of homes where with their families lived men whose object was to see the world in God and to realize their own life in Him. Though they lived outside society, yet they were to society what the sun is to the planets, the centre from which it received its life and light. And here boys grew up in an intimate vision of eternal life before they were thought fit to enter the state of the householder.

Thus in the ancient India the school was where life itself was. The students were brought up, not in the academic

atmosphere of scholarship and learning, or in the maimed life of monastic seclusion, but in the atmosphere of living aspiration. They took the cattle to pasture, collected firewood, gathered fruit, cultivated kindness to all creatures, and grew in their spirit with their own teachers' spiritual growth. This was possible because the primary object of these places was not teaching but giving shelter to those who lived their life in God.

That this traditional relationship of the masters and disciples is not a mere romantic fiction is proved by the relic we still possess of the indigenous system of education. These chaluspathis, which is the Sanskrit name for the university, have not the savour of the school about them. The students live in their master's home like the children of the house, without having to pay for their board and lodging or tuition. The teacher prosecutes his own study, living a life of simplicity, and helping the students in their lessons as a part of his life and not of his profession. This ideal of education through sharing a life of high aspiration with one's master took possession of my mind. Those who in other countries are favoured with unlimited expectations of worldly prospects can fix their purposes of education on those objects. But for us to maintain the self-respect which we owe to ourselves and to our creator, we must make the purpose of education nothing short of the highest purpose of man, the fullest growth and freedom of soul. It is pitiful to have to scramble for small pittances of fortune. Only let us have access to the life that goes beyond death and rises above all circumstances; let us find our God, let us live for that ultimate truth which emancipates us from the bondage of the dust and gives us the wealth, not of things but of inner light, not of power but of love. Such emancipation of soul we have witnessed in our country among men devoid of book-learning and living in absolute poverty. In India we have the inheritance of this treasure of spiritual wisdom. Let the object of our education be to open it out before us and to give us the power to make the true use of it in our life, and offer it to the rest of the world when the time comes, as our contribution to its eternal welfare.

I had been immersed in literary activities when this thought struck my mind with painful intensity. I suddenly felt like one groaning under the suffocation of nightmare. It was not only my own soul, but the soul of my country that seemed to be struggling for its breath through me. I felt clearly that what was needed was not any particular material object, not wealth or comfort or power, but our awakening to full consciousness in soul freedom, the freedom of the life in God, where we have no enmity with those who must fight, no competition with those who must make money, where we are beyond all attacks and above all insults.

In conclusion, I warn my hearers not to carry away with them any false or exaggerated picture of this ashram. When ideas are stated in a paper, they appear too simple and complete. But in reality their manifestation through the materials that are living and varied and ever changing is not so clear and perfect. We have obstacles in human nature and in outer circumstances. Some of us have a feeble faith in boys' minds as living organisms, and some have the natural propensity of doing good by force. On the other hand, the boys have their different degrees of receptivity, and there are a good number of inevitable failures. Delinquencies make their appearance unexpectedly, making us suspicious as to the efficacy of our own ideals. We pass through dark periods of doubt and reaction. But these conflicts and waverings belong to the true aspects of reality. And those who have firm faith in their idea have to test its truth in discords and failures that are sure to come to tempt them from their path.

I for my part believe in the principle of life, in the soul of man, more than in methods. I believe that the object of education is the freedom of mind which can only be achieved through the path of freedom—though freedom has its risk and responsibility as life itself has. I know it for certain, though most people seem to have forgotten it, that children are living beings — more living than grown-up people, who have built their shells of habit around them. Therefore it is absolutely necessary for their mental health and development that they should not have mere schools for their lessons, but a world whose guiding spirit is personal love. It must be an ashram where men have gathered for the highest end of life, in the peace of nature; where life is not merely meditative, but fully awake in its activities; where boys' minds are not being perpetually drilled into believing that the ideal of the self-idolatry of the nation is the truest ideal for them to accept; where they are bidden to realize man's world as God's Kingdom, to whose citizenship they have to aspire; where the sunrise and sunset and the silent glory of stars are not daily ignored; where nature's festivities of flowers and fruit have their joyous recognition from man; and where the young and the old, the teacher and the student, sit at the same table to partake of their daily food and the food of their eternal life.



Inside Out

by Jayashree Janardhan

Jayashree Janardhan is a Learning Network volunteer who splits her time between India and the USA. She loves working with children and for the last three years has been exploring ways to promote emotional and social development of children. She also volunteers with parenting groups in the USA that look at these aspects. based in the US. She can be contacted by writing to info@learningnet-india.org.

As humans, we have various forms of intelligence – linguistic, mathematical, musical, sports/kinesthetic, spatial, intra-personal and inter-personal. The latter two are important life skills that guide us through various experiences. *Intrapersonal* intelligence is a look inside ourselves — our needs and feelings and understanding the various experiences that make our life. This intelligence promotes self-understanding and is also necessary for developing *inter-personal* intelligence – our relationship with others. Developing inter-personal intelligence is essential as a life skill that determines how we interact with others and helps us manage our relationships. These two intelligences put together promote self-understanding and inter-personal skills.

When we care for children – as parents, facilitators or teachers — we need to help them make sense of their life experiences. This greatly impacts their intra-personal and inter-personal skills. When we converse with children about their experiences – we are developing in them their own ability to reflect on the happenings in their lives and make sense of it. By doing this, children develop the ability to convey their own perspectives based on their experiences. This contributes to their (state of) emotional well-being and later on living their lives as balanced individuals who can regulate their emotions through greater self-understanding.

As we grow we develop an autobiographical narrative of our life experiences which affects how we perceive the world. Our brain physically encodes and classifies our life experiences and this in turn determines how we react in different circumstances. When we get used to consciously making sense of our lives – i.e., reflecting on what is going on inside us, and then mapping this to our relationships with people around us – we develop a powerful ability to manage our experiences, reactions, interactions and relationships.

Triggers — Causes for Conflict

A trigger is a stimulus that bothers us. Something happens

that puts us in a *triggered* state. It causes an internal conflict – a feeling of disturbance or anger. How we handle the trigger will depend on various things and is influenced by intra-personal and inter-personal intelligences. Hunger and fatigue cause us to get triggered more easily. Hormonal states also cause us to get triggered easily. Other causes for triggers are unresolved experiences from our past which result in a habitual subconscious response. Every one of us has experienced triggers and seen our own habitual responses to them.

When we are triggered, our reactions will be different based on the circumstance and the particular person(s) we are dealing with. Responses may be to “*fight*” or “*freeze*” or “*run away*”. We have different reactions to different people. What we want to do is try and return to our stable state as soon as possible to effectively resolve the conflict. We should pause and reflect on exactly what triggered us and then develop effective communication to try and resolve the conflict. When we do not reflect and map experiences that disturb us, we create unresolved experiences in our life, which can lead us to react impulsively, without much conscious thought or choice. All of us have experienced such triggers and our own reactions to them. Our hope is to search for tools and strategies which can help us overcome them.

At a larger level, when education (or in particular – schooling) completely ignores this important aspect of personal growth, it leads to a society of people lacking in the ability to face day to day or larger conflicts. Societal conflicts occur with limited avenues for peaceful resolution. How conflict is viewed and dealt with in the growing years of a child will impact views taken by him/her as an adult. People working with children can consciously help them develop the abilities for this type of emotional intelligence by choosing age-appropriate strategies.

Many philosophies on education as well as specific tools exist to help develop inter-personal and inter-personal intelligence. This is something that can be developed anytime – provided the need to do this is felt.

Lesson Study India

A Teacher Led Professional Development

by Akihiko Takahashi

The author is Assistant Professor of Mathematics Education, Department of Teacher Education, School of Education, DePaul University, Chicago. He conducts Lesson Study Sessions for teachers at the University of Chicago.

Current reform movement in teaching and learning mathematics

Teaching mathematics through lectures may be an easy instructional method for teachers. However, when students are passively listening to teachers, their opportunities to understand mathematical concepts and procedures are not maximized. Rather than just listening to teachers talk, students need to be more actively involved in mathematics and do mathematical activities (Brown, 1994).

The current reform movement in teaching and learning mathematics in the U.S. has been under way for nearly two decades. The National Research Council's (1989) "Everybody Count: A Report to the Nation on the Future of Mathematics Education", and the National Council of Teachers of Mathematics' "Curriculum and Evaluation Standards for School Mathematics" (NCTM, 1989) and "Principles and Standards for School Mathematics" (NCTM, 2000) provide broad frameworks to guide reform in school mathematics in the U.S. One of the major aspects of these reform movements entails changing from a traditional classroom that focuses on teacher lecturing to a student-centred classroom that emphasizes student engagement in mathematical activities. A basic assumption of the reforms is that students can learn by constructing their own conceptions of mathematics (National Research Council, 1989). In other words, students are viewed as active constructors, rather than passive recipients of knowledge (Brown, 1994). Although research has demonstrated the efficiency of a constructive approach to teaching, we rarely see mathematics classrooms in which this approach is fostered (Hiebert, 1999).

Hiebert emphasizes the existence of this phenomenon by referring to the findings of the report of the Conference Board of the Mathematical Sciences (1975). "Teachers are essentially teaching the same way they were taught in school, because most teachers in the U.S. have not studied to be a teacher and they teach students with their mental pictures of what teaching is like, which they have acquired as students" (Stigler and Hiebert, 1999).

Teacher development, particularly involving the

transition from traditional instruction toward student-centred instruction, requires teachers to develop their knowledge in a variety of areas, such as content knowledge, understanding of students' thinking, and pedagogical knowledge (Simon & Tzur, 1999). Moreover, because teaching is a cultural activity and cannot be learned like the use of a computer, teachers need to have a concrete image of student-centered instruction to guide their professional development (Fraivillig, Murphy, & Fuson, 1999). Teaching is something that needs to be "learned implicitly, through observation and participation, and not by deliberate study" (Stigler & Hiebert, 1999, p.86). Therefore, learning how to teach is demanding and time-consuming. It is not something that can be learned quickly by merely listening to a lecture, or reading a manual.

Improving Teaching and Learning Mathematics through Lesson Study

Based on the TIMSS videotape classroom study (1997), Stigler and Hiebert argue that Japanese mathematics lessons better exemplify current U.S. reform ideas than do typical U.S. mathematics lessons (1999). One reason that current U.S. reform ideas can be found in Japanese mathematics lessons is that the research in problem solving in school mathematics, which was addressed in the early 1970s, influenced the recent reform mathematics movements in both countries (Becker & Shimada, 1997). For example, a typical pattern of a Japanese mathematics lesson, which is described by Stigler and Hiebert (1999), is based on Polya's four phases of problem solving (Polya, 1945). In the United States, it was announced a generation ago by NCTM that "problem-solving must be the focus of school mathematics" (NCTM, 1980). This emphasis on problem-solving in school mathematics has been accompanied by ongoing research (Lester & Garofalo, 1982; Schoenfeld, 1985), and helped formulate the major themes of the NCTM Standards (1989).

To implement the new teaching idea, problem-solving, to a mathematics class, Japanese researchers, educators, and teachers have worked collaboratively to move from

traditional instruction to student-centred instruction by referring to U.S. research documents through Lesson Study. Lesson Study is a form of professional development that is widely conducted in Japan (Fernandez, et al., 2001; Lewis, 2000; Lewis and Tsuchida, 1998; Stigler and Hiebert, 1999; Yoshida, 1999). Researchers have argued that Lesson Study is the critical systemic feature that has enabled Japanese elementary teachers to improve classroom instruction in mathematics and science in recent decades (Lewis and Tsuchida, 1998; Takahashi, 2000; Stigler and Hiebert, 1999; Yoshida, 1999). Because Japanese mathematics has been modified from traditional instruction to the form suggested by U.S. research such that instruction focuses on problem solving, one path toward reform mathematics instruction might use the problem solving that has been widely seen in Japanese classrooms as a base to create an active mathematics classroom.

What is Lesson Study

The practice of lesson study originated in Japan. Widely viewed as the foremost professional development programme, lesson study is credited with dramatic success in improving classroom practices for the Japanese elementary school system (Fernandez, et al., 2001; Lewis, 2000; Lewis & Tsuchida, 1998; Shimahara, 1999; Stigler & Hiebert, 1999; Takahashi, 2000; Yoshida, 1999).

First, Lesson Study embodies many features that researchers have noted are effective in changing teacher practice, such as using concrete practical materials to focus on meaningful problems, taking explicit account of the contexts of teaching and the experiences of teachers, and providing on-site teacher support within a collegial network. It also avoids many features noted as shortcomings of typical professional development, e.g., that it is short-term, fragmented, and externally administered (Firestone, 1996; Huberman & Gusky, 1994; Little, 1993; Miller & Lord, 1994; Penuel & Firestone, 1996).

Second, lesson study promotes and maintains collaborative work among teachers while giving them systematic intervention and support. During lesson study, teachers collaborate to: (1) formulate long-term goals for student learning and development; (2) plan and conduct lessons based on research and observation in order to apply these long-term goals to actual classroom practices for particular academic contents; (3) carefully observe the level of students' learning, their engagement, and their behaviors during the lesson; and (4) hold post-lesson discussion with their collaborative groups to discuss and revise the lesson accordingly (Lewis, 2002b).

One of the key components in these collaborative

efforts is "the research lesson," in which, typically, a group of instructors prepares a single lesson, which is then observed in the classroom by the Lesson Study group and other practitioners, and afterwards analyzed during the group's post-lesson discussion. Through the research lesson, teachers become more observant and attentive to the process by which lessons unfold in their class, and they gather data from the actual teaching based on the lesson plan that the lesson study group has prepared. The research lesson is followed by the post-lesson discussion, in which teachers review the data together in order to: (1) make sense of educational ideas within their practice; (2) challenge their individual and shared perspectives about teaching and learning; (3) learn to see their practice from the student's perspective; and (4) enjoy collaborative support among colleagues (Takahashi & Yoshida, 2004).

To Begin Lesson Study: Create an Informal Study Group

Since Lesson Study is a form of teacher-led professional development, any teacher can begin lesson study by starting to collaborate with other teachers. An effective model of lesson study in Japan is often started as a grassroots movement among enthusiastic teachers rather than a top down formation. For example, many Lesson Study groups in the U.S. started as a voluntary study group. Through experiencing several Lesson Study cycles, the group was able to spread the idea of Lesson Study at the school and convinced other mathematics teachers to join them. It might take several years, it would be a foundation for conducting Lesson Study lesson study and trying to provide consistent and coherent mathematics education to its students. Informal study groups that focus on improving mathematics teaching and learning can be a step toward developing a Lesson Study group. Forming a comfortable collaborative group is the most desirable step toward beginning successful Lesson Study (Takahashi & Yoshida, 2004).

Experiencing Lesson Study

The idea of Lesson Study is simple: collaborating with fellow teachers to plan, observe and reflect on lessons. However, developing effective Lesson Study can be a complex process (Lewis, 2002). In order to be effective, Lesson Study must become a cultural activity, woven into the fabric of the teachers' everyday teaching experiences. Effective Lesson Study cannot be learned by simply reading about it. Teachers must experience it first-hand by participating in it themselves on a long-term basis (Takahashi & Yoshida, 2004). By participating in Lesson Study and practising it, it becomes possible to learn such

subtle, yet important, things like how a lesson plan for Lesson Study is different from a traditional lesson plan, why such a detailed lesson plan is needed, what kinds of data need to be collected during observation in order to conduct meaningful discussions, and how can we carry out effective debriefings, to name a few. If you cannot find active Lesson Study groups around your area, you might want to use video in order to virtually experience a research lesson and its post-lesson discussion. Several Lesson Study video/DVD and other useful resources for conducting Lesson Study are available at following the websites:

- ▼ Global Education Resources (GER): (<http://www.globaledresources.com/>)
- ▼ Lesson Study Group at Mills College: (<http://www.lessonresearch.net/>):
- ▼ Lesson Study Research Group (LSRG) at Teacher's College, Columbia University : (<http://www.tc.columbia.edu/lessonstudy/>)
- ▼ Research for Better Schools: <http://www.rbs.org/>)

Professional development through Lesson Study provides many qualities of the professional development approaches that have been suggested to improve classroom practice and learning. It is collaborative and concrete, and has student learning/understanding as its center. It is continuous and teacher led. The lesson study approach permits teachers to be involved in professional development as active learners as they expect their students to be.

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Tilonia's Alternative Schooling

by S. Srinivasan and S. Anandalakshmy

Dr S. Anandalakshmy is an eminent educationist in the field of Child Development. S. Srinivasan works for Barefoot College, Tilonia.

A Grassroots Perspective

The Social Work and Research Centre (SWRC) was established in 1972, in Rajasthan, in the small village of Tilonia, as a registered, non-profit, voluntary organization. Tilonia is one of 110 villages of Silora Block in Ajmer District.

The terrain in and around Tilonia is arid and rocky: large expanses of dusty land, peppered with rounded rocks and thorny trees. Only camels could thrive here; the people merely survive. One realizes this when one overtakes camel-driven carts on the road or passes camels, reaching out for what edible greenery they can find on the lanky shrubs. There are no perennial rivers here, no abundant monsoon, water is a perpetual scarcity.

This was the spot chosen by a small group of young, idealistic university graduates fired by an inner call to work for the poor, to set up shop and work with the people. From its inception, therefore, there was a continuing dialogue with the rural communities. In the early years, the SWRC team also worked out the principles which would govern their approach and activities. These came to be called the "non-negotiables", and they included a commitment to gender and caste equality, to honesty and integrity and to environmental protection.

An Idea is Born

The process was not one of social workers implementing a programme for the poor, but one of their planning with the community and putting the plans into operation. The core team of the SWRC was constituted of people from different parts of the country, with varied educational qualifications and talents, and developed cohesiveness and a symbiotic functioning over time. As the scale of SWRC's initiatives grew, it moved in the direction of becoming a "barefoot college", a system that was open for the common man and woman and child. The organization was able to identify two major objectives and give them concrete shape.

The first objective was to create a conducive environment for participatory decision making, involving both the community and the SWRC team of workers.

The second objective was to decentralise the focus of SWRC's initiatives to Field Centres, situated away from Tilonia, in villages in different directions.

These two processes of participatory decision making and decentralisation made clear the link between development and education. Thus the need to provide education, with a focus on issues related to development, was perceived as an imperative. The dialogue consisted of a review of the critical aspects of the education of children, as they relate to development. There were several questions that confronted them, the main questions among them listed below.

- ‡ How can primary education be made more relevant to them and accountable to the community?
- ‡ Will the educational system prepare them to work in their villages?
- ‡ What is the learning process that will prepare them for responsible citizenship?
- ‡ What will prepare the children to work for development in their own settings?
- ‡ How can children demand attention to their aspirations?
- ‡ Can their large numbers enable them to develop a collective voice?
- ‡ How can the community be involved in planning for itself?
- ‡ What are the strategies for sharing of knowledge between the educated and those who have not had the opportunities to get an education?

The Barefoot College Approach

The formal schools were found to run at timings convenient for the teachers. Most of the teachers were from nearby towns and cities; none lived in the villages where they worked. The curriculum followed in the school was alien to the everyday reality of the children and this resulted in a mutual indifference between the community and the school system.

The Barefoot College was planned as an alternative that could fill the lacunae. Its major thrust was to value and reinforce the skills and abilities of the people in the

village: the artisan, the craftsman, the storyteller, the puppeteer, the manual worker, the herder of sheep and goats and the woman who could cook, sew and conserve resources. A secondary thrust was to demystify academic expertise and to translate the formal knowledge received in higher education, into viable and feasible strategies for the rural communities.

The project was aimed at supporting the community to identify its own needs and to make plans to address them. The children had to realise that the schooling they had missed could be recovered at their very doorsteps. Literacy and numeracy would help them to be active participants in the processes of development and to take control over their own lives.

When all the alternatives to make schooling relevant to village life were discussed at length, the following aspects emerged:

- ‡ Parents must be involved in planning.
- ‡ The school timings must be convenient for the children.
- ‡ Teachers who live in the village must be selected.
- ‡ Curricula and methods of teaching must relate to their environment.

The children in the villages in and around Tilonia herded goats or helped their parents in the tasks of subsistence farming. Also, there were the never-ending household chores for the girls which effectively kept them occupied the whole day. The families lived on the fringes of sustenance and could be termed marginal, in both economic and social aspects. They were invariably on the lower rungs of the caste hierarchy. This profile would surely qualify them to be considered “unteachable” in the regular formal schools!

The Tilonia Night School Project

The Tilonia Night School project began in a small way, with three schools in the year 1975. This number grew to nine in 1980 and to twenty-nine in 1981. In the beginning, only boys attended these schools. Gradually, one or two girls joined in. Today, twenty years later, more than 60% of the students in the Night Schools are girls.

According to the decisions taken by the communities and the Barefoot College, the teachers have to be residents of the village. There are two teachers, on an average, for every school. The strength of the school varies, but it could be as high as fifty. The schools are located in far-flung villages, but are easily identified if one drives in at night, by the solar lamp that lights up the school. The

school works for two to three hours every evening, not enough to cover the standard curriculum, but the motivation of the children is so high, that they do cover a lot of ground. The curriculum is developed with the specific communities in mind and contains both what is both familiar and what is relevant. The selection and the continuous training of the teachers are in-built for the system to work. Young men (and women) with at least a few years of high school education and an aptitude for teaching are trained on the job. The monthly meetings constitute an important part of the training and serve as a forum for the sharing of ideas and experiences and an educational process. After attending these, the teachers feel a renewed energy and enthusiasm for their jobs. They are also glad to have greater clarity on both objective and method. If the methodology had been established, what were the new thought processes? In what way can the Barefoot College claim to have broken new ground?

When development issues began to be discussed at the teachers’ meetings, the importance of the Night School as a nucleus for awareness-building, began to emerge. In fact, it came to be seen as one of the primary functions of the Night Schools. In the process of examining the aim of education, its potential leverage in the development of the village got recognized. The teachers of the Night Schools were also the same people involved in planning and implementing development programmes.

At the start, the curriculum had been planned, drawing on the environment of the child. The focus was further broadened, to relate the curriculum to the concerns of development. After many hours of deliberation, the Barefoot College agreed that the conventional school, which imparted literacy and numeracy, up to the level of Standard V, did not satisfy the requirements of the community. The rural people considered education as a vehicle of social mobility and as a method for increasing the market value for employment. Formal schooling, as they could observe, did not satisfy either of the objectives they had defined. Further it served only to alienate the children from their surroundings. They rejected the system.

The Barefoot College, by its very definition, did not see Education as an isolated input in the lives of children, but as a process that must be strongly founded in their own concerns. Ultimately, the best input for the children is that which enables them to break the stranglehold of poverty. Knowledge, which had come to be traditionally defined, as that which is taught in school, had to be redefined in our context. Literacy is definitely necessary

and useful, to deal with the matters of the world outside. Literacy and numeracy are generally recognized as tools that increase access to development. However, literacy it was found, was not sufficient in itself, to help the children get employment and to deal with various aspects of the power structure. The realization of this fact caused a paradigm shift.

The Children's Parliament

It was decided that if the children were to understand the linkages between the education system, the schemes for development and the political process, they needed to begin with hands-on experience in self-government. Thus the concept of a Children's Parliament was born. To begin with, the constituencies were defined. Two or three adjoining Night Schools would be one constituency. The electorate was made up of all children attending the Night School for a period of two years or more. The criteria for eligibility were determined by the children themselves. The children wanted Bunker Roy, the Director of the Barefoot College, to act as the President and be in overall charge of their elections.

They also decided that children in the age group 11 to 12 years would be eligible for filing nomination papers as candidates. Polling by secret ballot and in the presence of impartial observers would be held in each of the Night Schools, where polling booths would be set up. Polling would be held simultaneously in all the booths, and the ballot boxes sealed and transferred overnight to Tilonia or to one of the Field Centres. The counting of votes would take place the next day and the results announced to the children gathered there. The elected members would then select, from among themselves, the Prime Minister, the Cabinet and the Speaker of the House. The President (the Director of the Barefoot College) would administer the oath of office to all the members of the Parliament on the same day. When the term of two years came to an end, the President would announce the holding of fresh elections. This process of electing independent, non-party members to the Children's Parliament, every two years has provided the children an opportunity for first hand experience with democracy.

The Children's Parliament takes seriously the role of monitoring the Night Schools. The elected members occasionally make comments about the administration of the College. The members of the Children's Parliament work in coordination with the Village Education Committees. The nucleus of the idea of self-government,

through duly elected representatives appears to have generated a veritable movement. The children are not playing with models of democratic functioning: they consider democracy to be real and viable for them. They also put pressure on the SWRC and their local government for solar power, water pumps and other improvements in the village. They teach the parents and older relatives about the functioning of democracy and demonstrate its effectiveness.

The 'paradigm shift', referred to earlier, was the change of focus in the purpose of education. Normally, the school system has a curriculum which is expected to prepare the children for the future. That literacy is a means of making books, newspapers and magazines comprehensible to the children was obvious. Providing them the tools of communication to deal with a literate officialdom was also incontrovertible. Self-government was seen as adding value to education. In the Night Schools, literacy shared the space with practice in democratic functioning. This, in turn, made the children more effective in dealing with the present, as well as in being equipped for the future.

Children of the Night Schools are involved in almost all the developmental activities of the SWRC: hand pump/water management, solar energy, dairy, crafts, puppetry and theatre.

The Key Role of the Teacher

There were two criteria for the selection of the teacher:

- (a) S/He had to be from the village community and be accepted and respected by the people and
- (b) S/He had to have adequate literacy and numeracy skills, and be confident to impart them to children.

The exact level of education was not fixed, but the aptitude and motivation for teaching were considered important.

Once selected, the teachers would come to Tilonia for training, for a period of one month. The first half of the month is spent on informal, wide-ranging discussions ranging from methods of teaching to socio-political problems in the village. The time would also be utilised for workshops in which learning situations would be simulated. These sessions also formed the basis for development of teaching aids. At the end of the fortnight, the teachers would return to their villages to conduct a survey of the children in the age group 6 to 14 years. With the collection of demographic and socio-economic information about all the families in the village community, the teachers would

return to Tilonia to synthesize the data and to make a tentative plan of action. At this time, they would also be oriented to methods of evaluation of academic progress and the maintenance of school records.

The teacher is constantly supported and reinforced in the attempt to involve the community in the Night School. In the regular school system, the public is not welcomed into the schools. The curriculum is treated as a matter for specialists, who have been trained in colleges of Education. It is just the reverse in the Barefoot College. The local bard, the wandering story-teller, the midwife, the Health Worker — any one of them could be a resource person for the Night School. This brings the local community into the school; but what is more important, it enables the children to respect their own cultural traditions and to learn directly from the practitioners.

Enlivening the Methods

Rajasthan is famed for its puppetry, as everyone knows. The Barefoot College, which already had the experience of using puppets for the communication of development messages, introduced puppetry as pedagogy in the Night Schools. Children and teachers together made the puppets, wrote the scripts and presented the programmes. The skepticism around the use of entertainment puppets dissolved quickly.

The SWRC had a Media Centre, where film strips and slides were developed. These were used for campaigns and for educating the adults about developmental issues. Some of the materials were adapted to be used for the children in the Night School. The Night Schools had a flexible approach to the use of modern technology; where it was feasible, it was adopted; where an older method would suffice, it was used. The intention was to make the school a lively place for acquiring relevant information and a positive mind set.

In this context, the Night Schools were often labelled as “non-formal” by funding agencies and others. The debate between “formal” and “non-formal” schools was found to be unproductive and the decision at Tilonia was to use the term, “alternative school”.

The Night Schools have a wide spectrum of activities and inputs, which emerged as responses to the expressed needs of the children. For example, the children wanted an opportunity to meet the children from other villages and other parts of the district. So, the idea of the Children’s Fair arose, rather similar to the village fairs meant for adults, in the area. This became the Night School children’s

very own fair, organized annually. The fairs are held in different villages each year, with the community taking up the responsibility, through voluntary labour, for logistics and arrangements. The Annual Fair could range from one day to three days. The children look forward, excitedly, to the Fair and participate in the activities with vigour and enthusiasm. Some of them arrange for their older siblings to herd the goats on those days. The Fair has a variety of activities, which combine learning with a great deal of fun. These include games, puzzles, origami, toy-making, use of waste material and so on.

Educational excursions and exposure trips were organized for both teachers and children. Most of them had never had an opportunity to go beyond a neighbouring village. These visits opened the world out to them and to say that the children enjoyed them, was to make an understatement. They would have loved to see a new place every week, but the Barefoot College had its constraints.

For the children, who wished to learn a skill thoroughly, a residential training period of one year was ear-marked. Sewing, fabricating at the mechanical workshop, candle-making, chalk-making and carpentry were some of the skills taught in the Night Schools and taken beyond, for advanced work.

A mobile library functioned for the school system. This enabled children to get acquainted with the vast world of books. Although many of them had only moderate reading levels, they could take the occasional story book home, for a week or two. Once in a while, there would be a video screening arranged for the children on themes of legal literacy, health, women’s rights or environmental regeneration.

The Curriculum

The curriculum is prepared by a team, which incorporates the suggestions of the teachers, adults in the community and even the children. It is presented below:

Language: This includes reading, writing and articulation of Hindi, ability to express thoughts in their own words, writing formal applications for bank loans, jobs etc.

Mathematics: This includes numbers, addition, subtraction, multiplication and division, knowledge of Indian currency, measurements of length, area, weight, volume of liquids, time, knowledge of different shapes, like triangle and square; knowledge of measurement of farm land and building, quantity of soil dug in cubic feet; simple and compound interest, profit and loss, ratio and proportion, calculation of wages.

Animal Husbandry: Children learn about animals, their diet, their internal organs, their diseases and simple cures, immunisation, use of lactometer, cross breeding, artificial insemination.

Agriculture: Children learn about different types of soil, functions of different parts of a plant, various crops, disease of plants and their treatment, cross breed seeds, grafting, types of fertilisers, water and soil testing, proper storage of food grains, awareness of harmful effects of chemical fertilisers and pesticides.

Geography: This includes knowledge of directions, maps of the village and the farms, boundaries of the village, origin and shape of the earth, earthquakes, volcanoes, climate, day and night, subsoil water and its properties, geographical setting of Ajmer, map of India, the names of the Indian States.

History: Children learnt tales of local heroes, knowledge of local festivals and melas and their origin, history of their village, national festivals and tales of brave men, tales of Ramayan and Mahabharat, history of social customs, origin of man, discovery of fire and the wheel.

Knowledge of rural institutions: This covered Panchayat (local self-government), Development Officer, Pradhan (elected head of Village Council), their work and inter-relationships; Patwari (Revenue official) roles of Agricultural Extension Officer, School, Hospital and Post office, information about veterinary worker, Village Cooperative Society.

Health: Children learn about the human body, health and hygiene, importance of clean drinking water, immunisation, nutrition, symptoms of common diseases and their prevention and treatment, nutritional content of local food products.

Science: The curriculum includes air and pressure; heat as a source of energy and light, expansion due to heat; water; knowledge about space satellites; gravitational force, phases of the moon, North star, Milky Way, solar system, planets and stars.

Success Stories

There are several anecdotes and success stories, but two of them stand out for their boldness and uniqueness. One was the case of Dev Karan, the Speaker of the Children's Parliament, who was able to bring two rival politicians together, a feat hailed by all in the village, as a miracle. The second is the story of Kaushalya, who was the Prime Minister, until she left her village to get married. As a young daughter-in-law, she was able, after months of persuasion, to get her village agree to implement a piped water supply. Single-handed, she persuaded 56 families to pay a monthly fee of Rs 20 for water connections. The result was the installation of the first solar-operated pump for filling water in a 100,000 litre tank, which supplied safe drinking water regularly, to the whole village. And this, in a State, where no village pays for water supplied by the Government. Both these examples speak for the creative energy of the children when allowed to think and speak for themselves.



I have taught high school for 10 years. During that time, I have given assignments, among others, to a murderer, an evangelist, a pugilist, a thief, and an imbecile.

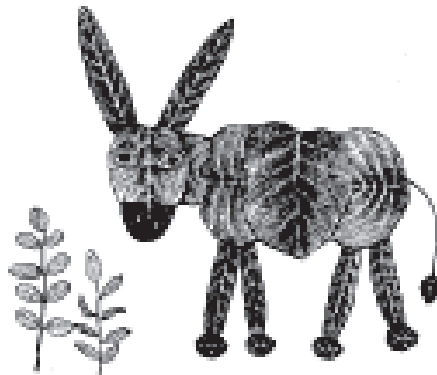
The murderer was a quiet little boy who sat on the front seat and regarded me with pale blue eyes; the evangelist, easily the most popular boy in school, had the lead in the junior play; the pugilist lounged by the window and let loose at intervals a raucous laugh that startled even the geraniums; the thief was a gay-hearted Lothario with a song on his lips; and the imbecile, a soft-eyed little animal seeking the shadows.

The murderer awaits death in the state penitentiary; the evangelist has lain a year now in the village churchyard; the pugilist lost an eye in a brawl in Hong Kong; the thief, by standing on tiptoe, can see the windows of my room from the county jail; and the once gentle-eyed little moron beats his head against a padded wall in the state asylum.

All of these pupils once sat in my room, sat and looked at me gravely across worn brown desks. I must have been a great help to those pupils—I taught them the rhyming scheme of the Elizabethan sonnet and how to diagram a complex sentence. — **NAOMI WHITE**

GROUP PROFILES

The Learning Network website and the past issues of *Revive* have profiled several member groups that are working on the areas of improving the learning framework. In this issue, we are pleased to include profiles of new member groups.



Barefoot College

Philosophy/Beliefs

The Barefoot College began in 1972 with the belief that solutions to rural problems lie within the community. The college believes in tapping the resources and skill sets available within the community for various development programs and encourages learning by doing.

Work Description

The Barefoot College has many programs to address issues of drinking water, education of girls, health & sanitation, rural unemployment, income generation, electricity, social awareness and the conservation of ecological systems in rural communities. It is completely solar electrified, has rain water harvesting systems and has been entirely built by architects from the community/college. Some of its programs are described below.

Night Schools – The Barefoot College has set up more than 250 night schools in six different states. Instruction is informal and is based on practical experience. Most of the children tend cattle and therefore, animal husbandry is an important component of the curriculum besides reading and math. Children attend night schools for five years. The Village Education Committees are responsible for administration, purchase of teaching/ learning material, teacher honorariums and general management. Members of the Committees function in an honorary capacity and encourage parents in their villages, to send children to the night schools regularly, especially girls. The Committee members are also trained in maintenance of simple financial records and stock books.

One of the unique aspects of the night schools is the children's parliament. The Children's Parliament controls and supervises the night schools. The idea behind the Parliament is the belief that empowering the people who have a vested interest in the school is the best way of ensuring its success. This also makes the children aware of political structure and processes. The parliament was conceptualised in 1993. The Parliament has elected representatives from night schools, situated in four districts of Rajasthan, covering an area of 700-800 square kilometres, from semi-arid to the desert regions. The election campaigning provides children an opportunity to visit and experience other villages.

Water - The college has undertaken many initiatives for rain water harvesting systems and piped water systems to provide drinking water to communities and school. Some of these initiatives include (i) training communities to take charge of managing piped water systems, (ii) recharging dried up wells and ponds, (iii) de-siltation of ponds and wells, and (iv) training resource persons in rain water harvesting systems.

Solar Power - The College trains rural unemployed youth as well as semi-literate and literate rural women, as barefoot

solar engineers. The trained solar engineers, from different parts of the country, install, maintain and repair solar home lighting systems in their villages. They also fabricate and produce solar lanterns. The college provides solar equipment through the government programs to rural communities at subsidised rates.

Income Generation - The College began promoting rural handicrafts in 1975. Assistance in improving designs and techniques, creation of marketing outlets, and access to credit have helped to restore and create new income opportunities for craftsmen and women. Crafts are sold through shops and marketing outlets both in India and internationally and are also available online.

Resources Available

Barefoot college encourages people from rural communities and weaker sections of the society to get trained and participate in its programs and activities. Contact barefoot college for more details on how to get involved.

Contact Information

The Director
The Barefoot College
Village Tilonia, via Madanganj
District Ajmer, Rajasthan 305816
Phone: (01463) 288 204, Fax: 01463-288206
Website: <http://www.barefootcollege.org>

Comet Media Foundation

Philosophy/Beliefs

Comet Media Foundation, started in 1985, researches and produces communication materials on themes related to development. The main objectives behind this effort are to (i) create awareness on development-related issues, especially choices available to society in science, engineering and technology, (ii) develop communication material on such issues, using appropriate media, (iii) facilitate issue-specific workshops, film screenings, knowledge festivals and other meetings and (iv) maintain a publicly accessible resource centre with material on these subjects

The subjects covered include education, environment, health, gender issues and the history of science. The materials are produced with an aim to bring out alternative perspectives on these themes and also tell of innovations by practitioners.

Work Description

All activities of Comet involve creating and distributing knowledge artifacts. The activities reach out to a wide range of audience including children, parents, teachers, women and NGOs. The activities broadly fall into 3 categories – Comet

Educational Services, Comet Resource Center and Comet Media Services.

Comet Educational Services organizes knowledge festivals under the banner Vividha. This includes Bal-vividha on the theme of alternative approaches to school education, Stree-vividha on women's empowerment and Paryavaran-vividha on environment issues. It also conducts workshops, regular film screenings and awareness campaigns on various development related issues.

Comet Resource Center consists of a book counter, learning toys and an exhaustive reference library of books, periodicals, art resources, videos etc. The resource center is a space for learning about innovative indigenous toys and aids and also as a reference desk on developmental issues.

Comet Media Services provides space, technical know how and the technology to do video production, text production, design services, photography and video editing. It also holds regular film screenings, workshops and awareness campaigns on development related issues.

Comet Media continues to explore possibilities of partnering with other organizations and individuals to reach out its services, skills and know-how to more people.

Resources Available

Comet Media Foundation provides a range of physical resources like a book counter, learning toys, an exhaustive reference library, videos and a space for activities. Other resource efforts include workshops, film screenings and technical know-how. More information can be found on www.cometmedia.org.

Contact Information

Comet Media Foundation
Topiwala Lane School
Lamington Road
Mumbai 400 007

Phone: +91 (0)22 2386 9052, +91 (0)22 2382 6674,
+91 (0)22 2382 1893

Email: For institutional networking and partnerships,
write to: chandita@cometmedia.org

Centre for Learning Resources

Philosophy/Beliefs

The Center for Learning Resource (CLR) has been working in early childhood care and development and elementary education, especially for rural and urban disadvantaged children since 1984 in Maharashtra and other states in India. CLR is strongly guided by the belief that every child has a right to develop to her/his full potential and that every teacher can create a relevant learning environment for children if she is

helped to acquire the necessary knowledge and skills.

CLR recognizes that parents and teachers are central to the process of education of poor children. It is also guided by the philosophy that education of young children must engage their imagination, broaden their minds, and equip them with functional and life skills which go beyond the narrow confines of mere academic achievement

Work Description

The CLR works as a technical support organization with the goal of improving the quality of early childhood development and elementary education that rural and urban disadvantaged children receive in our country. The CLR undertakes projects to develop relevant programs and materials in early childhood development and elementary education. CLR also provides, on request, a variety of inputs to government agencies and NGOs running pre-primary centers, elementary schools as well as support education programs that enable poor children to remain in and cope with school.

The main areas of work are – Training, Development of training and teaching-learning materials, Research, Advocacy and Consultancy. The following is a list of activities in different age groups. The training program includes an education package for caregivers, training programs for master trainers within NGOs and Government Agencies, In-service training of teachers and workers besides creating teaching-learning materials. These training programs are further classified by age - birth to three years, 3-5 years, primary level and middle school. CLR also has an interactive radio project for English teaching and a reference library for middle school.

These activities provide avenues to develop a child's full potential and create functional, learning environments that are culturally relevant. Organizations that have benefited from them include those striving to enhance their multi-grade teaching, render their schools accountable and effective, develop meaningful textbooks, and create relevant local learning aids. More information on CLR can be found at www.clrindia.net.

Contact Information

Zakiya Kuriem, Hema Kulkarni
Centre for Learning Resources
8 Deccan College Road
Yerwada, Pune 411006
Phone: 020 2669 2123

Doosra Dashak

Philosophy/Beliefs

Doosra Dashak, meaning the second decade, is focused on the education and development of children and young adults

in the age group of 11-20 years to make them a lever for social and economic development. Doosra Dashak believes that children in this age have boundless energy and if they can be provided with relevant education and skills, can become a source of social change and economic advancement. Doosra Dashak currently works in 4 blocks of Rajasthan, since 2001.

Work Description

The objectives of Doosra Dashak include undertaking activities to (i) meet the basic learning needs of adolescents and relate learning to life, work and environment, (ii) equip them for adolescence and family life through improving their understanding of health related issues, (iii) create an awareness about underlying causes of socio-economic and gender inequality, (iv) enhance vocational and life skills and move towards livelihood related issues, (v) harness energies for nation building and (vi) employ science and technology for improving lives of people.

The activities include community and people's mobilization, organization of multifaceted programs of basic education, life skills training and programs to improve the quality of life and environment. Residential camps ranging from 5 days to 4 months are conducted, where youths become aware of health, sanitation, gender inequality, caste, social status, human rights etc. The approach is participatory with emphasis on gender equity and excellence in all activities. The trained youths take up responsibilities for village sanitation, libraries, right to information campaigns, participation in panchayat and gram sabha meetings etc.

Contact Information

Anil Bordia, Chairperson
C-113 Shivaji Marg, Off Vijay Path
Tilak Nagar, Jaipur 302004
Phone: 0141-262 4820

Kalpavriksh

Philosophy / Beliefs

Kalpavriksh believes that a country can develop meaningfully only when ecological sustainability and social equity are guaranteed, and a sense of respect for, and oneness with nature, and fellow humans is achieved. It is a non-hierarchical organization and the group takes all decisions after appropriate debate and discussion.

Work Description

Kalpavriksh has organized its work into four areas – (i) education and awareness activities, (ii) investigation and research on Intellectual Property Rights, (iii) legal and policy action and (iv) advocacy and direct actions.

Education and Awareness Activities: These include talks

and slide shows in schools and colleges, activities to develop awareness regarding organic food, biodiversity issues; educational workshops and development of teacher's manuals for environment education in the Andaman and Nicobar Islands, Lakshadweep and Karnataka. Other activities include contributing stories and well-researched articles on environmental issues to newspapers and magazines, maintenance of a documentation center for easy access to information and collaboration with film makers on documentaries about communities conserving biodiversity.

A bimonthly publication called 'Protected Area Update' focusing on developments in wildlife sanctuaries and national parks across South Asia; 'Signs of Hope' a series of lectures, showcasing the efforts of various groups and individuals in the area of ecologically sustainable living; stories and well-researched articles on environmental issues contributed to newspapers and magazines;

Impacts of Intellectual Property Rights (IPR) regimes:

In this work area, Kalpavriksh focuses on biodiversity and local communities, sustainable, organic agriculture including the revival of agro-biodiversity, community based conservation in South Asia, particularly in India; conflicts between local communities and wildlife conservation and their resolution and environmental and social impacts of developmental and commercial projects. Some of the projects/ issues covered are (i) the Narmada River Valley Project, (ii) destructive commercial activities (e.g. mining threats to wildlife habitats) in protected areas, (iii) non-timber forest produce and local communities in Adilabad district, Andhra Pradesh, (iv) forest logging and status of tribals in the Andaman and Nicobar Islands, (v) biodiversity assessment in relation to water shed development in Amba Valley, Raigad district, Maharashtra, (vi) bird counts in Delhi and Corbett National Park, Uttaranchal, (vii) management issues of Sultanpur National Park, Haryana, (viii) environmental and social impacts of hydro-electric projects in North-East India, (ix) important bird areas of North-East India along with the threats to and opportunities for conservation in these areas and (x) the 73rd Amendment and its impact on environment and people.

Legal and Policy Action: Acting with villagers, Kalpavriksh has worked on several cases. Some of these include (i) a successful case against limestone quarrying with the villagers of Nahin-Badkot (Dehradun), (ii) a case against mining with the villagers of Jardhargaon in Uttaranchal, (iii) against the takeover of the Aravalis for luxury farmhouse development, (iv) against the dangers posed by the Sriram Chemicals Plant in Delhi and (v) a lawsuit to protect the Onge tribe and stop deforestation of the Little Andaman Island.

Besides these, Kalpavriksh has also co-ordinated the preparation of India's National Biodiversity Strategy and Action Plan, through a process of extensive nationwide participation and has provided inputs to various other policy

level documents and processes through advocacy, participation in government committees, critiquing of drafts and citizens' mobilization

Advocacy, Campaigns and Direct actions: These include actions (i) to save the Delhi Ridge forest (as a member of the joint NGO Forum), (ii) to protect wildlife habitats from destructive commercial developments (e.g. mining in Kataldi) and de-notification of protected areas, (iii) to protest against the Narmada Valley dams (as a part of the Narmada Bachao Andolan), (iv) against indiscriminate tiling of Delhi's pavements, (v) against the destructive role of WTO, TRIPS, and Globalization, (vi) against plastics through 'Alternative Bags Campaign' in Pune, (vii) to stop spraying of herbicides over the Mula river in Pune and to save the trees of Pune University.

Kalpavriksh has also campaigned for food self-sufficiency, and social equity through development of home gardens and seed exchange collectives in Sirsi, Karnataka. Other issues that Kalpavriksh has campaigned on include (i) promoting organic food and natural Holi colors in Pune, (ii) proposed amendment to plastic usage rules, (iii) repressive actions by the state against communities and activists, and (iv) dilution of environmental rules and standards

Networking: Kalpavriksh works with communities, local NGOs, social activists, conservationists and forest officials to initiate dialogue and resolve conflicts within protected areas and has co-ordinated a national conservation and livelihoods network and provides active support to tribal peoples' self-rule struggles. Other networking efforts include those with International NGO (related to the Biodiversity Convention) and the Inter Governmental Forum of Forests. They also have representation in international networks and groups such as the Global Biodiversity Forum, Earth Action, the World Rainforest Movement, the Using Diversity Fund for South Asia co-ordination of the Theme Working Group on Indigenous People, local Communities, Equity and Protected Areas (TILCEPA) of the World Conservation Union (IUCN).

Resources Available

A reference documentation centre with an extensive collection of books, articles, magazine and other literature on environmental and community issues. Training on the following subjects – Biodiversity Conservation, Community Conservation, Protected Areas and People, Environmental Governance, Safe Festivals. Publications on the many issues discussed above. More information can be found at www.kalpavriksh.org

Contact Information

Sharmila Deo, Kalpavriksh
Apt 5 Shree Dutta Krupa
908 Deccan Gymkhana
Pune 411004
Tel: 020 25654239 / 25675450

Kattaikkuttu Youth Theatre School

Philosophy / Beliefs

Kattaikkuttu Sangam and School believe in providing holistic, child-centered education that stimulates independent and critical thinking and acting in its students. Education should enable children to cope with the complexities of modern society and encourage children to explore their own artistic and intellectual abilities and turn them into professional skills.

The school is an attempt to open up the Kattaikkuttu tradition for girls and women on the basis of talent. The basis of this attempt is to provide equal treatment of women and men and safeguarding children's future employment and human dignity.

Work Description

The Kattaikkuttu Youth Theater School is a boarding school which offers basic education (7:30 AM to 12:45 PM) and professional artistic training (1:30 PM to 5 PM) to young rural children of all backgrounds. In addition, it organizes workshops where guest teachers introduce the students to different theatre forms and life skills.

Resources Available

(Oral) knowledge, skills and experience of the master teacher P. Rajagopal, who is a Kattaikkuttu actor, director and playwright, Knowledge and skills of other members of the Kattaikkuttu Sangam (all professional actors and musicians)

Sangam's Repertory Company which offers young students (14+) the possibility to acquire 'hands-on' practice by participating in performances of professional performers and getting to know the practical ins and outs of company management

Skill-based workshops on tailoring, making of costumes and props (foam technique), making of puppets (papier mache technique), electricity & stage light design, photography and basic finance

In January 2006 the organization hopes to move to its own Performing Arts Centre at Punjarasantankal Village (about 8 Km's from Kanchipuram). The Centre has its own open-air stage, three class rooms, (children's) library, workshop & training space-cum-conference/meeting hall and large kitchen. It invites others to use its space by supporting innovative and creative ideas of collaboration in the arts and in education.

More information can be found at www.kattaikkuttu.org

Contact Information

P. Rajagopal (Executive director & artistic leader)
Dr Hanne M. de Bruin (Facilitator)
Performing Arts Centre
Punjarasantankal Village (off Kanchipuram-Vandavasi Road)
Kanchipuram District, 631502, Tamilnadu
Phone: 04112-309469

Muskaan

Philosophy/ Beliefs

Muskaan believes in the inherent capacities of people to take decisions appropriate for themselves and in their right to develop and express themselves by accessing opportunities equitably (irrespective of caste, class, sex etc.) and attain an optimal quality of life. Muskaan has defined their role as providing an environment whereby people and particularly children have opportunities for enhancing oneself, and confidence to access these opportunities. They believe that in education, there is a process of teaching and learning in which the teacher and the learner are 'live' participants of education. The teaching and learning is to be on various aspects that help the student to grow towards a more effective and productive person for himself and people in his reference. Literacy and academic progress are components of this interchange which are attained through being oneself, with oneself and with others and using each person's inherent potential.

Work Description

Muskaan aims to provide education for the deprived children alongwith opportunities for them to grow up emotionally strong and secure, capable of choosing and pursuing goals in life with vigor, creativity and responsibility. They also work towards creating an environment for the slum dwelling poor communities and specific vulnerable groups within them, through and in which they can negotiate their rights and access opportunities for their growth in an equitable manner.

Education Centres: Muskaan works in six slums of the city (of Bhopal), towards providing opportunities of growth and development amongst children who are in deprived circumstances and in a situation of labour (at home or outside). They believe that love, trust and acceptance are the premises of any meaningful education, and these have been built into their package of enhancing the ability to read and write.

Muskaan has also tried to integrate children in the formal schools and support them so that they are able to adjust to formal school requirements. Based on their experience with (public and private) schools, they have changed directions from strengthening government schools to starting independent education centres.

These slum-based education centres were started for children who are not part of the school system so that they can learn in a more natural and empathetic environment, and give the certified examinations directly. Their activities with children take shape through slum-based education centres, workshops and fun trips to develop meaningful and sensitive relationships with children, providing academic inputs through child-centered and activity-based methods of teaching; and enhancing creativity, confidence and inculcate habits of self-learning in children. There is also a residential facility for (very selected) children whose studies are being interrupted due to several

uncontrollable reasons (adolescent girls facing pressures of marriage/ young children having to earn for the whole family/ children of migrating families).

Other Concerns: Interaction with the children and a constant exposure to the hardships the communities have resulted in an increased response to other concern areas in slums, especially health, livelihoods and savings.

Health – Muskaan is trying to build linkages with affordable health care providers for curative treatment, and to enhance preventive health care. Workshops with adolescents and young couples are carried out on a periodic basis for awareness of their own health.

Livelihoods – Enterprise management capacities of women in one slum have grown through the growth of a broom production unit. From a group of 3 – 4 women in early 2002, this has grown to 40 women in the slum who are involved in the production and marketing of the brooms.

Savings – A savings group amongst women was initiated out of the jhaadu group in Ganga Nagar slum. This has spread to other bastis, so that women are able to have more control on their household earnings. It has also helped them to combat the high degree of interest bound indebtedness to some extent.

Resources Available

Learning aids, training and consulting resources (issues related to elementary education, art and craft activities, urban poverty, vulnerability assessment of slums, gender), documentation.

Contact Information

Shivani Taneja
14 Nadir Colony
Shamla Hills, Bhopal
Madhya Pradesh 462013

Namma Shaale

Philosophy/ Beliefs

Namma Shaale, located in Bangalore makes every effort to upkeep the tradition of Montessori and is constantly guided by the child in whose service we strive. Namma Shaale admits children of any economic and social class, religious belief and family structure. Admission is not just the school's acceptance of the individual child but it is also essential that the parents embrace Montessori approach. It is the parents and school's shared commitment to the child and the Montessori philosophy, which forms the basis of partnership of the child's education.

The Montessori method believes that from moment of conception, the child is guided by an unseen force directed towards the attainment of an end, that of a fully realized human being. This force cannot but enable the human being to arrive at full potential, unless it is stopped in its path by

obstacles that impede its functioning or by lack of facilities to attain its end. Dr. Maria Montessori says " *We know how to find pearls in the shells of oysters, gold in the mountains, and coal in the bowels of the earth, but we are unaware of the creative nebulae that the child hides in himself when he enters this world to renew mankind.*"

Work Description

Namma Shale is a Montessori School for children aged 2 ° years through adolescence. The programs are described below briefly. Our program is described below.

Primary: The Montessori Primary classroom or Children's house is a "living room" for children between 2 ° and 6 years of age. Children choose their work from among self correcting materials displayed on open shelves. The materials are classified into Practical Life, Sensorial, Language, Math and Cultural Activities and are to be found in specific areas. Over a period of time, the children develop into a normalized community, working with high concentration and few interruptions. Normalization is a process whereby a child becomes self-disciplined, develops the love of work and order, ability to work in a focused manner and a sense of inner peace. The process occurs through repeated work with materials that captivate the child's attention. In this movement towards normalization, academic competence is also achieved.

The primary classroom environment unifies the social, physical and intellectual functioning of the child. Its important function is to provide children with an early and general foundation that includes a positive attitude towards school, inner security, and a sense of order, pride in the physical environment, abiding curiosity, a habit of concentration, habits of initiative and persistence, the ability to make decisions, self discipline, a sense of responsibility to other members of the class, school and community and above all a joy of learning. This foundation will enable them to acquire more specialized knowledge and skills throughout their school career.

Elementary: The elementary program offers a continuum built on the primary experience. As in the primary, the materials are a means to an end. They are intended to evoke the imagination, to aid abstraction, to generate a worldview about the human task and purpose. The child works within a philosophical system, asking questions about the origins of the universe, the nature of life, people and their differences and so on.

On the factual basis, interdisciplinary studies combine geological, biological, and anthropological science in the study of natural history and world ecology. Mathematics, language, music and arts complete the cosmic education. Studies are integrated not only in terms of subject matter but in terms of moral learning as well, resulting in appreciation and respect for life, moral empathy, and a fundamental belief in progress, the contribution of the individual, the universality of the human condition, and the meaning of true justice.

Adolescence (Erdkinder): Adolescence ushers in a new level of independence that must be provided for in the Montessori

environment by increasing activity from the point of view of work level, choices, and planning. The work in this phase is divided into two phases - the practical work emanating from the farm, store, and community work; and the educational studies connecting practical life experiences to independent studies that fit into a general academic syllabus. This endows the child with self confidence in forging his or her own future, and prepares the young adult to become a true citizen of the world.

The successful incorporation of the required syllabus prepares the children in stepping into their chosen line of further studies with great results. The Erdkinder is a successfully proven experiment in other parts of the world and Namma Shaale is dedicated to the discovery of the true adolescent in transition into a perfect adult.

Contact Information

Namma Shaale
No 179, Hennur-Bagalur road
Kannur Post
Bangalore 562149
Phone: (080) 5696 8621

Navnirmiti

Philosophy / Beliefs

Navnirmiti started in 1998 and is dedicated to acquiring, developing, innovating, producing and disseminating high quality, low cost/no cost (LCNC) learning methods, tools and systems to bring about universalisation of elementary mathematics and science skills and competencies. Navnirmiti reaches all those who otherwise would not have access to good education.

Navnirmiti strives (i) to provide the world's best science and mathematics education to all those who otherwise could not afford or access it, (ii) to acquire innovate and adopt best practice for quality education, (iii) promote activity based do and discover methods of teaching and learning, (iv) provide viable employment opportunities for needy women and youth, (v) to build self-reliant social enterprises, (vi) to reach out to every school in the country and (vii) to build a scientific temperament among the common public and strengthen the people's science movement.

Work Description

Navnirmiti has various programs towards universalising and popularising math and science learning and skills. Some of their programs are listed below.

Programs for Schools to improve Math and Science Learning: Navnirmiti has developed a comprehensive 'Universal Active Math' programme and a complete classroom Math kit to teach all primary level school mathematics through joyful methods. The kits are being used in many schools in Mumbai and other

places. Navnirmity provides training to teachers on using the kit. They have also set up math labs in schools in Mumbai, which provide a space for children to learn mathematical concepts using hands on activities. A poster kit for science has also been developed based on the curriculum for class 5, Maharashtra state board.

Popularizing science events involving common man and school children: Navnirmity organizes popular astronomy slideshows, exhibitions and sky shows. Some of the activities organised are around the solar eclipse, the transit of Venus, workshops on making simple telescopes, observing various planets etc.

Discover IT store: Navnirmity is involved in the research and development of innovative teaching and learning methods, materials as well as production and dissemination of low cost learning aids. The stress is on developing low cost learning aids, without compromising on the quality. These learning aids, toys, books and many other materials developed by various groups in India are available at the outlet run by Navnirmity. The materials are produced and disseminated by local cooperatives which provide viable job opportunities to women and youth.

Resources Available

- Training Workshops
- Learning Aids for Mathematics
- Learning Aids for Science
- Toys
- Books for children and teachers

More details on www.navnirmity.org/store/

Contact Information

Navnirmity
Flat No. 2, Lake Site bldg
Opp. SBI Bank, Near Powai Hospital
Powai, Mumbai 400076
Phone: (022) 2577 3215, 2578 6520
Fax: (022) 2577 3215

School Scape

Philosophy / Beliefs

SchoolScape, a centre for educators, was started to enable teachers and the leadership in education to enhance the quality of learning and life in schools and in educational organisations. The focus of SchoolScape is on bringing about a transformation in the quality of learning in the classroom and thereby in the school and the community so that the change is sustainable and it will benefit all partners - the children, the teachers and the immediate society.

Work Description

Some of the highlights of the organization's work are described below.

Professional Development of the Teacher Educator: This was a programme designed for the DIET faculty across 29 districts in Tamil Nadu, with DTERT, Dept of Education, GoTN.

Design of an education programme in Karnataka: This was a Government-NGO partnership along with training of government school teachers and field staff of the NGO to reach out to all children in the project area, especially the working children.

Quality Package: As a member of the UNICEF team, School Scape developed a Quality Package for implementation in government schools across ten states.

Besides these, SchoolScape also was involved in founding a Montessori School in Chennai (www.abacusnow.com) and has been the Convenor of the *International Democratic Education Conference, IDEC 2004*, organised in December 2004 in Bhubaneshwar, India.

Resources Available

Consultancy to various field based organizations, schools and institutions across India; International programme offered every year.

Contact Information

Amukta Mahapatra
Director, SchoolScape, Centre for Educators
2132/5124 Nageshwar Tangi, Lewis Rd
Bhubaneshwar 751002 Orissa
Phone: (0674) 243 2780 / 309 7383 (o),
(0674) 243 6896 (h), 99370 17080 (c)
Fax: (0674) 243 0904
www.idec2004.com
www.schoolscape.in

Sutradhar

Philosophy/ Beliefs

Sutradhar was started in 1995 as a non-profit trust to improve the quality of education for children. Sutradhar focuses on the use of media in educating children. Media is broadly defined to include toys, games, storybooks, folk toys, teaching aids as well media such as puppetry and storytelling that help children learn. Sutradhar believes that a large variety of play materials allows children to learn concepts and make connections – the foundations of early learning. It also has a special focus on the young child.

Sutradhar works on two aspects – bringing together the available resources and also working on systemic change. They bring together some of the best innovations in

education from across India and makes these resources available at its centre. They work on systemic change through teacher development, documentation and dissemination, research and advocacy.

Work Description

The center: The heart of Sutradhar is a retail outlet and documentation cell where learning resources selected from over 120 groups are offered to parents and teachers. The staff assist a cross-section of visitors who drop by with different learning needs and help them make the right choice. Visitors include educators working in formal, non-formal and special schools, non-profit organizations, government organizations, and parents, including parents of children with special needs. The centre also aims at understanding the needs of different user groups, identifying the lacunae that exist in the availability of quality material that teachers find useful; and design and develop materials to fill this gap. Designs for an early learning kit, special needs children, math materials, and materials with an Indian idiom have been taken up this way.

Documentation and dissemination: Sutradhar has evolved a range of activities to bring about systemic change. Documentation is one aspect that Sutradhar hopes would be useful to funders, policy makers and other non-profit organizations. They have documented 25 unique government school improvement efforts that have been made across the country and collated various reports including 'A study of Anganwadis in Bangalore' (2002), 'The Young Child in Karnataka: A Status Report' (2004). They also run the Sutradhar Features Service, which promotes writing on education in the press.

Fingertips: In the year 1999, Sutradhar undertook to compile "Fingertips" - a child resource directory for Bangalore, a first of its kind in the country. The directory aimed at making child-related services in Bangalore better known and utilized. Fingertips has over 400 entries, organized in seven sections, and provides a comprehensive overview of services available in the areas of Child development, Education, Health, Disability, Recreation and Support services. It also includes a listing of Help-lines. Sutradhar has also brought out the second web edition of Fingertips.

Teacher Development: Sutradhar offers teacher development workshops for NGOs serving underprivileged children in Bangalore. The training programs focus on building the capacities of teachers and field staff working in preschool and non-formal education. Workshops have been held on language, math, games, the creative use of teaching aids, the pedagogical and therapeutic uses of toys for special needs, puppetry and storytelling, sexuality education.

FORCES: The forum for Crèche and Childcare Services is a national level advocacy network committed to securing the rights of the underprivileged child, 0-6 years. Sutradhar

initiated the Karnataka chapter of FORCES in 2001. The network has about 15 members. These include resource centers and field based groups; working in education, child labor, disability and health, working in both rural and urban settings, with children as well as women and the community. FORCES activities include research, documentation, training and advocacy. Efforts are currently on to improve the nutrition and educational status of anganwadis in urban Bangalore.

Resources Available

- Training Workshops
- Educational materials for children, particularly upto 8 years, toys
- Books for children and teachers
- Early Learning Kit for balwadis / anganwadis
- Fingertips: an online child resource directory for Bangalore
- Reports and publications
- Detailed profiles of 40 groups working in early childhood issues in Bangalore / Karnataka
- Chrysalis: a manual for a life skills education program

Contact Information

Director, Sutradhar
599, 7 Main, 17A Cross
Indiranagar Stg 2
Bangalore 560038
Phone: (080) 2521 5191
Telefax: (080) 2528 8545
www.sutradhar.com
www.fingertips.sutradharindia.org

SVYM

Philosophy/ Beliefs

The Swami Vivekananda Youth Movement was started by a group of medical students to work with dispossessed tribals in H.D.Kote taluk, Karnataka with the objective of imparting quality education to the tribal children and helping them fit into the mainstream while retaining pride in, and contact with, their tribal heritage. A Viveka Tribal Learning Center (VTCL) at Hosahalli, has grown from a thatched hut with a few students to a government recognized semi-residential school imparting quality education to over 400 children.

Work Description

The VTCL today trains teachers from other schools, develops teaching aids, and enhances children's lives with innovative concepts like joyful learning, experiential learning and activity based learning. The organization has also entered into a partnership with the government to work in 312 government

schools of H D Kote taluk in Karnataka. VTCL has also taken up implementation of mobile schools to reach remote tribal areas.

SVYM follows the Nali-Kali method of teaching (Rishi valley card system). Though they have adopted the government syllabus till 10th standard exams are not the measurement of success. The child is sent to the next class based on his or her interest and willingness. The organization has developed workbooks in Kannada medium especially for Science and Mathematics since there is a dearth of such books.

SVYM is working closely with the School Development Management Committees (SDMC) set up by the government in these areas without creating more parallel structures. They interact with the teachers in government schools every month. One representative from SVYM participates in the SDMC. The objective is to increase the role of children in the education and reduce dropouts by encouraging the community to participate. SVYM promotes activities and opportunities for children to express themselves and their talents like singing, dancing, painting and other art forms. SVYM is also working towards establishing accountability for a child's education.

Resources Available

More information on SVYM and their work can be found from the following links:

www.vivekamysore.com

<http://www.learningnet-india.org/lni/data/publications/revive/vol1/v1-6b6.php>

<http://www.learningnet-india.org/lni/data/activities/conferences/jan2003/svym.php>

Contact Information

Dr. Balasubramanian
Hanchipura Road, Saragur
H. D. Kote Taluk, Mysore District
Mysore 571 116
Tele fax: 91-821-245 513

Taleemnet

Philosophy / Beliefs

The philosophy of Taleemnet is symbolized by the logo which depicts the weaving together of the five straight and five wavy strands. These strands represent the five elements of the natural worlds (which are central to the ideas of philosophy, science and art) interwoven with the five senses with which we experience and interpret them. This symbolizes the fusion of the rational and scientific with the spiritual and aesthetic.

Work Description

Taleemnet is a part of an education platform called the Multi World Network for the generation and support of diverse and effective learning opportunities. Taleemnet provides a

much-needed platform for parents and educators who realize that while keeping kids out of school may initially seem risky, it will bring great benefits in the long run. Taleemnet documents and disseminates information on innovative learning experiences, home schooling experiences, path breaking educators and alternative education.

Resources Available

www.multiworld.org/taleemnethome.htm

www.multiworld.org

Contact Information

Dr. Claude Alvares
G-8, St. Britto's Apartment
Fiera Alta, Mapusa
Bardez, Goa 403507
Tel: (0832) 225 5913

Tulika Publishers

Philosophy / Beliefs

Tulika is an independent publishing house producing quality books for children. The company's logo is the common crow, a bright, busy, intelligent bird, with a great sense of family — and an unmissable part of the sights and sounds of India

The focus of Tulika is to give children images of India that we would like them to grow up with; of how all its little parts come together to make it what it is — a diverse whole, a changing yet changeless continuum. These are the images Tulika hopes to share in a world opening up to more and more voices. Tulika hopes that its books will illustrate in concrete terms how multicultural societies the world over hold together, and how they must interact together.

Tulika's publishing programme, therefore, involves and draws inspiration from writers and illustrators sensitive to these issues

Work Description

Whether it is retelling a myth, a legend, or a folk story, contemporary story, books reflects the society the child is growing up in today. Skill to express this is a talent that comes from a good writer. The publishers and writers at Tulika express concerns close to their hearts; issues that are self experienced and communicate these issues sensitively. Tulika's books reflect a contemporary reality. Tulika believes in publishing books that enhance a child's reading experience. The focus is on the story and the way it's told that can captivate a child's imagination and senses completely.

Through pictures and words, the books offer children opportunities to experience several worlds — of people, places, animals, birds, trees, colours, shapes, ideas. From the strong, clear lines of folk-toy based illustrations that introduce concepts of line and circle, letters of the alphabet hidden intriguingly

within objects, sound words that capture the tumult of stormy visuals . . . to wordbirds which streak across pages familiarising children with strange words from different languages, folktales coloured with local art forms, ecology lessons through nostalgic watercolour memoirs or gripping adventure stories, history and geography blending in narrative and picture.

Tulika also focuses on bilingual books. They regard this as a very realistic way of teaching in a multilingual society. Tulika also has a list of Kannada, Tamil, Telugu and Hindi books. Stories from one language are translated and published in several other languages, wherever applicable and relevant.

Resources Available

- √ Books for children in 8 different Indian languages
- √ Bilingual Books
- √ A complete list of publications can be found on:
<http://www.tulikabooks.com/bookshelf.htm>
- √ [Why Bilingual Books – Article in Revive 2005](#)
- √ [Presentation at January 2003 conference](#)

Contact Information

Radhika Menon, Sandhya Rao
Tulika Publishers
13, Prithvi Avenue (First Floor)
Abhiramapuram, Chennai, Tamilnadu 600018
Fax: (044) 2467 1113
Phone: (044) 2498 1639 / 2467 1117
email: tulikabooks@vsnl.com

Vidya Online

Philosophy/ Beliefs

Vidya Online is an effort to use the Internet as a tool for education. Through appropriate use of technology, especially internet and multimedia solutions, *Vidya Online* aims at (i) empowering teachers and strengthening teaching practices, (ii) bridging the gap between teachers, academics and researchers, (iii) providing children and teachers a richer learning experience and (iv) popularising use of ICT in education.

Work Description

Vidya Online has a 'one stop' non-commercial website, which facilitates knowledge sharing, provides resources and online help for better classroom transactions. This is also an online forum for critical reflection on issues in education. Besides, *Vidya Online* supports ongoing teacher improvement initiatives and imparts training in the use of ICT for education.

All resources on the website are free for non-commercial

purposes. The resources include curricular support, readings in education, public documents, downloadable e-books, contacts and e-courses.

Resources Available

More information can be found at www.vidyaonline.net.

Contact Information

Vidya M S
Type V, 17, NCERT Campus
Sri Aurobindo Marg
New Delhi 110016
Phone: (011) 2660 1299

Vidya Vrikshah

Philosophy/ Beliefs

Vidya Vrikshah is guided by the objective of free spread of ancient Indian knowledge, and the free spread of literacy, education and employable skills in all Indian languages to all, specially to the socially and physically disadvantaged. This is to be achieved through community mobilisation and participation, utilising a remarkable multi-lingual software package consciously designed for these very purposes and offered free by the Indian Institute of Technology, Chennai. This software solution has received a national award of the Govt. of India as the best IT solution for the disabled.

Work Description

The work of *Vidya Vrikshah* can be organized into three categories – (i) training, (ii) design of hardware and software and (iii) distribution.

Training: *Vidya Vrikshah* runs 3-day training courses for students, teachers and others (blind or otherwise) in the use of computers in local languages. They have so far conducted nearly 100 courses covering around 500 trainees from all over India

Design and development of hardware and software solutions and implementation strategies: *Vidya Vrikshah* have developed training modules for all types of disabilities, and placed them on their website. They have also designed a Universal Braille Kit to enable blind children to learn to read and write, count and calculate, draw and measure, and thus enable braille based literacy and education. They have also formulated a strategy entitled the "National Initiative For The Blind" to provide a holistic approach to the literacy, education and communication needs of the blind in the country.

Distribution of hardware and software: *Vidya Vrikshah* provides their software with training to all trainees, free of

cost. They have also provided computers free of cost to 25 blind schools and around 50 rural inclusive schools in Tamil Nadu. Since January 2004, they have been producing a Childrens Braille Magazine in Tamil and distributing it to 25 blind schools in Tamil Nadu. They have also arranged for free distribution of over 2000 Universal Braille Kits to blind children through Blind Schools in all States.

Resources

Software

Offline and online modules for literacy, education and training

More information can be found on their website www.vidyavrikshah.org

Contact Information

N.Krishnaswamy (Chairman – Tel: 24937926/24936358)

Mrs Alamelu Ramakrishnan (Director - Tel: 24424741)

Mrs Vijaya Ramkumar (Secretary - Tel: 24938090)

3, Tiruveedi Amman Street

R.K.Nagar,

Chennai 600 028.

Email: nkswamy@vsnl.net, alamelur@md5.vsnl.net.in

Vishakha

Philosophy/ Beliefs

Vishakha is a voluntary organization working for women's empowerment, education, health, literacy, livelihoods and rights of children in rural Rajasthan. Vishakha is primarily focused on women's development and children's rights and is striving for equity through community participation.

Work Description

Vishakha has been working in the Phagi block of Jaipur District since 1991. Vishaka's work has been organized around the following areas – (i) empowerment of women and other marginalized sections of society, understanding and advocating for incorporation of their perspective into state level policy, (ii) working towards establishment of women's identity through all those activities that build their capacities to emerge as empowered individuals, (iii) introducing innovations in the area of primary education to enable children of deprived groups to become part of the educational process and (iv) creation of a resource centre wherefrom documentation, analysis and dissemination of relevant information on issues concerning women, children and other marginalize communities can be taken up. Some of these initiatives are described below.

Community based libraries: Forty community managed libraries were created in different villages of Phagi block.

After much exploration books suiting the taste and needs of rural readers including neo-literates have been collected. Libraries are perceived as an activity cum education center for those villages.

Creation of local-culture based curriculum: Vishakha has developed a multi-group teaching curriculum for primary levels on the basis of local traditions and cultures. This has been tested and implemented in 60 educational centers.

Empowerment through Health Education: Village Health Groups of women, men and children have been created to develop awareness on reproductive and community health issues. Then village people have also been trained on the use of various local communication media.

Mahile Salah Evam Suraksha Kendra: This is a joint effort of the Rajasthan Police and 11 women's groups including Vishakha and civil society groups based in Jaipur. It is a holistic redressal centre for women and children who are victims of violence. Building upon the learning from this, Vishakha is facilitating the opening of such centers in 11 other districts with the collaboration of Rajasthan local women groups, civil society groups and Rajasthan Police.

Resources Available

Uchav - a bimonthly magazine for children

Nai Dishayen - a manual on life skill trainings in adolescent girls, currently used by seven IPD districts in Rajasthan

Tamasti - a health magazine to render people's concerns and curiosities

Contact Information

Bharat

Vishakha

9 Pratap Nagar

Near Glass Factory

Tonk Road, Jaipur, Rajasthan

Phone: (0141) 517 2422



Contact Information

Akshara
5-357 B, Appa Rao Thota
Madanapalle, Chittoor District
Andhra Pradesh 517325
Contact person: Ravi Aluganti
Phone: (08571) 228197
Email: ravialuganti@yahoo.com

Ananda Bharathi
C/o NEEDA
12-13-1173, Street No.10, Tarnaka
Secunderabad 500017
Contact person: Janaki Iyer
Phone: (040) 27019315
Email: srisl@sol.net.in

Ananya
233, 6th Main,
4th block Jayanagar,
Bangalore 560011
Contact person: Shashi Rao
Phone: (080) 6639414
Email: shashi_ananya@hotmail.com

Ankur - Society for Alternatives in Education
7/10 Sarvapriya vihar,
New Delhi 110016
Contact person: Sharmila, Prabhat
Phone: (011) 26523395, 26523417
Email: ankureducation@vsnl.net

Anugriha Charitable Trust
II / 197, Anugriha,
Arasavanangkadu,
Tiruvarur Dist,
Tamil Nadu 612603
Contact persons: Aruna, Raghavan
Phone: (04366) 269478, 269354
Email: actrust@sancharnet.in

Aseema Trust
3, Mangala Murthi,
65 First Main Road,
Shastrinagar,
Chennai 600020
Contact person: V R Devika
Email: vdevika@yahoo.co.in

Auroville Educational Resource Centre
SAIIR,
Auroville, 605101
Contact person: Subash
Tel: (0413) 2623350, 2622793
Email: isaiambalamschool@auroville.org

Avehi Abacus
3rd Floor, K K Marg Municipal School
Behind New Shirin Talkies, Saat-Rasta
Mahalaxmi, Bombay 400011
Contact person: Simantini Dhuru
Phone: (022) 3075231
Email: avcab@bom5.vsnl.net.in

The Barefoot College
The Director
Village Tilonia, via Madanganj
District Ajmer, Rajasthan 305816
Phone: (01463) 288 204, Fax: 01463-288206
Website: <http://www.barefootcollege.org>

Bharathi trust
184/14CA, Illrd cross street Jayanagar, Tiruvallur
602001
Contact person: Siddama
Phone: (04116) 262607, (044) 24468634
Email: bharatitrust@yahoo.com

Centre for Learning – Hyderabad
C-128, AWHO Ved Vihar,
Subhashnagar
Secunderabad 500015
Contact person Gurveen Singh
Phone: (040) 27790457
Email: gurveenkaur@rediffmail.com

Zakiya Kurien, Hema Kulkarni
Center for Learning Resources
8 Deccan College Road
Yerwada, Pune 411006
Phone: 020 2669 2123

Centre for Montessori Training
2/1, Habib Complex,
3, Durgabai Deshmukh Road, R A Puram,
Chennai 600028

Chitra Krishnamurthy
100 K G S Layout,
Vijayanagar, Bangalore 560040
Phone: (080) 23406075
Email: skrishnamurthy@tatanova.com

Comet Media Foundation
Topiwala Lane School
Lamington Road
Mumbai 400 007
Phone: +91 (0)22 2386 9052, +91 (0)22 2382 6674,
+91 (0)22 2382 1893
Email: For institutional networking and partnerships,
write to: chandita@cometmedia.org

Digantar
Todi Ramjanipura
Jagatpura
Jaipur 302017
Contact person: Rohit Dhankar,
Phone: (0141) 2750310, 2750230
Email: digantar@datainfosys.net

Mr. Anil Bordia, Chairperson
Doosra Dashak
C-113 Shivaji Marg, Off Vijay Path
Tilak Nagar, Jaipur 302004
Phone: 0141-262 4820

Gandhi Study Centre
58, Venkatanaryana Road
(near Hindi Prachar Sabha)
T Nagar, Chennai 600017
Contact Person: Dr Annamalai
Phone: (044) 24346549, 20017076
Email: gandhcentre@eth.net

Gram Mangal
Sugandh, 2118, Sadashiv Peth
Pune 411030
Contact person: Dr Ramesh Panse
Phone: (020) 4330343
Email: grammangal@hotmail.com

Hameed Manjreshwar (VALORED)
St. Joseph Highlands, Lower Berdoor
Mangalore 575002
Phone: (0824) 439895
Email: sirimak@rediffmail.com

Haritha Ecological Institute
PO Box No. 26
Paloncha, Khammam District
Andhra Pradesh 507115
Contact person: Dr Sudhakar
Phone: (08744) 255030(O), 255060(R)
Email: sudhakar21@yahoo.com

Jodo Gyan
E/12, Shakurpur, Near Britannia Chowk
15/10, 2nd floor, Kalkaji
Delhi 110034
Contact persons: Shaji, Usha Menon
Phone: (011) 27102820

K M D Henry
17/390/2-2-1-3
NVR St. Extn, Nehru Nagar
Madanapalle 517325
Phone: (08571) 230440

Sharmila Deo
Kalpavriksh
Apt 5 Shree Dutta Krupa
908 Deccan Gymkhana
Pune 411004
Tel: 020 25654239 / 25675450

P. Rajagopal (Executive director & artistic leader)
Dr Hanne M. de Bruin (Facilitator)
Kattaikuttu Youth Theatre School & Performing Arts
Center, Punjarasantankal Village (off Kanchipuram-
Vandavasi Road),
Kanchipuram District, 631502, Tamilnadu
Phone: 04112-309469

Kathalaya
88, 3rd cross,
BHBCS layout, BTM stage-II,
Bangalore 560076
Contact person: Geetha Ramanujam
Phone: (080) 26689856
E-mail: kathalaya@vsnl.net

Kumbham
Aruvacode,
Nilambur
Kerala 679329
Contact person: Jinan K B
Phone: (04931) 221544, 094471 21544
Email: jinankb@eth.net

Lord Scudamore Primary School
Friar Street
Hereford Herefordshire
HR4 0AS
Tel: 01432 273951

Lord Scudamore School
TNSF
132, Avvai Shanmugam Salai
Gopalapuram,
Chennai 600 086
Contact person: Balaji Sampath
Email: balaji_sampath@hotmail.com

Manchi Pustakam
C/o WASSAN, 12-13-452,
St. No.1, Tarnaka
Secunderabad 500 017
Contact person: K Suresh
Phone: (040) 55284580 (O), 55637504 (R)
Email: sureshkosaraju@yahoo.co.in

Margabandhu Toys
639 Royal Park Residency,
J P Nagar, 9th Phase
Bangalore 560062
Ph: +91 (80) 576 376 52
Email : joys@margabandhu.com

Margabandhu
Nirantar
B-64, Sarvodaya Enclave, IInd floor
New Delhi 110017
Contact persons: Dipta, Purnima
Phone: (011)6966334
Fax: (011) 6517726
Email: nirantar@vsnl.com

Shivani Taneja
Muskaan
14 Nadir Colony
Shamla Hills, Bhopal
Madhya Pradesh 462013

Namma Shaale
No 179, Hennur-Bagalur road
Kannur Post
Bangalore 562149
Phone: (080) 5696 8621

Navnirmithi
Flat No. 2, Lake Site bldg
Opp. SBI Bank, Near Powai Hospital
Powai, Mumbai 400076
Phone: (022) 2577 3215, 2578 6520
Fax: (022) 2577 3215

Olcott Memorial High School
28, Besant Avenue
Besant Nagar
Chennai 600090
Contact person: Lakshmi Suryanarayanan
Phone: (044) 24915826 (O), 24918093 (R)
Email: surlak@vsnl.net

Paacha Saale
Machnoor Village
Jarsangam Mandal
Medak District
Andhra Pradesh
Contact person: K B Murthy
Phone: (08451) 288472
Email: ddshyd@hd1.vsnl.net.in

Pravah
15/10, 2nd floor,
Kalkaji,
New Delhi 110019,
Contact persons: Swati, Ishani
Email: pravah@vsnl.com
Puvidham Learning Centre
Nagarkooda vill & Post (via)
Indur, Dharmapuri 636803
Contact person: Meenakshi Umesh
Phone: (098427) 32210, 94432 33482
Email: puvidhamtrust@hotmail.com

Puget Sound Community School
5031 University Way NE
Office Room 111
Seattle WA 98105
Ph: 206.324.4350
Email : pscs@pscs.org

Ram Puniyani
K. Ramakrishnan
P Saraswati,
57/5A, Rangachari (Dr.Ranga) Road,
Abhiramapuram 600018
Phone: (044) 24992704
Email: saras15@sify.com

K. Ramakrishnan
A-5 Bharathiar University Quarters
Coimbatore 641 046
Tel: 0422-2422030;
E-mail: ramkishyam@gmail.com

Dr L S Saraswati
Flat B, Prajwal Semantaka,
Old no.2, New no.3,
Pinjala Subramanya St, T Nagar,
Chennai 600017

SAKTI
305, 1st Block
Janapriya Abodes
New Bakaram, (near Gandhinagar)
Hyderabad 500080
Contact person: Dr.P.Sivaramakrishna
Phone: (040) 55614787
Email: saktisrk@yahoo.com

Amukta Mahapatra
Director, SchoolScape, Centre for Educators
2132/5124 Nageshwar Tangi, Lewis Rd
Bhubaneshwar 751002 Orissa
Phone: (0674) 243 2780 / 309 7383 (o), (0674) 243
6896 (h), 99370 17080 (c)
Fax: (0674) 243 0904

Director
Sutradhar
599, 7 Main, 17A Cross
Indiranagar Stg 2
Bangalore 560038
Phone: (080) 2521 5191
Telefax: (080) 2528 8545

SVM
Dr. Balasubramanian
Hanchipura Road, Saragur
H. D. Kote Taluk, Mysore District
Mysore 571 116
Tele fax: 91-821-245 513

Taleemnet
Dr. Claude Alvares
G-8, St. Britto's Apartment
Fiera Alta, Mapusa
Bardez, Goa 403507
Tel: (0832) 225 5913

Radhika Menon, Sandhya Rao
Tulika Publishers
13, Prithvi Avenue (First Floor)
Abhiramapuram, Chennai, Tamilnadu 600018
Fax: (044) 2467 1113
Phone: (044) 2498 1639 / 2467 1117

Vidnyan Vahini
701 B Kshitij,
Plot No. 87A-1-1
Sahakar Nagar No. 2,
Pune, 411009
Contact persons: Madhukar, Pushpa Deshpande
Phone: (020) 4222127, 4281134, 4224865
Email: madhu36@vsnl.com

Vidya M S
Type V, 17, NCERT Campus
Sri Aurobindo Marg
New Delhi 110016
Phone: (011) 2660 1299

Vidya Vrikshah
N.Krishnaswamy (Chairman - Tele : 24937926,
24936358)
Mrs Alamelu Ramakrishnan (Director - Tele :
24424741)
Mrs Vijaya Ramkumar (Secretary - Tele : 24938090)
3, Tiruveedi Amman Street, R.K.Nagar,
Chennai - 600 028.
Email: nkswamy@vsnl.net, alamelur@md5.vsnl.net.in

Bharat
Vishakha
9 Pratap Nagar
Near Glass Factory
Tonk Road, Jaipur
Phone: (0141) 517 2422

Mathematics can be found in some surprising and beautiful places. Mathematical concepts reveal themselves in natural forms, in art and in decorative patterns that are traditional in many cultures.

Symmetry and pattern are found in starfish, snowflakes, and Islamic tiles; mathematical sequences and ratios describe the structure of sunflowers and of classical Greek temples; fractal geometry is revealed in the formation of coastlines and mountains and is used by computer artists to create realistic depictions of the natural world. They can create chaos with a bouncing ball, then discover how the chaos theory describes complex natural phenomena such as weather systems.



The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn. – ALVIN TOFFLER

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K. Ramakrishnan, Vivian Paley, Constance K. Kamii, NCTM, Richard Skemp, Lawrence Erlbaum, Sundaram Subbharatnam, Jayashree Ramdas, Kathy Emery, Sylvia Braselman, Linda Reid, Gurveen Kaur, E. Annamalai, Krishna Kumar, Vidya Online, Jayashree Janardhan, Askhihiko Takahashi, Fr Godfrey Lima, S. Srinivasan, K. Anandalakshmy

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39 Fourth Street, Abhiramapuram, Chennai 600 018 Telephone 044-24986618 / 24986619

Email goodbuks@vsnl.com