Journal of the Krishnamurti Schools

JOURNAL OF THE KRISHNAMURTI SCHOOLS

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An Educational Journal

This is a journal on education brought out annually. It is an anthology of writings by educators, teachers, and thinkers exploring a new vision of education in its many dimensions—philosophy, psychology, classroom experience, curriculum, nature and environment, and contemporary issues. It lays special emphasis on J Krishnamurti's principles of education, and will be of use to teachers, parents, educational administrators, teacher-educators, and anyone interested in education.

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Dear Reader

Kindly share this journal, after your perusal, with a school nearby or a school you know, or a teacher who you feel will enjoy this, so that it reaches more educators.

Many thanks
The Editors

AFFECTION

When you care, violence in every form disappears from you

To continue with what we were saying in our previous letter, we were pointing out your responsibility to study, to learn and to act. Since you are young and perhaps innocent, given to excitement and games, the word *responsibility* will seem rather frightening and a wearisome burden. But we are using the word to imply care and concern for our world. When we use this word, the students must not feel any sense of guilt if they have not shown this care and attention. After all, your parents who feel responsible for you, that you should study and equip yourselves for your future life, do not feel guilty, though they may feel disappointed or unhappy if you do not come up to their expectations. We must clearly understand that when we use the word *responsibility*, there must not be a feeling of guilt. We are taking particular care to use this word free from the unhappy weight of a word like duty. When this is clearly understood, then we can use the word *responsibility* without its burden of tradition.

So you are at school with this responsibility to study, to learn, to act. This is the main purpose of education.

In our previous letter we put the question: what will you do about yourself and your relationship with the world? As we said, the educator, the teacher, is responsible for helping you to understand yourself and so the world. We ask this question for you to find out for yourself what your response is. It is a challenge that you must answer. You have to begin with yourself, to understand yourself.

In relation to that, what is the first step? Isn't it affection? Probably when you are young you have this quality, but very quickly you seem to lose it. Why? Is it because of the pressure of studies, the pressure of competition, the pressure of trying to reach a certain standing in your studies, comparing yourself with others, and perhaps being bullied by other students? Do not all these many pressures force you to be concerned with yourself? And when you are so concerned with yourself, you inevitably lose the quality of affection. It is very important to understand how circumstances—environment, the pressure of your parents, or your own urge to conform—gradually narrow the vast

beauty of life to the small circle of yourself. If you lose the quality of affection while you are young, there is a hardening of the heart and mind. It is a rare thing to keep this affection without corruption throughout life. So this is the first thing you must have. Affection implies care, a diligent care in whatever you are doing—care in your speech, in your dress, in the manner of your eating, how you look after your body; care in your behaviour without distinctions of superior or inferior, how you consider people. Politeness is consideration for others, and this consideration is care, whether it is for your younger brother or oldest sister. When you care, violence in every form disappears from you—your anger, your antagonism and your pride. This care implies attention. Attention is to watch, observe, listen, learn. There are many things you can learn from books, but there is a learning which is infinitely clear, quick and without any ignorance. Attention implies sensitivity, and this gives depth to perception, which no knowledge, with its related ignorance, can give. This you have to study, not in a book, but with the help of the educator learn to observe things around you—what is happening in the world; what is happening with a fellow student; what is happening in a poor village or slum and to the man who is struggling along a dirty street.

From *The Whole Movement of Life is Learning: J. Krishnamurti's Letters to His Schools,* Chapter 34

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Editorial

'Unconditioning' the Minds of the Educator and the Student

'So, our problem is not so much the child, the boy or the girl, but the teacher, the educator, who needs educating much more than the pupil. And to educate the educator is far more difficult than to educate the child, because the educator is already set, fixed. He merely functions in a routine, because he is really not concerned with the thought process, with the cultivation of intelligence.'— Krishnamurti.

Here in this brief statement is a leitmotif which runs through all of Krishnamurti's teachings on education and is a constant concern for teachers in the Krishnamurti schools. This concern about the thought process and the cultivation of the intelligence, particularly of the educator, is a theme which runs through almost all the articles in this issue of the Journal. The challenge Krishnamurti poses to the teachers is: 'Can the adult teachers who have, through their life experiences, become set and fixed in habits of thought and feeling, and in images about the world and about themselves, undo these fixations and become open to reality and to people, especially to the children in their care? Can they 'uncondition' themselves into being open, and cultivate flexibility in meeting situations in life as a whole, and in the process educate children in the art of meeting life?'

Two articles which describe the challenges involved in these questions are Siddharth Menon's piece 'Breaking Walls and Amending Fences: Some Thoughts on Unconditioning at School', and Viju Jaithirtha's article 'The School as a Centre for Inquiry for Adults: Inviting Parents into the School'.

In Siddharth's article, he uses the wall which divides the lands of two farmers in Robert Frost's poem *Mending Wall* as a metaphor for the enclosing walls of habitual biases and prejudices which even very young students develop. He describes the challenges which this tendency on the part of the children pose to the adults in the school, who themselves need to be constantly aware of their own tendencies to become rigid and fixed in their ways, and to quickly apply a 'surgical' solution when facing situations of potential disorder. Or there may be a temptation to simply evade the responsibility of engaging with students and colleagues

in situations of conflict. The author suggests that while boundaries may be necessary in order to preserve spaces between people, these boundaries may be thought of as being fences which could be shifting and tacit ('amendable') rather than as walls which are fixed and set. Since to amend is to ameliorate, such amendment would enhance the ability to be responsive to change. And responsiveness is a much-needed quality if we are to preserve basic values of honesty, decency and respect for life as a whole, which are so much under threat today.

Viju Jaithirtha's article describes how Shibumi, a small group of teachers in Bangalore, took up Krishnamurti's challenge of 'educating the educator'. Being an 'alternative school' is normally taken to be almost synonymous with being 'child-centred'. But in Shibumi this motto was turned around when it declared itself to be 'a centre of adults interested in self-inquiry and the teachings of Krishnamurti' and said that there was an educational programme available for such interested adults. This required that the parents' role in this centre was not confined just to entrusting their children to the care of the teachers, but to that of being responsible, not only to the children, but in the spirit of Krishnamurti's teachings to inquiring whether 'human consciousness can be transformed'. The article gives examples of parents' sensitive responses to this situation of being part of an 'adult centre' committed to such an enormous responsibility. This is an account of how Shibumi has developed into a place in which the adults are continuously involved in this process not only through dialogues between themselves, but through the very practical tasks of the day-to-day running of the school.

Two articles which deal with the question of 'unconditioning' versus closure and rigidity in human consciousness, from an explicitly 'philosophical' angle, are 'The Autobiographical Self: A Case of Mistaken Identity' by Shashidhar and 'Exploring Self-Awareness at IIT-Madras' by Dr Devdas Menon. For hundreds of thousands of parents and their children in India, an entry gained into one of the Indian Institutes of Technology is 'Paradise Gained' and the failure to gain entry is 'Paradise Lost'. Dr Menon, who teaches at IIT-Madras, describes how, far from being paradises, the IITs are rather hot-houses in which the majority of students cultivate success and careerism at the cost of losing awareness of the inner world of the self and of empathy for others. This article is an account of an experiment being made at IIT-Madras to introduce an accredited, structured course of inner development and awareness, inspired by the Upanishadic and Yogic spiritual traditions of the country. The course is conducted through open-ended discussions, talks and study circles, and has been welcomed by many students who have opted for it. In the positive response received for this course, Dr Menon sees signs of hope that many more young people in the country will be interested in undertaking the spiritual inner journey of self-exploration and self-awareness.

In his article 'The Autobiographical Self', Shashidhar raises the question of the origin of the primordial sense of being an enduring, enclosed and fixed self which all human beings have, and asks whether this sense is based on reality or is an illusion. Neurobiological research suggests that the strong sense of being the centre of all happenings in the body is the result of the body's need for survival, thus giving rise to a 'biological self'. What is problematic is the extension of this sense of a separate biological self to the psychological and social spheres, which gives rise to the 'autobiographical self', felt as the centre of the personal 'psycho-dramas' in which all human beings live. The carry-over of the 'self model' from the biological to the psychological sphere seems to be an illusion which only gets strengthened if we try to end it. However, the author suggests that this need not lead to an attitude of despair, but could be used as a spur to engage in mindful observation of this illusion-producing process. The author is sanguine that such observation will help us to not be caught in the web of *maya*!

Another article which has as its central theme the dissolution of the fixations and conditionings that are embedded not only in our minds but in our bodies, and explores this theme in a very direct 'non-intellectual' way, is Jayaram's piece about the Himalayan trekking trips undertaken every year by a group of teachers and senior students of The Valley School. This piece describes how these Himalayan trips are not just long treks over difficult mountain terrains, undertaken to test and stretch the participants' physical endurance limits, but are inner journeys into themselves in which many habits and fixations of body mind and feelings are dissolved and many valuable insights gained. There is a growth in humility and reverence in the face of the majesty of the mountains and in the ability to be in solitude with oneself. The participants learn to surrender themselves to the flows and rhythms of nature and experience the gifts of the senses intensely. The deeper layers of consciousness are exposed in a very natural way in the presence of the innate meditative quality of the mountains. The author shows how these treks are exercises in 'unconditioning' the whole person in a very living experiential way.

Two articles which are pedagogical in content, but which also implicitly deal with the question of how the rigidities and fixations in the minds of children can be overcome, are Marina Basu's 'Playing with Numbers or Delving into History' and Usha Mukunda's 'A Vital Role for the Librarian'. The learning of mathematics has tyrannized the minds of millions of children the world over for the better part of the last hundred years. Marina Basu shows how children who have been fixated in varying degrees of fear, dislike and diffidence in learning mathematics can be helped to relax and enjoy playing with numbers. She narrates how she gets her children to come upon their own insights into numbers by showing them that numbers are not just 'brute facts' in the world which behave in mysterious ways, but are human constructs. One such construct through which the study of mathematics took a giant

leap was the invention of 'zero' as a place holder, along with the invention of the decimal number system. By showing them the history of this Indian invention, the author gets the children to invent their own number systems and thus overcome their fear of numbers. Usha Mukunda, in her article, has an amusing classification of children as readers: 'tortoises' (slow readers), 'bulls' (raging readers) and 'burros' (resistant or hesitant readers). The article describes the ways in which she inveigled the 'burros' into reading more, by observing where their interests lay and what their strengths were, for example, sports, craft work, animals, desire for order and cleanliness and so on. Exposing these children to books in these areas, and thus getting them to read more, dissolved many rigid attitudes of dislike for books and reading in their minds.

A school in which openness and flexibility are in-built in the diverse nature of the student body and the staff is 'Marudam', a small school in the outskirts of the small south Indian town of Tiruvannamalai. This school has a variegated mix of students and teachers who come from the villages, the cities and even from foreign countries. In the article 'Integrative Education: A Story of Marudam', Arun and Poornima describe how there is an 'un-conditioning' process built into the diversity of the school, as persons from different backgrounds have willy-nilly to learn from each other—the city children learning to be more 'physical' and to work with their hands from their village school-mates, and the villagers learning to read more and be more 'academic' than they were inclined to be earlier. Everyone has to learn to be bilingual, and both Tamil and English are used in the school. This bilingualism necessarily promotes mental flexibility and the ability to be at ease with people of different cultural backgrounds. Many other such practices in this school are expressly designed to loosen up the conditionings brought about by differences in class, income levels, nationality and so on, of both students and the teachers.

The study of the sciences is rendered difficult for many students by the demands of the syllabus which is often formula-ridden, and by time constraints dictated by examinations. In their article 'Celebrating Science', Kavita Krishna and Deepak Ramachandran describe the work done and the learning gained at a 'Science Mela' organized at the Rishi Valley School to explore science in an open-ended way by getting the students to ask their own questions relating to different disciplines (Biology, Chemistry, Botany and Physics) and to set up their own experiments for answering these questions. Though things did not always work out as expected, much more real knowledge was gained through these 'failures' than is possible through routine learning for the examinations. The whole approach to learning the sciences is thus 'loosened' up, and the students get to look at learning the sciences as a process of creative discovery.

T.M. Krishna, a Krishnamurti school alumnus and well-known musician, in his article 'The Spirit of Art in a Classroom' tells how art has become categorized and 'used' both in 'mainstream' and 'alternative' 'schools. In the former, the arts are treated either as 'extra-curricular' add-ons to the hardcore subjects, or as one more means of competitive achievement by students. In the alternative schools they become modes of self-expression. The question which Krishna asks is whether the teacher can infuse the spirit of art, which is the discovery of beauty in all living experience, into the teaching of Mathematics, Literature or any other subject. His answer is that the creative spirit of art can indeed be brought into the teaching of academic subjects 'if educators can engage with themselves as artists' which will happen with 'the teacher's own discovery of beauty within learning that she shares'.

While Marina Basu's article describes ways of undoing children's tendency to get fixated in fearful feelings about Mathematics, Arvind Ranganathan's piece 'Learning the Craft of Teaching' deals with the fixations of both students and teachers. This article is both about helping children to 'move consciously from a fixed idea of (inborn) talent…to a more engaging frame of mind' and about how the teacher himself may have to 'unfix' notions of not having an inborn talent for teaching. The article describes how, just as he helps the children who are fearful of Mathematics to realize that they certainly know some things with certainty (one plus one is equal to two) and to thus gradually go up a 'ladder of skills' and consequently grow in confidence, he builds his own confidence as a teacher by preparing adequately for classes, learning to 'play with' the subject's content, experimenting with different ways of presenting the content (videos instead of 'chalk and talk') not hesitating to get feedback from both teacher-colleagues and students and through co-teaching with colleagues. The article is a description of how he grew in confidence as a teacher by exercising the 'explorative freedom available in a Krishnamurti school'.

N. Vaishnavi's piece on 'The Mind of the Middle-Schooler' is about the teacher being open at the emotional level to the thoughts and feelings of children of ten to twelve years of age, who are growing up fast. Understanding each child comes only when the teacher sets aside her own fixed ideas and preconceptions, and openly shares feelings and thoughts with the child. She illustrates with anecdotes how this attitude of openness works to gain important insights into the mind of the growing child. The article is suffused with feelings of empathy which the author has with the lives of the children she teaches.

Geeta Waters's 'A Living Foundation: Being Educated with Krishnamurti' is a celebratory account of her years as a student in a Krishnamurti school during which she learnt the art of watching her thoughts. It is an expression of gratitude for having been taught this art from a very young age so that she realized how words could mislead ('the word is not the thing') and how the young mind develops false images about the self and about other

people. She describes how 'the awakening of intelligence' through such watching resulted in the reawakening of her own interest in education when her children were born. She learnt that it is never too early to engage children in this inquiry to 'uncondition' the mind.

Kartik Kalyanram's piece 'Stepping out: Issues and Challenges of Leaving School' and Gautama's 'Challenge of School Education in Our Times' are both concerned with the question 'After school, what?' Invariably this question is taken to be about what course of study and consequent career the student is planning to undertake after leaving school. These articles are not about this pragmatic question, but about how far and in what way the Krishnamurti schools prepare students to meet life in the 'wider world' when they step into it. Gautama's piece articulates the widely accepted consensus about the deleterious impact which the world-wide consumerist culture promoted by corporate interests is having on young lives. This culture promotes very many dysfunctionalities, the most destructive of these being the inability to live harmoniously in close relationships with spouses, children and friends. The questions asked in the article are about the extent to which Krishnamurti schools help their students to discover the inner resources to meet the dysfunctionalities of today's world, by encouraging their potential for collaboration and cooperation with others, and to accept that there may be multiple rather than singular 'right' answers to the same question.

Kartik's piece is also about the dangers and challenges facing students of Krishnamurti schools when they step out into the 'wider world'. After having spent several years in an atmosphere which is rather cocooned and protected by certain special ways of thinking and relating with friends and teachers, these students may very well find themselves all at sea in the world which could prove to be a very rough place indeed in which aggressive competition prevails in all activities of student life, and especially in academics. The article outlines a formal programme conducted by the author for the students leaving Rishi Valley School, in which they were given glimpses of some of the less savoury aspects of the milieu they are about to enter: lax attitudes about sexual relationships, about the use of drugs, tobacco and alcohol, the prevalence of financial frauds, cyber bullying and so on. The purpose of this programme was to help the students to be 'aware of themselves and their (new) environment at all times'.

In most of the articles in this issue of the Journal, the authors describe their efforts towards 'unconditioning' their own minds and the minds of the children in their care. Tanuj Shah, a teacher in the Rishi Valley School, in his article 'Schooling, Exams and Livelihoods: Parents' Perspectives on Education', describes the reverse process of how very strong conditioning of a certain kind has a hold over schools serving very different sections of society. Having taken a year's sabbatical from the school, he describes his experience of

working with three schools in Gujarat (a school for tribal children, an 'alternative' school, and a Gujarati-medium school based on Gandhian values) and an English-medium school run by an NGO in Bangalore for children from socially and economically disadvantaged backgrounds. In working with these schools in very different economic and social settings, and talking to the parents of the children, the author finds that a single anxiety is almost the sole driving force behind the functioning of all these schools, namely the anxiety about livelihoods. 'Will my child be able to earn a good livelihood after getting this education?' is the single question that obsesses the parents. As corollaries to this anxiety come the obsession with examinations, with the knowledge supposedly enshrined in textbooks and with marks which 'take on a life of their own'. These obsessions have a flattening effect both on the innate creativity of the children and on educational thinking in the country as a whole. The result is that only a sub-standard education is given to vast numbers of children especially in the rural areas, and a whole generation of children grows up which has neither any prospect of employment in the formal sector, nor the willingness or the skills to work with the hands in other occupations. In this depressing scene, the author sees the need for the Krishnamurti schools to continue to deepen their efforts in the light of Krishnamurti's vision of education and to spread their models of teaching-learning.

The last piece in the Journal is an appreciate review by Manju Bhatnagar and Rima Anand of a series of textbooks called the 'Hindi Ki Duniya Series' for teaching Hindi to very young non-Hindi speaking children, written by Chandrika Mathur. As a very refreshing contrast to the usual lifeless, dull and mechanically produced textbooks, the reviewers find this series of books to be written in a very lively style which is bound to appeal to the children, who would also be attracted to the contents of the accompanying CD containing poems, songs and conversation pieces. These textbooks are highly recommended by the reviewers for teaching Hindi to young children in the non-Hindi-speaking parts of the country.

'Unconditioning' is not a word recognized by the dictionary. Neither was this chosen as the 'lead theme' of this issue of the Journal by the editors when soliciting articles. It is a measure of the impact which Krishnamurti's teachings on education has had on the minds of the teachers in the Krishnamurti schools, and in the schools inspired by his vision, that this theme of the undoing and 'loosening' up of set, fixed ways of thinking, feeling and behaviour has 'spontaneously' emerged as a common thread that runs through most of these articles. And it is all the more remarkable that many of the articles are as much concerned with the education of the educator who is 'already set, fixed', as with the education of the child.

O.R. Rao

Breaking Walls and Amending Fences: Some Thoughts on Unconditioning at School

SIDDHARTHA MENON

Something there is that doesn't love a wall,
That wants it down.

— Robert Frost: *Mending Wall*

The farmer-speaker in Robert Frost's poem *Mending Wall* takes a wry look at his neighbour's self-satisfied retreat behind his father's saying: 'Good fences make good neighbors'. Where their lands meet, a wall is unnecessary because one is all apple orchard and the other all pine, and neither harbours the cows that could trespass. Yet the neighbours meet each year to walk the line along the wall that separates them, and rebuild whatever has tumbled. It is a ritual that brings them together, but only to ensure that the wall between them stays strong. Here is a paradox somewhat analogous to the connection between schooling and unconditioning.

Most of the deliberate activities in a school are concerned with building up: accumulating knowledge, honing skills, developing the complex processes that constitute what we call thinking; developing too an aesthetic and moral sensibility, a stance towards the world and towards ourselves. Perhaps all of this is necessary and much of it unexceptionable. But something there is that doesn't love these structures that we ritualistically, and sometimes lovingly, erect, and they contribute in a large measure to what you might term 'conditioning'. The security we derive from them is shown to be precarious, especially when, in spite of our efforts at building together, we find ourselves in conflict—with each other and within ourselves. When the speaker in

Frost's poem suggests that it might be elves that cause the disrepair to the wall, it is an impish reminder that human nature cannot be easily compassed and that our diligent efforts to mould it are undermined by forces we do not fully comprehend. Nor can conditioning itself be simply understood, as it is vaster than any individual's lifespan and subtler than the identifiable circumstances of birth and of life experience, including formal education.

Can a school, then, help raise our awareness of the conditioning processes that it is itself so largely, but by no means exclusively, responsible for? And can it do this for both the teachers and the taught, so that both together become learners about themselves?

Answers to these are perhaps suggested through a reading of Frost's poem. An annual occurrence in farming life becomes an occasion to question a strongly—or conveniently—held position. Questioning beliefs, or at least seeing that assumptions, opinions and prejudices have a strong hold on us, is one entry into the domain of conditioning. In a residential school this hold is manifest, for instance, in the way cultural tastes are expressed. Teenagers tend to have strong biases in favour of certain kinds of movies, music, food, clothes or experiences and equally strong prejudices against others. These are heavily conditioned by peers and the larger social environment, and as a teacher one is bemused by the strength with which these are apparently held. Why are young people not more open-minded, we wonder: why are these tender shoots already so rigid? We are both concerned and exasperated—feelings that are understandable even if accompanied by an amnesia regarding what we were at the same age. More to the point, they might be accompanied by a certain blindness to what we are at present: just possibly broader-minded than the stereotypical teen, through age and experience, but sometimes not even this, and no less susceptible to the ubiquitous workings of conditioning even if we have learnt to be more guarded in how it is expressed through us.

Seeing this is to see that it is the ground from which we question or point things out that is the key to the efficacy, and even the authenticity, of the enterprise. Choosing to ignore the limitedness of our own perspectives, or not asking the same questions of our own lives, or asking them (of others or ourselves) with the weight of condemnation, is likely to do no more than breed attrition. Much can be learnt, in this regard, from *Mending Wall*. There is, for instance, the matter of tone. If an extreme of exhortation is the self-righteous and nitpicking one-upmanship that, say, political rivals on prime

time TV flaunt, or are pushed into adopting by aggressive and time-conscious anchors, nothing could be further from it than the urbane, restrained and gently teasing voice in this poem. Leisurely and disingenuous though he might sound in his questioning of received wisdom ('I'd ask to know / What I was walling in or walling out') the speaker is neither casual nor inclined to see this merely as a local issue (in which he differs from his neighbour but gives in good naturedly to his whims). In his stark image of the neighbour as 'an old stone savage armed' (with boulders to strengthen the wall between them) he sees the divisiveness and insecurity that has left a stain on humankind. But he manages through his image to suggest it without harping on it; and the absence of stridency is not merely disarming: it is also commensurate with the task of turning our consciousness inward. His refusal to rail at the neighbour's smug self-enclosure is no mere expression of tact, nor a sign of superficial liberalism or disengagement. It comes instead from the recognition that here is a thing in which we are all implicated and that butting your head against it would only give you a headache.

If some, like the neighbour (as far as we know), choose not to understand him, there will be others like the reader drawn in to witness the episode, who respond to the poet's tone and perhaps find that they are looking within themselves. The poet is reaching out to a larger constituency, which certainly includes himself, and if it involves judgement it is not the judgement of one who knows it all and is beyond being judged in turn. This makes for engagement rather than obedience or disobedience, or even acceptance or rejection, or the no-man's land of indifference; and engagement is what a teacher must strive to maintain, even through situations that require her to lay things down sharply and unambiguously.

But if the farmer-poet chooses not to press his point (or is doing so in a way that might not be apparent) what of the adult in a school who, in her capacity as house parent or class teacher, takes on a more critical responsibility for the students in her care? Would she—should she—look askance from the sidelines, but do no more than ask a question or two when 'spring is the mischief' in her, and leave it at that even as she realizes that her 'words had forked no lightning' with her students? On the face of it this would seem an inadequate response, possibly even an abjuring of responsibility. There must be ways by which she can—and should—sustain the challenge, so that unreason does not prevail by default.

Indeed there must, but there is no blueprint for this and there are cautions to be observed. It seems that at the heart of the business is a raising of self-awareness and that the biggest challenge in engagement is to prevent its becoming no more than a clash of competing wills, ideologies, opinions, or tastes—in other words, non-engagement!—even if at school it is less ugly than the rabid self-assertions we see on TV.

At this point it would be worthwhile to interject that the issue is no longer, and actually never was, primarily that of helping students to confront their conditioning. The more piquant challenge—and opportunity—in a school is for adults themselves to live and work in harmony in spite of the myriad temperaments, beliefs and preferences, not to say agendas, which they bring with them. With all the weight of our accumulated selves, do we have the lightness and the clarity to feel we are together? If doing the inner and outer work for this to happen as adults did not interest us, there would be a shade of inauthenticity in our efforts to do so with students. It might feel easier with students: there is a moral and institutional charge one carries as a teacher (however lightly one may wish to exercise it) that eases our way with students; also, our attachment to what we consider due to us is less consuming when it comes to students than our fellow teachers. Another aspect of what we conceive of as 'conditioning' is at work here: the sense of self that is attached to its ways, afraid of letting go and prone to feeling bruised by others' words or actions.

The enterprise then, whether with students or with fellow teachers, requires sustained engagement, a scepticism of ideological positions and a nurturing, in ourselves and others, of what it takes to be self-aware. The question follows whether these are central to the way we function in the school. This needs to be asked because in the hurly-burly of life at school other considerations have a way of being prioritized. For instance, in dealing with serious violations of discipline, personal feelings of outrage, or indulgence based on one's cultural predilections can assume greater importance than continued engagement with students (and with one another) on the issues involved; or in being confronted with students' insensitivity, which expresses itself in a variety of ways, the urge to correct them quickly and bring about 'order' can come in the way of perceiving—and helping them perceive—the roots of insensitivity; or faced with the rigidity or unreasonableness of one's colleagues, one may ignore the reasons for such tendencies and fail to see how

they manifest in one's own attitudes. Situations of this kind arise all the time, and perhaps a common factor in the way we approach them is our sense of urgency, our feeling that here is something importunate that must be tackled quickly and 'effectively'. This may be the case: no doubt there are situations where we have to act promptly, not to say surgically. The question is: does this invariably drive the way we act? Is this the 'default mode' that we slip into? If so, it could be that we are losing out on some of the potential richness of shared learning in a school.

This brings us once again to *Mending Wall*. Frost's poem admirably fulfils Emily Dickinson's dictum to 'Tell all the truth but tell it slant'. There are many truths in the poem, but underlying it also is a reticent wisdom, a willingness to allow uncongenial voices their space while querying them, and an ability to let go when it seems necessary to do so, not only so that harmonies are preserved in the moment but because, as already mentioned, the poet is addressing a larger constituency, and doing so in a larger time-frame. Immediate outcomes are of less concern to him than a clarifying vision. His 'constituency' includes all who have the time to pause, to discover that this poem is not primarily about potential disputes between farmers in New England, and to re-examine their own lives in the light of the poem's understated clarity and intensity. Because the truths are told slant, we find our intelligence engaged and our energy not wasted in reacting against, or feeling overwhelmed by, a tone of didacticism.

It may be argued, however, that even this is a disguised didacticism. Possibly, but then it must be asked: is creating a space in which people might see for themselves something that you wish them to see, *conditioning*? And if it is, is all conditioning of necessity bad, a smudge on a pristine whiteness? Much rests on how we understand this word that is so tinted for us by Krishnamurti's distinctive use of it. We may find ourselves in the position of saying that any acquired wisdom, even if its source is not didactic, is not wisdom at all. This would be paralysing if we took it too literally, especially as people concerned with teaching and learning. It would be more productive to facilitate self-learning to the extent possible (as Frost's poem implicitly does) and to see ourselves and our students as learners, reflexively interested in how we learn: that might be the beginning of 'unconditioning' (which is, by the way, a word even more problematic than 'conditioning'—the computer underlines it with an angry red). For, unconditioning is clearly not a simple deletion of files or

programs from the brain—were that possible—but has much to do with deepening our shared awareness of the hold these programs have on us, or rather of the fact that we *are* these programs.

But we are also more than them, perhaps, and this is the potential that a school should be concerned with: through the way lessons are taught and problems of various kinds dealt with, through the energy we give to nurturing human relationships and through the spaces we create for exploring the larger world and seeing how we are shaped by our connections with it and shape it in turn, thereby allowing spaces for reflection and for silence. Can we, in other words, allow for conditioning and unconditioning to happen simultaneously?

Perhaps this parallels another simultaneity that we might, in conclusion, briefly consider. If the wall in Frost's poem represents the needless divisions that humanity has indulged in, a kind of deadly 'game' (to borrow the poet's word) that has been endlessly replayed, it is pertinent to ask what the 'good fences' represent. For the neighbour in the poem the truth that they embody is self-evident, and 'Good fences make good neighbors' bears repetition but not justification. The poem invites us to examine not only the saying but the fixedness with which it is held to be true. If our first response to both is somewhat critical (especially as we tend to identify with the speaker's commonsensical undercutting of rigid notions) over time another, more positive, response begins to emerge as well, and this too is about both the saying and the way in which it is held.

Though fences are erected for similar reasons as walls, on the whole *fences* evoke a less immovable impression than *walls*. If they are felt to be lighter boundaries that help us preserve space around ourselves—but without a sense of separation or isolation—in an increasingly cluttered environment, they serve a valid purpose. It may indeed help us to be better neighbours if there are boundaries of this kind which are shifting and tacit and which foster understanding and respect. These fences need amending rather than mending, because to 'mend' is to return to the status quo and to 'amend' is to ameliorate by being responsive to change.

As for the certitude with which the saying is repeated, a kind of quiet certainty about things that matter may stand us, and our students, in good stead in a world in which basic values such as honesty, decency and a respect for all life are more and more visibly being eroded, partly under a misguided relativism. To be clear, after having examined them patiently, that some values

are necessary for human beings to live well together, is not necessarily a limitation if one is open to re-examining them at any time, and is actually doing so through the press of circumstances. The dynamic between certitude and questioning is analogous to that between conditioning and un-conditioning. The school provides ample opportunity for these to be held in balance. It is a balance, through self-awareness, that might make for something more durable, but less divisive, than the wall that the neighbours have to mend at springtime between their respective pines and apples.

Learning the Craft of Teaching

ARVIND RANGANATHAN

In my first year as a teacher, I was fortunate to chance upon Kamala Mukunda's book *What did You Ask at School Today?* From the chapter titled 'Motivation' I gained a perspective (perhaps not intended by the author) that has shaped my teaching practice over the past three years.

Broadly speaking, students seem to align themselves along one of two perpendicular axes—the axis of 'Talent-Performance' and the axis of 'Understanding -Effort'. On the Talent-Performance axis, performance is paramount. Students see their performance as a result of having a certain talent or the lack of it. For instance, in a mathematics class this is evident in the statement 'I am not the maths kind. I hate maths.' Poor performance is seen as *evidence* of lack of talent, creating a spurious certainty about one's inability. Similarly, good performance becomes a reinforcement of a static sense of ability. Learning then is reduced to a limiting either-or binary of 'success' or 'failure'. Living on this axis crystallizes a self-image that becomes hard to challenge and leaves the student constantly yearning for ways to be better in the eyes of the world. This yearning is a treadmill built for disillusionment and therefore deepens the yearning even further.

The Understanding-Effort axis breaks out of this 'stuckness' by recognizing that learning is a dynamic, never-ending process, joyous and valuable in itself without any gain attached to it. It also recognizes that talent is a false god: talent is at best pleasurable and inspiring when offered generously, but often it is cruelly used to further one's sense of power in order to mask a deeper sense of insecurity.

As a teacher, I decided to focus on the Understanding-Effort axis and thereafter worked to help students move consciously from fixed ideas of talent, reinforced by poor performance in assessments, to a more engaging frame of mind. I wanted them to be able to see that understanding was sometimes hindered by prejudice against the subject, born out of previously frustrating experiences with it.

It is possible to discover the lie in this prejudice by starting with a simple

question: 'What is 1+1?' Once that is easily answered (after an incredulous look), one can progressively move up a ladder of skills and come to a point where there is uncertainty. One can then pose a challenge: 'Is it really true that you know *no* maths at all? What is true is that you are confident of some concepts and skills and you are unsure about others. That is not a problem. In fact, that is true of all of us.' Finding the point where certainty blurs (in a subject like mathematics at least) gives a good starting point for rebuilding skills and confidence. It is then possible to bring in effort as a means of intervention, to further understanding, not performance.

I found that I could apply the same principles to my own teaching. It seemed that what was true for students was true for teachers also. It is possible to look at other teachers and think of them as naturally gifted in some way and that 'good teaching' was an ability that one had by chance or not. I realized early that I was not a 'natural teacher', but it took me a while to realize that it did not matter.

I began to think of teaching as a craft, not unlike weaving or web design, that could be learnt systematically and with deliberation. It was possible to gather skills and to hone them. What has emerged is a rootedness in understanding and effort, which has helped me move from a well-intentioned but diffident teacher to a more confident and effective one.

Below, I discuss three aspects of teaching I have consciously worked on.

Preparation

The importance of preparation for a class cannot be overstated. For me, it has been the key determinant amongst the factors within my control. Preparation comprises reading ahead, working out problems beforehand, researching other resources, planning activities, and compiling worksheets. Another key aspect of preparation comes to the fore with the question: 'Who is one preparing for?' The obvious answer is 'the students', but there can also be a preparation for oneself.

To teach a class merely as a transaction of a syllabus or as an institutional requirement is a travesty of learning. When teaching is seen as an opportunity to dive deeper into one's own understanding as well, pushing the edges of what we think we already know, 'to play with it', then an interest is naturally created in us. In the classroom, the live quality of the interest that has been aroused in us is what communicates and, by resonance, brings forth the student's own interest. As a response to the more traditional idea that education is about filling the student's mind with the teacher's knowledge, it is countered that the root meaning of education is derived from the Latin word *educere*, 'to bring forth'. But what is it that is brought forth? Is it the student's existing knowledge? Is it his talent? I think not. It is the student's innate interest and curiosity to learn that is brought forth, and that interest which is drawn out is the real teacher.

For example, before teaching a course in environmental education for the middle school (which may have more hands-on components), it may be useful for the teachers to study together the writings of, say David Orr or Schumacher, though it may not be of any immediate use in the course. The purpose would be to prepare one's own mind through a deepening of understanding, as stated above. This may be done each time one teaches the same course, so that newer ideas and perspectives emerge, which may sometimes translate into appropriate teaching methodologies.

Similarly, a conversation among teachers before a study trip could focus not just on the practicalities but also on the topics or issues that the trip has been planned for. It would create the ground for an active engagement with what emerges on the trip.

Classroom management and teaching methodologies

For a new teacher, the prospect of a noisy, disorderly or chaotic classroom is daunting, and it rouses feelings of anxiety and helplessness. Such experiences may leave a teacher diffident about her role. A common response to such a situation is to 'get tough'. While there is some validity in being firm so that the learning environment is not vitiated, it seems to me that the difficulties of classroom management (a terrible phrase, indeed!) are better addressed laterally rather than by a heavy-handed approach.

Again, what is called for is a shift from the Talent-Performance axis to the Understanding-Effort axis for oneself. Instead of feeling a personal lack in the face of a disruptive class, one could look to experiment with classroom methodologies and take a greater interest in the students' lives to understand the apparent lack of interest.

For instance, let us suppose I am most comfortable with a traditional chalk-and-talk approach, but in my classes I also notice that it creates a pattern of interaction where some students slip into passivity and the focus is entirely on me. This is ripe ground for what one may call 'disruptive behaviour' with attendant feelings of inadequacy for the teacher. Instead of haranguing, I could choose to use videos that explain the concept with clarity, thereby remove myself from the focal point, and change my role to one who asks probing questions that test understanding, help make connections with previous material, and inspire ideas for a project.

The Krishnamurti schools offer plenty of latitude in methodologies that a teacher may adopt. It is important to use that space to experiment and discover newer ways to engage with content. An exploration into teaching strategies makes teaching an active process of learning for oneself. There are several excellent resources available in the school library and online, but to use them consciously in one's practice makes all the difference.

Learning to 'talk maths' is a critical skill that helps break the idea of mathematics as

being an exercise in number crunching, symbolic manipulation, or formula memorizing. It opens the ground for precision in expression, an appreciation for closely related but distinct concepts, and articulation of a variety of different solutions for the same problem.

Sometimes there are unexpected benefits in exploring teaching methodologies. In using a series of videos from MIT's Open CourseWare to teach calculus for class 11, I also learnt how to effectively use a blackboard!

Feedback

The role of feedback (for the teacher and student alike) is dependent on the axis that one lives in. On the Talent-Performance axis, feedback is merely reinforcement of a static idea of oneself. On the Understanding-Effort axis, however, feedback is a critical ingredient of learning. In the virtuous cycle born out of effort leading to understanding which spurs further effort, feedback is the catalyst that changes the cycle into a spiral. It brings in reflection as the key process between effort and understanding, and lends depth.

Feedback for students would imply writing detailed comments on their test scripts or speaking to them individually about a piece of written work. At times, it takes 3-4 iterations of similar feedback before it begins to be incorporated by students. Feedback could also be built into a classroom conversation with constant probing to uncover patterns of thinking and fallacies, if any feedback for teachers is an institutional requirement in some schools; but it may also be sought voluntarily and informally. Co-teaching is a wonderful ground for simple, open feedback. We may also get valuable feedback from students.

For two consecutive sports days at The School-KFI, I taught folk dances I had learnt as a student at Rishi Valley School. In the first year, I had taught a dance done in parallel lines. After many days of practice, when we went to the sports ground the day before the event, we found that the lines were messy—what worked for smaller groups in a closed space was chaotic for the entire school in an open space. This was not something I had foreseen. The solution came from a group of class 9 girls who suggested that the formation be changed to circles. Initially, the idea was not acceptable to me because it flew in the face of how I had learnt the dance. However, when they demonstrated the dance in a circle, everything fell into place beautifully.

In the second year, I taught a dance where I struggled to break down a particular sequence of steps. Again I had learnt it in a specific way, and though I could see that it was not working, I did not know how to correct it until a class 12 student introduced two simple pauses to fit the steps to the music, and then magically all was well.

In either instance, the need to be right in front of others could have overshadowed the opportunity to learn, but happily that was not the case.

In *The Courage to Teach*, Parker Palmer states that teaching is a public profession that is practised privately. Surgeons operate in the presence of other doctors, lawyers argue their cases in public view, so why do teachers seek the security of a closed classroom? Palmer writes, 'If we want to grow in our practice, we have two places to go: to the inner ground from which teaching comes and to the community of fellow teachers from whom we can learn more about ourselves and our craft.'

A personal note

The first line of the article should really have been 'In the first year of *my second stint* as a teacher…' When I was a student at Rishi Valley School, I was certain I wanted to teach. When I did join The School-KFI in 1999, I thought I had answered my calling. The experience of the next three years, however, left me with deep self-doubt. I was left asking myself: 'If you are not good at that which you think you love doing, should you still do it?' Unable to answer the question satisfactorily, and feeling that I may be doing more harm than good, I stopped teaching in 2003.

I rejoined The School-KFI in 2011, and I see now that it is not important whether or not teaching is a calling. The path of understanding and effort keeps me interested in other questions, such as 'How do I address multiple levels in a mathematics class?' or 'How do we help children be safe in online spaces?' or 'Is education a process of preparing a child for the work of self-inquiry to be undertaken as an adult?'

It strikes me that the first three years of teaching are important years, as someone who has done it twice over! Especially in a Krishnamurti school, where classroom engagement is only one part of all that goes into being a teacher, the explorative freedom available can also be strangely overwhelming. Building competence through learning the craft of teaching helps create a stable ground for entering that other more challenging area: the art of teaching.

The Spirit of Art in a Classroom

T M Krishna

Every narrative on society categorizes people. It even segments thoughts and actions. It sees life as a set of predefined options. Based on which one we choose, we are either co-opted into a definite identity, or we inherit one. We have to belong to a category or a type. Even if we, defiantly, choose not to belong to any, we find that we have been allotted to the category of 'no category'. We have to either choose, or be chosen.

The discourses on education are no different: teachers, students and parents are classified according to the school they are associated with. What we stand for or how we see the world gets fundamentally conditioned. Every word is understood within this slotting paradigm, and the very same 'self-hood' that the 'liberal' seeks to disengage is only re-engaged.

Mainstream and alternative: a polar divide

We routinely hear of schools being classified into two types, which are, in effect, stereotypes: 'mainstream' and 'alternative'. These are interesting and complex expressions. Their meaning and implications operate at many levels, and depending on where we see ourselves positioned, we place a heavier weight on one side of the weighing scale.

What are mainstream schools? Within the Indian context, they refer quite pointedly to private schools where most of the upwardly mobile middle classes send their children. These schools enroll a large number of students focused on achieving progressively higher grades. Expressions such as 'having drive', 'ambitious', 'target-oriented', 'creating leaders' are spouted forth when describing these spaces of education. Two particularly prominent phrases heard to describe this orientation are 'high achievers' and 'aiming at excellence'.

The alternative schools naturally place themselves at the opposite end of the pole. These schools are, by definition, smaller schools that concentrate on

the individual development of the child, interested in nurturing children as being part of humanity and, in fact, of the earth. These schools have devised other self-defining words and phrases. For instance, they embrace education beyond books and exams, learning experientially and creating complete individuals.

Naturally insinuations, even accusations, fly thick and fast between the two! To the alternative, the mainstream schools are mass factories where children are being churned out as mindless machines who deliver for the marketplace. To the mainstream, the alternatives are utopian, making students incapable of dealing with the real world, protective, elitist in spirit, self-absorbed and exclusive.

These perceptions of two presumed opposites are fascinating, for they only further establish that both positions are just that: positions, as neither one of them investigates the actualities of the other. Moreover, a mainstream school may have alternatives within, and a so-called alternative may turn out to be mainstream. But these important nuances get obscured in such dualistic narratives.

Within these synthetic bubbles are stored ideas of art and its role in a school environment. These too do not escape those dichotomous perceptions.

Art teaching as a vehicle for reiteration or competition

In the mainstream schools, by and large, music and dance are seen as vehicles for providing cultural, religious and national reiterations. They are about pride and the celebration of our national identity. The school establishment curates this identity, imposing a belief system. Teachers, students and parents either buy into this or accept the art and music module as a harmless side diversion in the single-minded drive to embrace academic achievement.

Mainstream schools exploit a child's talent in order to further the 'achiever' principle even here and to demonstrate their dominance even in art! Here, the art class with lessons in painting or clay-sculpting becomes another battle ground for the competitive out-achieving of one by the other. The mainstream school's competitive educational environment does not spare its 'art'.

In the alternative schools as well, art becomes a tool, a tool of identity creation, with only the identities having changed. Here they help in creating ideational identities such as secular beliefs, environmental sensitivity, gender

sensitivity and the transcending of linguistic or nationalistic dogmas. The art class usually is a strong educational supplement and is used as a vehicle of self-expression and exploration. Art is also used as an actual tool for teaching curricular subjects. School Projects, which are common to both alternative and mainstream schools, are examples of taking art beyond being desirable add-ons. They try, quite wonderfully, to integrate actual art in academic learning.

Capturing the form and letting the spirit go

If I keep aside my own personal bias that pushes me towards the alternative, I encounter an artistic problem. These various ideas of art are still within the confines of the literal. By literal I mean that they are seen as forms: painting, sculpture, dance and music. These forms in their temporal structure provide a service to the education system. The idea seems to be that art can open new pathways to thinking, imagining and connecting that in turn seeps into the other facets of a child's education. Neurologists, child specialists, philosophers of education will all talk about how art does advance pedagogy.

But I wish to ask one question. Does a child really carry with her the spirit of art into the learning of quadratic equations, human anatomy, or the Indian constitution? More importantly, does the art teacher? I have in my question qualified art with the word *spirit*. What does this mean and how does it change our perception of art itself? By using the word *spirit* in this context, I am trying to remove the literal idea of art and explore what art means in its more abstract, non-empirical sense. What is it that art nourishes within our essence that we can hold and treasure?

In this exploration, I hope we can perceive art as a companion and not as a device. Is this even possible? If it is, then what have we missed in the way we understand art? To investigate this possibility we need to relive within ourselves our own artistic experiences and see, in some wonderment, what those were. In this inquiry let us not get entangled in aesthetic debates on various forms of art and how each inhabits the socio-emotional space. What we are interested in is what we experience in art when it engulfs us.

The art moment

A music concert, a dance presentation, an hour at a painting gallery sometimes turns out to be among the most cherished moments in our life. We continue to recall those days from our memory. But what does our memory say? The recall

does not say much. We feel a catch in our throat or our eyes sometimes well up with tears, but we cannot articulate that experience, and maybe we need not.

There is one other place where we come into contact with this self, and that is when we are with nature. This happens in the hills, walking by the sea or inside a forest when speech does not force us back to self-knowledge. But there is a difference between the way nature gives us this treasure and art does. Nature always exists, and when we allow ourselves to become part of her we are gifted those moments. Art unlike nature is a conscious human creation. Art uses various physical forms deliberately to transcend the physical self, whereas nature is what it is.

When art happens, it erases from our mind the physicality of our own existence. I don't sense my feet on the floor, my skin tingling, or the lack of ventilation in the auditorium. In fact I am oblivious of the 'I'. For that period of time I do not feel the physical body. Events are part of a continuous, un-segmented moment. The sense of space too is magically absent. Our seat in the audience is not separate from the position of the musician or the dancer. We don't see this spatial distance. The stage itself is only an extension of my own space. The demarcations are gone. If I am absorbing a painting, I am within the painting or, more significantly, the painting is within me.

But then what am I experiencing, why and how?

Life is a word we often use to describe that which is within and surrounds us. We know of this life only because we can experience it, and this experience is the result of our ability to feel. Feeling is not just touching, hearing or seeing. Feeling is about connecting this physical ability to the mind, and in that interaction we 'realize' feeling. When these connections are effected, life means a wholly different thing. Another word we immediately associate with feeling is emotion. We must be very careful here as emotions are interpreted as specific resultant states born from feeling. Sadness, anger, fear, happiness are all classified states which emotion seems to signify. But if we were to view emotion as the human ecology of experience where the stimuli, the physical and the mind intersect, we can perceive emotions without conditioning them into literal states. To understand the art experience we need to look at emotions in this way.

When we are within the art experience, we come into contact with an unfathomable element within. Art by its sheer presence removes the barriers

within our mind. We allow ourselves to be submerged in the experience. I am the art and the art is I.

The art 'moment' lives not just in art alone

Even when we are watching the dance presentation of a tale or listening to a song immersed in religion, an art experience dissolves all these literal aspects into abstraction. The literal meaning of the words, story line or social context are not separate, but together become the whole experience. Within a painting too, we perceive beauty as a whole as we transcend colour, stroke, form, composition and structure. This beauty is a reflection of ourselves, and this 'we' is not the collective of the 'I', but that which resides beyond our own individual or group identity. This is probably why we can never articulate the artistic experience.

Art allows for the abstraction of life into aesthetic forms. It is a profound discourse that does not categorize or limit experience. It also allows you to feel deeply, become inward and absorb with great intensity without having to negotiate conditioning. Within the artistic moment the human being is unshackled from the limitations of the temporal and literal. Art is the bridge between the external world and the inner self.

The true spirit of art therefore exists in what it does to us as human beings and how it transforms our way of seeing.

Grasping the art moment in a classroom

Can we carry this idea into the classroom? The classroom, both for the teacher and the student, is a conditioned space. This is true even of a Krishnamurti school. The nature of the conditioning varies, but the reality of its presence is undeniable. Therefore it is essential to ask whether the teacher and the student share complete freedom. What does this mean? When we look at sharing as giving or receiving, we place upon them many conditions. The giver automatically sits on a pedestal and the receiver lower in the hierarchy, creating a power equation. Now, can we bring into the classroom the spirit of sharing which transcends the literal limitations that our social constructs carry?

In the art experience, you and the artist share and learn without being limited by the role played by each. This condition exists only while we are part of the artistic moment. Our identities do come back into the narrative

immediately after the experience, but during the experience it is a deep emotional sharing, where learning is true, clear and honest. This is what the teacher in a classroom can become—a catalyst who allows every child to enter a pure sphere of learning. For this, the teacher needs to be in touch with her own learning where she is also discovering. The artist's ability to create that moment lies in his marvelling at the art itself. Every note is an unravelling. The only conscious act by the artist is to allow himself to surrender to art as it reveals itself. Can we imagine a teacher with this emotional depth, where 'that which she knows' becomes perpetually 'that which she hopes to touch?' The teacher will discover at every moment something she has not seen before. It will not matter that she has taught the same topic to another class a few months before, because every time she enters that chapter, it will be new, fresh and as beautiful. This will transform the way children respond to learning. Like someone in a concert, they will now have an opportunity to share in the wonderment selflessly.

As teachers, can we enter the classroom with the intensity of immersing ourselves within the core of 'x' in maths or Keynes's economic theory or Macbeth? Does the teacher 'lose herself' within a word, idea or problem? Does the atmosphere in the classroom become charged by this emotional intensity? I am not asking for this to happen every time, and it will not. In fact, it may happen only for a few minutes in a class. But this is impossible unless the teacher looks at herself as an artist travelling within.

The teacher as seeker

We need the seeker within the teacher. This will transform the teacher and the student. Imagine a classroom where every student imbibes this spirit from the teacher without conscious realization. Minds will be alive with learning. The child will then allow herself to be one with a word, a problem, the mountains or a political thought, at least for a passing moment.

The artistic attitude of the teacher will transform the method of learning. This will happen not because the teacher seeks to make learning more fun, interesting or engaging. This will come from the teacher's own discovery of beauty within learning that she shares.

What about artistic abstraction? How can that happen in a classroom? We may not be creating art, but we can in the learning of anything create a link with life experience. Can the teacher create an atmosphere where the

Pythagoras theorem evokes within every individual the real feeling of life? Does the sheer elegance of the Pythagoras theorem evoke a deep feeling from within, almost as if we touched a moist leaf in a forest?

Art as pause, pause as art

Art experience does something else: it brings a pause to our lives. Though art is about something happening, all the moving parts of art are grounded in a pause. The moment the pause disappears, reflection disintegrates. This pause is not a vacuity but a ripe void. In music this manifests as aural silence, in dance it is moving silence, and in visual art it is spatial silence. This is why time stands still in art. If we are to reflect upon this idea within the classroom context, can we see the possibility of creating this pause in learning?

This is not to be interpreted as creating an actual pause between concepts! Can this nothingness, silence, stillness be created by the way teachers engage with an idea? Can an idea simmer in the class, even hang in the balance, allowing for its viewing and imbibing by everyone present? Can there be a pause from rushing for solutions, answers or resolution?

Today, there are two kinds of issues in classrooms. In the 'mainstream' schools, the examination is a single point agenda, and so a pause is a liability. In the alternative schools, making learning engaging, fun and interesting is so much in the top of their minds that multiples tools and techniques are constantly used. Here too the pause is the scapegoat.

Not 'teaching art', but teaching as an art

I have not written this piece to provide techniques or art-based solutions; honestly, I am not capable of that. What I have tried to place before the reader is the spirit that drives my life beyond its artistic existence. Whatever I have said can be extrapolated into any sphere of living, but even as an artist I struggle with living life, keeping intact this 'spirit of art'. But as educators if we can engage with ourselves as artists, we can perhaps transform the classroom.

Once we see art as more than just painting or sculpting, we become artists in life. Art skills have their space in a school, and I am not undervaluing their necessity. But art experientially gifts us a window into something special that exists within us. If we can draw into that 'spirit', education can become an artistic experience.

Exploring 'Self-Awareness' at IIT Madras

Devdas Menon

sreyas ca preyas ca manushyam etah
tau samparitya vivinakti dhirah
sreyo hi dhirobhi preyaso vrnite
preyo mando yoga-ksemad vrnite
Kathopanishad

(Translation: Both the truly good *(sreyah)* and the ephemeral pleasant *(preyah)* present themselves to man. While the heroic wise person *(dhirah)* discriminates carefully between the two and chooses *sreyah* over *preyah*, the fool *(mandah)* chooses *preyah*, desiring to acquire and preserve various sense-objects.)

Are we preparing our youth to take to the heroic wise path of the *dhirah*, the fulfilling path of *sreyah*? The evidence, unfortunately, points heavily to the contrary. The vast majority of our 'educated' population are clearly on the *mandah's* path of *preyah*—with a focus almost entirely on enjoying various sensual pleasures, amassing wealth and acquiring power at any cost. Cynical as it may sound, there is some truth in Theodore Roosevelt's famous remark: 'A man who has never gone to school may steal from a freight car; but if he has a university education, he may steal the whole railroad.'

According to ancient wisdom, the thirst (*trsna* in Sanskrit) for happiness is a natural craving in all sentient beings, and arises from a sense of separation from our Source. It is but natural that we should seek to quench this thirst in all kinds of ways, beginning with sense-pleasures, wealth and power. The *mandah's* way of *preyah* is indeed how we all begin our lives, but in an enlightened culture, we are meant to be *aware* of, and to rise above, the entrapment of our lower nature. We are meant to discover and manifest in our

lives our true higher nature, governed by *sreyah*. Should not our education facilitate and inspire this full flowering of the human potential? At present, it would appear that this 'flowering' is limited to highly specialized and narrow domains, and even here, the powerful forces of *preyah* tend to prevail and overwhelm.

Existential challenge for youth in India

There is so much pressure on our youth from all sides—parents, society, media—to succeed in the rat race that they fail to look inward and discover where their true inner calling lies. Many of them are driven into aspiring to become engineers and doctors, while their aptitudes may well lie elsewhere. Even those who discover through their college education that their aptitudes indeed lie in the fields of core engineering and medicine find themselves strangely compelled to abandon their calling, falling a prey to the relentless forces of *preyah* sweeping across our culture. Thus we see some of the best IIT students, who would have made excellent engineers and researchers, ending up in finance and software, tempted by the mind-boggling salaries they are offered. Indeed, they are persuaded to do so by their own parents, who celebrate their success at being able to earn, in a short time, wealth that they have not seen in their entire life-times. The media also pitch in to hail IIT students who break records in salary offers. Likewise, in the field of medicine, even the best students, who find that they have a natural calling for healing, abandon this calling to choose the most popular and lucrative options (currently, radiology), with their parents more than willing to invest huge amounts in their education, in the hope of gaining a huge return on their investment.

Hardly anyone pauses to reflect and ask: wherefore, whither? These basic questions often emerge at a later stage—the so-called mid-life crisis. It is, of course, never too late to take to the path of *sreyah*, but it is not easy to do so, when the brilliance of one's youthful energy has ebbed away, and one finds oneself burnt out, fatigued and rather disillusioned with life. It takes significant courage, inspiration, discipline and aspiration to become a *dhirah*! Besides, often, we find people in their later years looking more for solace and therapy, rather than authentic growth.

The crisis we witness within ourselves is reflected in the chaos we see outside, for which we are all collectively responsible—the terrible disparity

of poverty and abundance side by side, the growing pollution and irreversible damage to ecological balance and the environment, the unbridled corruption at all levels, and the incapacity of politicians and leaders, nearly all of whom seem to be lost in the trappings of *preyah*. It is so easy to get submerged in a feeling of hopelessness, and yet nothing can be more damaging to us than to lose hope and faith, and get into the blame game and a sense of being victimized. We need to do all that we can, in our limited spheres, to move ourselves and inspire others along the path of *sreyah*.

Self-Awareness at IIT Madras

At IIT Madras, we have been exploring various ways of introducing 'inner' development in education. These have been mostly extra-curricular in nature, using various fora, such as *Reflections* and *Vivekananda Study Circle*, involving mostly talks and discussions, which dwell on diverse themes. We realized the need for a sustained structure in these programmes in order to meaningfully serve the objective of facilitating authentic inner transformation. Thus we came upon the idea of developing a regular course that is part of the curriculum, and not just something 'extra-curricular'. We wanted the course to be exploratory in nature, unlike the other courses in the Institute. The approach had to be open rather than prescriptive, while at the same time aiming to be deep and transformative.

We have run this course four times since January 2012, and the response from the students who credited the course and others (including a few faculty) who audited the course has been overwhelmingly positive. Based on their request, we now offer an advanced course, starting from January 2014. This 'free elective' course, titled *Integral Karmayoga*, deals with the theme of spirituality in work.

Self-Awareness

IITians are by nature intellectually inclined; but too much thinking can be a handicap when it comes to holistic development. Our students and faculty train themselves to think a lot, because thinking indeed is a primary function in the academic world, where spoken sentences commonly begin with 'I think…' It is relatively rare to hear anyone here say 'I feel…' While thinking indeed is a tremendous strength in academics, and in general in reasoning and ideation, it needs to be supplemented by a healthy development of other human potentials for holistic and balanced growth.

This obsession with thinking is a widely prevalent disease in modern times. It is truly a disease because it puts us ill at ease—something that we are sometimes dimly aware of. To be able to get free, even temporarily, from this imprisonment—being 'locked up' in our heads—can indeed feel liberating.

Freedom, delight and awareness

One may be surrounded by great beauty, by mountains and fields and rivers. But unless one is alive to it all, one might just as well be dead.

J Krishnamurti

It is ironical that even while living amidst the beautiful sylvan surroundings at IIT Madras, the vast majority of IITians seem to move about completely unaware of the immediate presence of wondrous and live nature all around us. We remain locked up in our respective narrow mental worlds, and not necessarily engaged in solving brilliantly the many technological problems of the world! In fact, if only we were aware, we would quickly discover that most of our mental activity is random and unfocussed, often revolving endlessly around routine chores or petty concerns and anxieties.

Students are pleasantly taken by surprise when we shift outdoors for some of our 'Self-Awareness' classes under the shade of a beautiful banyan tree. They are even more surprised when we talk about the importance of doing nothing, of just being, simply aware, of being centred. All that they have to do is to pay quiet attention and to be keenly aware of all that they experience. This often turns out to be a collective transformational process.

Students begin to find value in such simple yet profound states of being. We try to expose them to various kinds of simple exercises in awareness. For example, sitting together, we sometimes try to reawaken our own experience of the world of our infancy. Everything—from a little ant to a huge tree—appears to be so fascinating, so alive, so mysterious, so delightful!

It is so important, so very important, to experience this daily. The naturally beautiful and harmonious surroundings in the 640-acre forest at IIT Madras, where we live and work, offers us the perfect ambience for this. We make use of the gift of sensory perception—the very same senses that can trap us in *preyah*—for something sublime, filled with authentic well-being, beauty and harmony, which constitute the very nature of *sreyah*. How wonderful it would be if we could learn to soak ourselves in this spirit and

remain centred in such awareness more often, anywhere, even in the midst of the hustle and bustle of daily life!

Delight at work

For who could live or breathe if there were not this Delight
of existence as the ether in which we dwell?
From Delight all these beings are born,
by Delight they exist and grow,
to Delight they return.

Taittriyopanishad

(Delight (*ananda*), unfortunately, is not something we experience frequently, and the students know this only too well. It is necessary for all of us to find delight in the work we do and in the relationships we have.)

We simply do things because others have said it is important to do these things, or because we believe they are required for our survival. Such work is either uninteresting or involves much struggle. It is only on rare occasions that we find work that is delightful and rather effortless and perfect. In such rare moments, we feel as though we are part of a flow and that some mysterious higher force is at work through our being. How wonderful life would be if these moments enter into our lives more frequently! This requires us to identify our life purpose, the very purpose for which we have been born. Throughout the course, we encourage students to discover those activities that bring them delight and a profound sense of fulfilment, something that the usual motivations of *preyah*, such as money and fame, cannot grant.

Other aspects of self-awareness

Learn to live within, to act always from within… instead of living in the surface, which is always at the mercy of the shocks and blows of life.

Sri Aurobindo

Our course on Self-Awareness is exploratory in nature. It has many elements, all of which are aimed at inner transformation for an authentic and fulfilling life. The students learn to look experientially into their own selves, and their understanding is reflected in the many assignments they are required to do. Essentially, they have learnt the importance of disengaging and stepping back into the wideness of awareness, and so remaining centred and inwardly calm

even under difficult situations. Many report significant improvements in their relationships and work culture. A few have also reported clarity in discovering their life purpose.

We sincerely hope that this course will contribute in an enduring way to the awakening and flowering of the students who have undertaken it.

The Mountains Will Surely Speak to You

S Jayaram

A high altitude trek in the Himalayas has become a part of the learning programme at The Valley School, Bangalore, since the year 2000. In the late nineties, it was an optional event every summer where a handful of high school students and one or two adults would participate. Having trekked in the majestic Himalayas since 1986, I had come to realize that the entirety of the experience and the insights that one acquires during these treks cannot easily be expressed through words or photographs (which are anyway available aplenty); the only way to get a feel for the mountains and understand what a trek can do to you is to actually go on one. It was then that we decided to make the Himalayan trek a compulsory part of the class 11 programme and devote a fortnight for this in the academic calendar.

For a teenager, ostensibly the trek as a part of the school curriculum is an 'excursion' or an 'adventure experience'. It is that and much more indeed. It is important to orient students to the basic intent and raise related questions for them to explore. During each year's orientation programme for class 11, one of us adults states clearly the why and how of the trek. Again, a month or so before the trip, a session orienting their body and mind towards the experience becomes pertinent. One has to keep in mind that a group of forty students will have diverse physical and mental constitutions and temperaments.

The broad objectives of such a trip are:

- To experience nature in its pristine form, not merely as a tourist, but while living in it day and night for a week.
- To have first-hand observation and understanding of the culture, lifestyle and values of the mountain people, who are yet to be consumed by the aggressive, fast-paced urban culture, and thus to understand what it might mean to stay connected to nature and not separate oneself from it.

- To understand for oneself how our actual requirements for daily life are quite simple and few, and thus what it means to live in austerity. In the process, to realize how dependent we are on gadgets, cosmetics and entertainment to stimulate our lives.
- To understand the physical and psychological thresholds of endurance, to dispel the illusion that each effort needs to have a goal or an achievement.
- To be an explorer, a wanderer, to be with oneself and remain in solitude for considerable lengths of time.
- To imbibe the majesty of the mountains and feel the growing humility within, soak in the sacred quality of the mystical Himalayas.

Many of these objectives are not tangible, and one might not see an obvious and immediate 'impact' on the student or even the accompanying adult at the end of the trek. However, it seems certain that the seeds of sensitivity are sown and may germinate some day. Indeed, students have stated that they have experienced positive changes deep within. It is important to realize that if one ends up 'teaching' or articulating all these to a youngster, it could be seen as mere intellectual banter. Instead, it would be worthwhile to posit these as questions and informally engage students in a dialogue. Adults have to play a very gentle role in the process. Apart from being physically fit and capable of taking care of themselves first, as well as ensuring the safety and welfare of students at all times, adults must make an attempt to reach out to them on the personal front without being overbearing. This is certainly a tough challenge, but it is invaluable.

We have been trekking in different belts of the Himalayan ranges, choosing routes which are not popular among tourists but which nevertheless are quaint and offer beautiful views all along the way. Most routes in the Garhwal-Kumaon region are along a river and lead up to a glacier in the higher altitudes, with the mighty peaks in the background. The paths are dotted with temples and rustic villages and seem to emanate a religious aura. Himachal and Kashmir Valleys are known for their picturesque views of snow-lined mountain ranges and alpine vegetation. Leh and Ladakh offer exotic and ethereal views of sandy moraines on dry, cold mountain-scape, as well as striking views of the night sky with its stars and planets that are indescribable. Arunachal Pradesh and the other North Eastern regions overwhelm you with rich biodiversity and forest cover, and the eastern Himalayas in Sikkim offer treks through dense forests of rhododendron to the base of mighty peaks

like the Khanchengdzonga with unbelievably close snow-lines. It is difficult to choose from such a rich repertoire, and each one has its own unique fragrance and flavour.

While planning the route, one has to keep in mind that each one in the group must be able to go through the complete experience, even though the levels of exertion and stress may vary from one individual to another. The actual trek from the base camp and back lasts about seven days when done at a leisurely pace, with six to seven hours spent walking every day. Considering the fact that it is a novel experience for most of the students, it is important to locate routes that are at a moderate altitude (11,000 – 13,000 feet MSL recommended), ensure that there is adequate time for acclimatization, that there are trained mountain guides and healthcare professionals within the team, and that there are alternative routes to reach the base camp quickly in case of an emergency.

It is also an interesting exercise to help students pack sensibly for the trek and carry just the right amount of gear. It helps when we remind children about the costumes and the gear that people who live in the mountains use, and that we do not have to pretend to be creatures belonging to another planet! The contrast in lifestyles is strongly felt as children interact with the support team members and guides or the people whom we meet in the villages en route. It is heart-warming to see children connecting with the local folk and also developing a sense of respect and admiration for them spontaneously.

However meticulous one might be in planning a schedule or in deciding a route, the final approval for things to happen must come from the Mountain. It is She who decides if and when you can proceed on your journey. A combination of reverence, caution and humility, together with the wisdom of the local tribes, should be the guiding force for one to proceed on a journey in the mountains. The urge for accomplishment and achievement seems completely out of place, and a sense of fulfilment, gratitude and tranquillity much more appropriate as one traverses gently in the lap of the mountains. And so long as one is willing to listen, the Mountains will surely speak to you!

As a school trip, the Himalayan trek is unique in certain aspects. It is in the unpredictable mountains that we learn to surrender ourselves to the flows and rhythms of nature, and not be anxious about our targets and deadlines. The sense of accomplishment is discarded for a deeper coming-to-terms with

oneself and one's fears. An intimate and immediate relationship with the mountain develops—not mediated by second-hand knowledge from the media or elsewhere. In the extremes of climate, there is hardly the time or the opportunity to be preoccupied with one's appearance, and that translates into the psychological realm as well. Moreover, as an example, the simple task of washing one's face in the morning becomes an intense experience of the water, an alertness to its quality rather than an activity of grooming oneself.

Petty comparisons are replaced by a caring for one another. Against the backdrop of the Himalayas, there is a palpable sense of all of us being the same fundamentally. Hence there seems to be a dilution of the strong sense of 'I' that we usually carry within us, and with that a relationship beyond the known becomes possible. We find leisure and quietude instead of the usual clutter of numerous distractions, and in turn perceptions are heightened, and we seem to be more receptive to the details and nuances in nature. Whether one is an atheist or a believer, the presence of the mountains inspires respect and reverence in us. The impact lingers long after we return to our daily bustle, and thus the Himalayan trek is not an escape but a rejuvenation. There arises a freshness in us from where new possibilities can emerge.

While every trip has its own learning and impact, a trip to the mountains brings one in touch with the deeper layers of consciousness in a very natural way. It is possible that the innate meditative quality that draws you again and again to the mountains brings you closer to yourself, to others and to something beyond.

Integrative Education: the Story of Marudam

V Arun and S Poornima

In 2008, a small group of us decided to start a school with a different vision. We were fortunate to be donated an eight-acre piece of land in the outskirts of Tiruvannamalai in Tamil Nadu. We developed this land over three years, adding classrooms, a kindergarten space, a library, a laboratory, a craft area and a music room. Since 2011, we have been working from our own campus, and today we have seventy students from kindergarten to class nine, ten full-time teachers and ten volunteers. This article is the story of our journey into a truly integrative education, sharing what we have learnt and the challenges we face.

From the beginning, Marudam had students of varying backgrounds: some from the nearby village, some from the city and some from abroad. We have also been open to taking in children with learning difficulties, to help them explore, discover and develop other talents. We wished to be a small school, with children from diverse backgrounds, and lay emphasis on hands-on work and skills.

Ideologically this was a great decision, but how has it worked out pedagogically? Five years have passed now, and it is good to reflect on the opportunity we have created and are in the process of creating. The children generally have a sense of well-being which we think is due to the variety of engaging subjects in the school such as art, craft, theatre, nature walks and gymnastics. The groups are small enough not to exclude anyone from any activity they are interested in, and every child can be confident that she is accepted, safe and valued. All children are therefore able to acquire and enjoy many skills in an atmosphere of equality. Our small numbers allow many vertical group activities. So today we can say with certainty that our children are happy to come to school and that they relate to one another fairly seamlessly, without any barriers.

Working with differences

From the outset it was important for us to acknowledge that our children came from very different backgrounds, and we found this reflected in the enhancement or absence of certain abilities. While there are exceptions, generally some differences are quite apparent.

For instance, children of foreign origin generally have a very strong sense of entitlement, are empowered to act on their own, have strong body awareness and are very articulate. They have a sense of their own space and share their possessions on their own terms. They are comfortable with adults and have no fear of speaking their minds. During lunch time, they like eating salads and are sensitive to spice.

The village children are, by and large, very open and flexible in their needs. They usually have a good knowledge of the natural environment, have tremendous ease with physical activity, plenty of energy and very little concept of their own space. They do not possess much and do not have much sense of personal belongings. They are happy to share what they have and also use what others have. Village children like eating rice, are not used to vegetables and generally detest salads; and we have struggled to get them to eat a balanced diet!

The middle-class city children are far more conventional in their expectations and their approach to learning. They generally have a higher motivation towards academics, have travelled more and have a wider sphere of knowledge. They, too, are often particular about their belongings and tend to talk about possessions such as cars and televisions. They are used to eating junk food and are very particular about taste, and with them too it is often a struggle to make them eat what is served. Another striking aspect of both the village and the middle-class city children is the huge influence that movies have on their interests, aspirations and interactions.

In the midst of such cultural diversity, we wanted our children to respect each other's differences, work and play together harmoniously, develop problem-solving skills from an early age, and grow up as sensitive and caring human beings. It has been quite a challenge to hold a class together, but we find the classes alive and interesting with different kinds of children with various expectations, reactions and thinking processes. For example, while discussing groundwater, village children have an intimate knowledge of wells, how they are dug, about different soils, springs and bedrock. Other children have knowledge through study of books about aquifers, water tables and so on. The village children move from concrete to abstract learning whereas the others have the grounding of concrete knowledge.

In a mathematics class, village children relate to the topics when concrete examples are used such as purchasing vegetables or provisions for the house. Starting from here, they are able to understand mathematical concepts.

Village children are very good at using tools or climbing rocks or trees and have an ease with things natural, which the other children appreciate and learn from. One child comes from a goat-herding family, and while on the hill she is quite like a mountain goat herself. The way she climbs

steep rocks with such sure-footedness commands respect from everyone. She also has a very sharp eye and makes very interesting observations about nature and is often the first to spot a bird or an animal in the wild.

Kalpana and Murugan are classmates. Kalpana has very good reading and writing skills and is a voracious reader. Murugan has very good observation skills and knows about birds. Kalpana helps Murugan to read and is extremely patient, and Murugan helps Kalpana with bird watching and mapping. Though from very different backgrounds, there is equality in their relationship.

With our small classes and children from such varied backgrounds, there is no average student to whom the class can be addressed. Each student is addressed individually, and each follows her own learning curve. While we have common topics and resource materials, each student follows these at her own pace. Classes have to be carefully planned, and materials have to be in place. Often we have several volunteers in a class catering to different groups of children or even to individual students.

Bilingual classes

All our classes are bilingual; every single instruction in class has to be shared in English and Tamil. But it is not just the teacher speaking in two languages. Every sharing by every child is translated from Tamil to English or vice versa. For example, after our Friday walks the children come back and share their observations. Two columns are made on the blackboard: one in Tamil and the other in English. All children's observations are written on the board using whichever language they choose to share in.

In geography, we decided to study the natural world one biome at a time. We started by studying rainforests, for which we got an excellent book with many pictures. The book contained information on the forest-dwelling tribes of the rainforests and the conflicts they faced. All the reading material was translated into Tamil. Once a week, we watched nature documentaries on the topic being covered, and we stopped every few minutes to translate and explain the commentary in Tamil. We also visit regularly the Gurukula Botanical Sanctuary for a first-hand experience of life in a rainforest.

Some European children speak Tamil, and this encourages other children to learn Tamil too. One boy of British origin prefers people who speak English, but is happy to play *kabbadi* with everyone and do project work with a few others. So he ends up having different partners for different activities, and nobody judges that or pushes it in any direction.

Project-based learning

Given such diversity, we felt that learning through the project method would be the most inclusive. We chose broad themes and

followed them through comprehensively for several months. Once the topic was chosen, we allowed children to pursue different leads and explore them by providing materials, and taking them on visits when possible.

One of our initial projects was on food: 'From Farm to Plate'. We did many activities such as growing vegetables, making salads, cooking, visiting neighbourhood farms to interact with farmers and to see what was being grown, and visiting the town market and interacting with the vendors there. It was a rich learning experience, and the children have not forgotten the many things they learnt in the process.

Another project we did was on *eris*: ancient traditional water bodies. Having always heard that they are interconnected, we decided to see them for ourselves. So together we walked through the canals connecting one *eri* to another. This knowledge became real to all of us. Being out together was also a great experience for all the children. Some were excited about the concept of the *eri* system, and others drew maps in their heads for a new landscape. Many remembered the fine details of trees or specific landscapes which others might have not even noticed.

Our kindergarten

We chose to follow the Rudolph Steiner method in our kindergarten. In this approach, children do not start writing till the age of six or seven. The emphasis is on play, socializing, working on developing fine motor skills, playing with clay, and doing household chores like folding, cleaning and cutting. The first activity of the day for this group is a long walk through the neighbourhood, which of course the children enjoy immensely. From this activity we noticed big improvements in their observational and socializing skills and physical strength. Even at a tender age the village children are more knowledgeable and more agile and often lead the walk.

Leela, our kindergarten teacher, emphasizes that integration occurs naturally in the kindergarten; it is simply what happens every day. For example, 'free play' is expressed as role play and the creation of imaginary worlds, which is a particularly fine substratum for integration to happen naturally. While ample scope is given to group activities and play, any expression of discrimination (yes, it exists even at this young age) is greatly frowned upon in the kindergarten. There are a few times in the day where the children are asked to hold hands. It is a simple thing, but is one of the acts where there is no freedom of choice: it is unacceptable for a child to refuse to hold another's hand. Strong bonds are formed early, and children learn to interact healthily from this very young age.

Bringing Children Together

We have found theatre to be a powerful tool in bringing children together. We have two hours of theatre class a week in which every child participates. They play theatre

games, making up little skits or engaging in mime. Or they may sit together in a circle, each coming up with an idea and fitting them together into a play.

Theatre is one of the most 'integrative' pedagogical methodologies as it has the potential to be totally inclusive. Each child can act out a character he is comfortable with and thereby feel part of the group. In the classroom a child carries all sorts of insecurities, and these can be dropped while acting. Being watched by others also gives a feeling of acceptance and self-worth.

Our theatre teacher Alice gives some examples of such integrative moments: 'One boy who loves to act, but has problems with lines, chose a very physical role and could leap about, being in his element. Another girl who is reluctant to go on stage took on a regal role and found pleasure in acting a part with limited movement and limited dialogue, yet she held the part with incredible majesty and also seemed to be in her element.'

Another activity that creates conditions among the children for complete acceptance of each other is physical education, which is a part of the daily routine at Marudam. Physical education teacher Jessica shares a story about Maha, a home-schooled and bright child with no experience of playing games with other children. Maha preferred to sit immersed in a book while the others played outside. One day while the children were practising a sequence of postures such as standing on one leg like a tree or slithering on the belly like a snake, the idea came that Maha could lead the class. The sequence was long, but to the astonishment of the others she was able to do all the movements as well as the speaking! The group performed this, and Maha's own confidence in her body grew as well as her acceptance in the group.

Play gives the village children, who are often more body-oriented, opportunities to be acknowledged and seen. Vineeth, a ten-year-old bundle of energy, was asked to be on the top of a pyramid of three levels. He climbed slowly onto the shoulders of his peers to the top, and a big applause greeted him as he stretched his arms out in the final pose.

Conflicts do arise, and we have had to deal with many difficult situations. For example, Kala, a village girl, refused to partner with Jaap, a Dutch boy, during study time. She complained that he did not share any of his things. Jaap took in this feedback and changed. He wanted some private space, but was eventually willing to share his belongings.

Ila, Avani and Amrutha are children of European origin, and for some reason tended to form a 'clique'. Sasi and Kamakshi are Indian children of their age, and there was not much engagement between the two groups. We discussed this in circle time, and Avani and Sasi were willing to make an effort to integrate. Crochet was

the first opportunity that came up, and they have grown close since.

Integrated teacher body

Our teaching community is almost a replica of our student community. We have five teachers from the surrounding villages, five from foreign countries and eight from cities in India. In addition, we have many volunteer-teachers who come for specific activities such as farming, yoga, gymnastics, clay, art, wrestling and silambam (an ancient Tamil Nadu martial art form). Children are therefore exposed to people who speak a variety of languages and are from different cultures.

Our village teachers are particularly good at creating experiential learning situations thanks to their intimate knowledge of the land and the culture. They bring a level of comfort to interactions with nature. For instance, Pachaiyappan is completely at ease with handling all kinds of creatures.

The school itself is a community of people who work on our afforestation project and organic farm, whose children are at Marudam. We have parents who are farmers participating with children while they are on the farm, parents who help cooking with children and two parents who are art teachers and an aunt who is a craft teacher.

Further, because Tiruvannamalai is a destination for different kinds of interesting visitors, we enjoy unexpected encounters with people from all over the world. This opens us up to diversity and helps us see people from different backgrounds as friends.

Questions about the future

As a school based in a rural area, there are many questions about the future. We certainly do not want our children to end up feeding the industrial machinery. We, of course, will not stand in the way of a student who wants to pursue a career in engineering or any other professional course, but we would like them to follow their heart and find happiness in a field of their choice. We have many first-generation learners who struggle with the alphabet even at the age of twelve or thirteen. These children are brilliant in other areas such as art, craft or farming. Should they go through the grind of exams, or should we empower them to just pursue what they are good at?

Many of our children are from poor backgrounds and aspire for a higher standard of living. Their parents would like them to go to college and find lucrative jobs. Their education at Marudam may end up moving them towards the city, and we wonder what we can do to counter this situation—or must we accept the inevitability of it? We are still very young as a school, and none of our children have actually reached this threshold. We will wait to see what the future holds for us.

In our staff meetings, held once a week, all the teachers and many of the

volunteers participate. We conduct 'child studies', where we choose a child a week or two in advance and then share our observations about the child in the meeting. Sometimes we discuss a group as a whole. It is fascinating to note the kind of diversity that exists in learning styles, different kinds of intelligences, aptitudes, energy levels, which of course vary with different activities.

To be honest, sometimes it is a nightmare to deal with a range of differences, but it is also a blessing. It helps the teachers and the children accept differences and respect them, for that is the reality.

A Letter to my Young, and not so Young, Friends

ANDREW ALEXANDER

From the snow-capped mountains I walk across the brown-green fells of the Lake District, up past the noisy waterfall to the placid tarn—a place of mirrors and reflections. As the logs crackle in the fire and sparks explode when they are moved, thoughts move from the past, to the present, to the future… Is it possible to live without conflict?

What of my young friends? I wonder if I might call you friends; you who have been the students with whom I have shared my life during the past three decades and more; where despite the pressure to control, to manage and make demands, maybe there was some sense of affection. And what of the students who, in two days' time, will return to the school community of which I am now part? In this environment, pressure, control and authority are the subjects of questioning, and affection is seen as an essential element in living. My early life, perhaps like many others of my generation and background, was almost completely devoid of affection—it was not part of the education, an education that was specifically designed to produce rulers of the world! I have learnt affection through my relationship with my wife, my children, through friendship and through nature.

I watch the light on the snow as we drive away from our week of reflection and activity together. Fresh snow has fallen in the night, whilst coming as heavy rain into the valleys. Even from this distance the newness of the snow creates a cleansing effect on the mind and, for a fleeting moment, there is a sense that this mind soars like an eagle, hovers over those softened sharp rocks and gazes down on this magnificent scene.

Our own children are caught in the conflict between the creative and the mundane. And as a family we sit by the fire of a house we have now deserted, consider and explore together the need to earn money to exist, whilst

maintaining vital involvement in writing, music and art, which give our lives meaning. Our sons still hold on to their profound interests, whilst all the time they are under siege from the world of exploitation, aspiration and conformity.

So, my friends, as it is the beginning of a new year and I have had the birthday which takes my aging, hesitant steps further into my seventh decade, may I ask your permission to participate in your revolution? I know it is going on. I have seen it in the eyes of the young and not so young in many places of the world. I have seen it in the faces of the children who refuse to be coerced, to fit in despite the weight of the adult world which, in its stupidity and arrogance, thinks it knows how we all should live. I saw it a few days ago as I was sitting on a rock by a lake, eating my lunch after a walk that took me past that noisy, tumbling waterfall. I saw it in the smiles of the two children feeding the ducks and laughing as their big, black dog plunged in to deprive the birds of their food. I heard it in the call and laughter of their mother and the accompanying laughter of strangers. I see it in my grandson in his second year of school, who loves learning; and my other grandson, who is in his third year of life and loves living.

Will you let me join you in negating a world which supports violence, which accepts people being driven out of their homes in Syria, Sudan and many other places in the world? I will question with you the values in life which put the earning of money and owning of things as being more important than treating the earth and all it contains with care and affection. And as I move with that sureness of step which unites us all in death, I will give you what little insight and understanding I have to contribute to the conversation that feeds your revolution. But I will not hate; I will not lead, for that implies followers and then you have already joined the deadly game; I will not specialize in exams, academic theories or intellectual speculation; above all, I will not be part of a movement!

A friend in India once called Maggie and me 'nomadic cross-pollinators', as we travelled around the country having discussions with many people and observing the different work that was being done to alleviate poverty, engage with social justice, tackle environmental degradation and bring about a transformation of human thinking. It is possible that this is what I can give to this process of revolution—for the revolution is not like any other that has gone before it. There may be enemies, but there is no blueprint or dominant

ideology; there is urgency, but that urgency consists in moving slowly and carefully, for there are many traps; and, above all, there is no separation because it is that very process of fragmentation that has brought us to the necessity of the revolution.

Perhaps we can talk about this?

The Autobiographical Self: A Case of Mistaken Identity

J Shashidhar

A human being is a part of the whole, called by us 'Universe', a part limited in time and space. He experiences himself, his thoughts and feelings as something separated from the rest, a kind of optical delusion of his consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest to us. Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty.

The true value of a human being is determined primarily by the measure and the sense in which he has attained liberation from the self.

— Albert Einstein

Mystics throughout the ages have told us that the self is an illusion and that it is in 'ending the self' that true freedom lies. Today, neurobiologists confirm that there is no 'ghost in the machine', and yet we have a very embodied experience of the world. We seem to be at the centre of all our experiences, and the sense of who we are seems visceral and real. Moreover, we exhibit fairly consistent patterns of behaviour over time. These patterns are so predictable that they seem to inform the images others hold of us and we hold of ourselves. The patterns and images put together give us a strong feeling that each of us is a unique personality. The most confounding experience is that of agency. We have a sense that there is 'someone' acting. Therefore we reward and punish people for their actions and motivate one another to act in particular ways. Our everyday experience rebels against the idea that there is no one at home.

On the other hand, the minute we ask a few difficult questions this certainty is shaken. Where exactly is the self located? Is there one central agency in the brain controlling all functions? Who am I, stripped of all roles, likes and dislikes?

How does one reconcile the biological sense of being a person with the unanswerable questions posed above? This article hopes to do so by exploring two aspects of our experience of the self: the autobiographical self and the biological self (terms borrowed from Antonio Damasio, see for example *Self Comes to Mind: Constructing the Conscious Brain).*

The biological and autobiographical self

According to neurobiologists, the human brain is continually mapping the body, and this map is represented in the brain. We experience this as a coherent sense of where we are in our physical location and orientation, a sensitivity to changes in our body state, a clear sense of ownership of our bodies, an awareness of the boundaries of our body and also of the environment we find ourselves in. In other words, we have a very strong sense of being alive as a distinct organism. I would like to refer to this sense of being alive as a separate entity as the sense of having a 'biological self'. It is likely that the biological self is brought into being afresh, from moment to moment. From this perspective it makes perfect sense that we experience the world as if we were at its centre and that we attribute experiences as happening to 'me'.

What about the autobiographical self? Along with a sense of being alive, we also have a sense of being *a person to whom the body belongs*. The person has properties and attributes, which go well beyond the body. Every time we experience something, we experience it as happening not just to the biological entity, but also to this person. The experiences seem to build and contribute to an 'autobiographical self'. In other words, this other sense of self carries with it a narrative and an autobiography. The autobiography is rich with experiences, ideas, images, evaluation, likes, dislikes, achievements and failures. Moreover, we experience other human beings as entities with autobiographies, and our narratives are deeply enmeshed with one another. From the time we are born till we die, not only are we continuously constructing our autobiographical selves through our own experiences, images and evaluations, but are also adding the experiences of our ancestors as well as the ideologies and beliefs we inherit from our culture. Our stories become part of, and feed into the larger narratives of, humankind.

Our brains come equipped with some special abilities which further add to the construction of the autobiographical self. For example, we can think and plan for the future and recall our past. We can map and model reality, and we have a very powerful imagination. All this creates an autobiographical self which seems to have an independent life, with the body as only one of its many attributes. Our narratives and the narratives of the people with whom we relate completely occupy us.

How are the two selves related? One of the hardest problems in the study of consciousness is the question of how a biological organism can give rise to an autobiographical self. Perhaps we will never answer this question, but we can definitely observe that when the autobiographical self experiences something, it automatically leads to a change in our body state. Perceptions about the world and about ourselves change our body chemistry. And when we become aware of changes in our body state, these in turn impact the narrative of ourselves. This close interplay gives rise to our embodied sense of self.

Let us now look at the age-old question of who we are, from the perspective of the biological self and the autobiographical self.

Who am I?

It would be safe to say that we are biologically separate entities going through life and being conditioned and shaped by our experiences, storing these experiences to be retrieved when needed. What then of the autobiographical self? The main content of the autobiographical self is memories and images stored over time. While it seems, as we mentioned before, to take on a sense of independent existence, on close examination it seems to exist only by virtue of its content. Krishnamurti (Madras 1978) expresses this very powerfully:

> *So the nature, the inmost nature of the self, when you have gone through all the layers of the self, the essence, is nothing. You are nothing. On that nothingness, thought has imposed the superstructure of consciousness, consciousness being the content. Without the content there is no consciousness, the content being your religion, your particular god, your puja, your anxiety, your sorrow, your pain, your hate, your love. All that is the content of your consciousness, obviously… You understand what thought has done? You are absolutely nothing. All this superstructure has been built by thought, and thought is the response of registration. Do you see what thought has done?*

On an earlier occasion (Saanen 1974) talking about the structure of the self, he says: *And we make such an enormous fuss, such a struggle to maintain this structure.*

Would it then be far-fetched to say the autobiographical self is a mere construct, or to use Krishnamurti's words, just a 'bundle of memories'?

Daily life

The reader might wonder what this fine hair splitting about the self can possibly have to do with his or her daily life. I think everyone will agree that over the years our brains have stored a great deal of data about others, the world and ourselves. Let us look at this storing process for a moment. The first thing to note is that the data is not stored neutrally in the brain: on the contrary, it is stored with emotional content. So when we retrieve a particular piece of information, it also comes with these emotions.

The next thing to observe is that the storing process is notoriously erroneous. Memories are stored selectively, influenced by the emotional state we are in. They are highly subjective and can often be shaped and changed over time. Is all the content of the narrative false? Of course not; many of the things stored are factual, but stored in a very skewed and biased manner. The simplest way to test this is to have several people recall an event they all have undergone and watch the so-called 'Rashomon effect' unfurl. The difference in interpretation that each person has of the same event is often astonishing!

Every stimulus, whether it originates from outside ourselves or from our own internal cogitations, seems to trigger a change in our body state. Apparently, we are biologically programmed to evaluate each change in our body state, to check if it has moved away from equilibrium (homoeostasis) and act accordingly. So if we sense either a threat or a reward to the system, we respond accordingly. Our brains map the change in the body state, and we become conscious of the mapping through thoughts and feelings. We describe this stimulus as having happened to 'me'. The minute the sense of 'me' arises, there is the potential to access the many layers of stored data about the 'me' that one has accumulated over time. Each response in turn conditions us and contributes to the content of the autobiographical self. So we are constantly responding to life from our conditioning.

One of our basic assumptions is that this complex mechanism has given human beings an edge in meeting life. But has it? It definitely has helped us to come up with complex models of the universe, to control and manipulate our

environment to an extent that no other species has done, and to produce all of art and culture. Yet, humans also create immense conflict and suffer enormously, both individually and globally. We have also, through our activities, brought life on the planet to the brink of extinction. What has gone wrong, and has it any connection with the autobiographical self?

It is not hard to see that the root cause of human conflict and our impact on society and the environment is a deep sense of alienation and separation. Perhaps this sense of separation arises because of our inability to recognize that events are only happening to a biological self and not to an autobiographical self. The biological self is, as we said, created from moment to moment, and its purpose is simply to become aware of what is happening to the organism at that moment. It is the autobiographical self that perpetuates the moment and creates a sense of continuity over space and time. We can think about and evaluate ourselves and our lives, or remember what someone has said or done to us in the past, or start worrying about the future. The visceral impact of the emotions generated by such thinking makes it appear that the autobiographical self is real and actual. In turn, this sense of things really happening to us makes us spend our lives trying to nurture and protect a ghost that does not exist.

Freedom from the self?

Is it possible to be free of the autobiographical self? The German philosopher Thomas Metzinger's description of the problem in the introduction to his book *Being No One* is fascinating:

> *[N]o such things as selves exist in the world: Nobody ever was or had a self. All that ever existed were conscious self-models that could not be recognized as models. . .You are such a system right now, as you read these sentences. Because you cannot recognize your self-model as a model, it is transparent: you look right through it. You don't see it. But you see with it…This is not your fault. Evolution has made you this way.*

Are we biologically doomed to have an autobiographical self, as the above passage seems to suggest? According to teachers like Krishnamurti, it is possible through an act of insight to see the self for what it is and be free of it and still live a highly functional and intelligent life. What about ordinary folks like us for whom insight does not seem to lurk around the corner?

It seems to me that we can come to the following understanding. If the biological self is being created from moment to moment and is necessary for our survival, it does not make sense for us to end it. What about the process of creating the autobiographical self? The paradox is that any attempt and the very desire to end it seems to add to its narrative and perpetuates it. What then are we left with? Plenty it seems! There is great scope to understand aspects of self-inquiry such as self-knowledge, 'emptying the content of our consciousness', living in the present and mindfulness. We can realize that events in the present are happening to a biological self and not to an autobiographical self, however real they appear. We can appreciate that learning about ourselves is not an additive process and, in fact, is about learning about our conditioning and how we respond from it. We can pay attention to how our narratives are being created, influencing our perceptions and relationships. Furthermore, we can become aware of the *maya* that the autobiographical self creates and not be caught in its web.

The Mind of the Middle-Schooler

N Vaishnavi

'Akka, what are you scared of?'

'Why is it important to keep one's promise, Akka?'

'I don't get bored, Akka, I just get tired of doing the same thing!'

'Why can't we have a day when we play games all day long?'

I am often struck by the openness and earnestness with which these questions are raised by middle-school children, all of 10-12 years, in a class. It is not always easy to come up with answers, but I have found that these statements and questions have, more often than not, led to meaningful conversations with them. These are children whose minds are curious, observant, imaginative, buzzing with ideas and thoughts, eager to explore, and willing to push boundaries with oneself as well as the others. This is also the time when they are growing up physically as well as emotionally, and that throws up the question of one's self-worth and perhaps responses to 'growing up'. There is also the need to belong in a group, of forming identities and making choices. There is so much that is going on in their minds, and as a teacher I find myself watching them fascinated, trying to understand their questions, thoughts and observations through my own.

The different ways of learning and working together, inside and outside of school, and the conversations the middle-school children share with their peers as well as with their teachers, seem to provide a fertile ground for expanding and nurturing their minds. Over the years, as a middle-school teacher, I have found immense value in watching children learn from one another and accept different points of view.

Learning together in the middle-school classroom is built into its structure, and there is the opportunity to understand an idea by oneself, share it with others in a small group, and widen one's understanding in the large group. I am often asked, 'Can I teach this to A?' or told, 'I think B gets it when I tell her a certain way.' These are the moments I cherish in the classroom where I can sit in one corner and watch them as they work: teaching each other, admonishing gently when someone

does not try, all the while nudging each other to work along. There are also moments of 'He is not getting it, Akka, can you please help?' or 'I don't want to be in her group.' At such times, not telling them what to do helps them figure out where their difficulty or dislike is stemming from and allows them to work with it. What creates the situation for such learning to take place? It is perhaps the processes of the middle-school classroom, random seating, working in different groups, working on different ideas around a theme or topic that take away any semblance of comparison between individuals. It assures each child of care and respect, which is at the core of all learning. Where there is freedom and no fear, each person learns differently—learning happens along the way as long as one is truly interested in learning. In this context, the shift to one subject a day in middle school offers an opportunity to look at different ways and styles of learning, creates an occasion for slowing down, and brings in a sense of leisure in learning and deepening of one's understanding.

Conversations in class, as part of circle time, at the end of the day during the class teacher's period or the innumerable interactions on the games field and on overnight trips, create a rich context for articulating one's thoughts, ideas and questions. All that we talk about in school with children, of being responsible, caring for each other and listening to each other come alive in all these situations. Over the years, I have found that much of my understanding of a child comes from these conversations—conversations that are an open sharing of what one thinks or feels. As a teacher, I realize the value of creating a relationship with each child, of just allowing the child to be. This is a great responsibility for me, for such a relationship requires that I closely observe the child in order to understand where he or she is located and to also understand my response to the relationship. It is for me to meet the child where he or she is, with affection and with the intent of understanding and not analysing them. This is also the age when many of their insecurities surface, and I have seen how conversations help them understand and respond to their feelings.

When the school term began this year, I had a ten-year-old who was looking worried and, on many occasions, feeling 'unwell' in class. Gentle probing and a conversation about why this was happening brought out her fear that she would have to stay away from her parents on the overnight trip that was coming up at the end of the school year. It did not matter to her that it was just the beginning of the term and that the trip was too far off for her to even think about it. I knew that reasoning would be of no consequence, and so we sat, the two of us, on the stairs, and she talked while I listened. Since that conversation, she has been 'well', and I have often wondered how a child sometimes just needs that time and how

important it is to listen without being quick to respond to their queries or worries. By merely talking to students, just engaging with the genuine intent of understanding what they are thinking about, or listening to the question they are holding without always giving them answers, it is possible to gain an insight into the growing mind of the middle-school child. When children share their anxieties, their fears or even an account of their day-to-day lives, it helps to forge a relationship based on mutual trust and confidence.

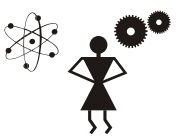
Experiences form an integral part of learning in middle school, and this is reflected in the way children attempt to play around with ideas as they relate to experiences inside and outside the classroom. One can see this while they work on projects, go on field trips, and enjoy campus walks as also overnight trips. I find that these are wonderful opportunities to push them to struggle with something new, to get them outside their comfort zone and see how they work with it, to help them discover facets of themselves they were unaware of, and to look beyond the obvious and relate to it. It is not an easy task, for I find that I have to set aside my own ideas and preconceptions and approach the situation afresh, along with the child. What can be more fulfilling and challenging than struggling with something that extends our horizons?

I have seen different aspects of their personalities emerge on such occasions as they help and support one another even without being asked to by anyone. On one such overnight trip, when a Class 5 child refused to rappel out of fear, the others in the group gave her the freedom to stay with it, and before I could talk to her, another child from Class 7 went and sat next to her and, after a while, started talking to her. I watched them from a distance as they talked to each other. I do not know what transpired between them, but after the others finished their turn, she got up and said that she too would like to give it a try. Somewhere during that time between fear and uncertainty had emerged this moment of clarity. I am not quite sure about how it happened, but later when I asked the boy about what he had said to her to make her change her mind, he said, 'I just told her that I too had been scared the first time and that it is no big deal.' As simple as that. An honest acknowledgement and acceptance of his fear had made her examine hers. I am always amazed at this sudden 'growing up' that happens at such times when it is just a matter of being together and experiencing something.

I see middle-school years as the 'magical' years in school because somewhere there is still the occasion to wonder about things, the leisure to stay with a question, and figure out all the answers, right or wrong, to allow every imaginative thought to take flight, chase dragonflies as one wonders about why some insects have wings and others do not, and not be afraid to ask questions, speak one's mind, try out new things and learn from them.

Celebrating Science

KAVITA KRISHNA AND DEEPAK RAMACHANDRAN



Every week, science teachers at Rishi Valley School get together for a faculty meeting. We are a diverse group. Some have taught for over thirty years, and for others this is the first year of teaching. Some teach exuberant eleven-year-olds while others work with anxious eighteen-year-olds preparing for their board exams. Our discussions usually focus on streamlining the science curriculum, the difficulties we face in teaching a certain class, or ways in which we can reach a particular student. Underlying all the discussions is a common desire—to make science more meaningful and exciting for our students.

Caught up in the daily timetable, we often felt unable to fully explore in an open-ended way ideas that students were excited about. We felt the need to do something with students that would evoke and celebrate the excitement of science. Thus the seeds of a 'Science Mela' (science carnival) were sown, almost a year before its fruition. This article describes how the idea grew, took shape, and what we learnt in the process.

Objective of the Mela

The aim of the Science Mela was to create greater awareness, interest and appreciation of the different facets of science. We hoped to convey how accessible underlying scientific principles are, how dramatic and exciting science can be, how the ways of doing science are fascinating and stimulating. We wanted our students to understand the role of observation in science and to look afresh at the world around them.

Planning

The discussions on how to conduct the Mela began in earnest several months ahead. For most faculty members, this was the first attempt at organizing such

an event. There were many discussions about which classes should participate, how long the event should be, and what kinds of activities we could include. We took the pragmatic decision to keep it relatively small and manageable by working with middle-school students (about a hundred of them!) on a variety of projects. The whole school was to be included in other events such as assemblies, films, talks and the final exposition.

Scheduling the event, given the teachers' packed schedules and the busy school calendar, was another issue. We finally chose to work with students over four afternoons on different projects, and include hands-on activities, lectures by well-known scientists, video sessions and assemblies during other times during the Mela week. An exhibition of students' work on the fifth and last day was also included.

The process of planning for the event was in itself a great learning experience. At the outset we listed the various tasks needed to be done. These included identifying the locations, organizing the infrastructure, inviting guest speakers, selecting films, sourcing material and liaising with the school administration. Each of us volunteered to take on some of these responsibilities.

We also decided to work in small groups to generate ideas for projects in different areas. For convenience, each group focussed on a subject it was most familiar with (physics, chemistry, biology, environmental science), although there was much overlap between these areas in the ideas that emerged.

Weekly meetings to review how things were moving along were an opportunity to share ideas and offer suggestions. Differences of opinion were discussed and disagreements resolved in an atmosphere of openness and camaraderie. It soon became evident that each of us had vastly different styles when it came to planning, especially an event that was months away. Some of us were laid back and needed reminders and encouragement from the group, while others were constantly making lists and firing off e-mails! The differences in style and temperament coupled with the ability to work together proved to be one of our strengths as a group.

Sourcing material was a challenge, given the remote location of the school. Checklists were maintained to ensure that adequate supplies were on hand before students started work. In open-ended projects, one could not always predict what ideas students would come up with. So teachers had to be

specially resourceful in anticipating and being ready with additional materials and alternative plans.

Gathering materials was in itself an experience: visiting the alleys of Madanapalle town looking for just the right plastic pipe, understanding the local areas and culture, struggling with the language when buying materials from small vendors.

People spontaneously offered help in different ways. A teacher visiting Bangalore (150 km away) offered to shop for materials, a houseparent helped to make science posters with her students, a laboratory assistant volunteered to make models for display. The enthusiasm seemed infectious.

We also alerted other departments in school that we would need their help. The woodcraft section, the arts and crafts department, the estate, the health centre and the building maintenance department all chipped in. Their unstinted assistance in several tasks (often at short notice) was invaluable and energizing.

As the week of the Mela approached, the anticipation and enthusiasm among students was palpable. Students constantly came up with new ideas and questions about projects. Our own preparations became more frenetic as we ticked items off our lists and kept our fingers crossed.

Projects and activities

Choosing and collating projects for students to do was fun. It gave us a chance to include all those exciting projects that a fixed, time-bound curriculum excluded. A project could call for doing experiments, designing and making a model, investigating an idea, or a field-based exploration. Projects needed to be feasible, given the available time and resources and the age of the students.

When we got together to compile the final list of projects, even we were amazed. We had more than fifty diverse and exciting projects for students to choose from! As a colleague remarked, 'I wish I were a child again doing some of these projects.' The projects covered a range of ideas and concepts. Students were allowed to choose the projects they would do. On the basis of their choices, we divided students into small groups. Each student worked on a minimum of two projects: a long one over three afternoons and a short one over one afternoon. They prepared write-ups, posters, charts and models to present their work.

Sample list of projects:

- *Why does fungus grow on some surfaces and not on others?*
- *Grow a bacteria garden.*
- *Can we light a fire without a match?*
- *Study the patterns of tree bark.*
- *Explore where weaver ants prefer to make nests.*
- *Bake yummy bread using the power of the sun. Understand the chemistry of kneading and why bread has holes in it.*
- *Grow different kinds of crystals.*
- *Make your own fire extinguisher.*
- *Solar distiller: purify water using sunlight.*
- *Design and build your own electric board game.*
- *Genes and variation: record variation in classes 7 and 8.*
- *Explore why we need animals to grow good food by getting elbow-deep into cow dung.*
- *Investigate the mechanics of marbles.*
- *Mechanically propelled car: How far can you make a car go without fuel?*

Execution

Things started out smoothly. Our extensive planning pre-empted various issues: maintaining order with more than a hundred students working in different locations and the sharing of resources were reasonably trouble free. Students needed reminders about maintaining equipment and cleaning up, but were generally responsible and helpful.

There were several surprises along the way. Projects which were expected to take three afternoons were completed in half a day. Batteries ran out and bulbs fused as students designed and tested unexpected circuits. Open-ended projects demanded discussions with the harried teacher. Field work and observation required patience. Recording data was painstaking. Failed experiments led to dejected youngsters.

Teachers would gather at the end of every day for a much-needed cup of coffee and sharing of experiences. The debriefing helped us gear up for the next day with new ideas, strategies and a renewed sense of purpose.

In addition to the work the students were doing, there were several other science-related events. Assemblies on topics as varied as 'Mirror Neurons' and

'Camera traps in RV', interactions with visiting scientists from the Tata Institute of Fundamental Research and the Raman Research Institute, film screenings on life in a space station, and the work of an Indian science educator added to the 'science buzz' on campus. The walls of the middle school were decked with science-related posters, charts and puzzles.

After four days of hectic and purposeful activity it was the day of the exhibition. Students displayed and explained their work to more than 300 visitors (other Rishi Valley students, parents, teachers and students from the rural school). As students explained what they had discovered, their excitement was obvious. The exhibition literally ended with a bang as students set off the fireworks that some of them had made.

Lessons learnt

While the Mela was intended to be an interesting exposure to science for the students, it was an enriching and educative experience for teachers as well. Here are some of the things we learnt:

- Planning and delegation helped us work collaboratively as a team. It helped us take individual ownership for tasks and yet take collective responsibility for the success of the event. The larger vision of making science exciting and meaningful underpinned our work. This helped us receive suggestions and resolve disagreements in an atmosphere of mutual understanding and cooperation.
- Open-ended projects were a challenge for students and teachers. Students often had high expectations of what they would make or do. Things did not always work as expected as in these examples:

  A group of students decided to make a 'Hovercraft car working with an air-powered propeller'. When it did not work after several hours of serious effort, there were many dejected twelve-year-olds. As one student said, 'Our car was supposed to be powered by a balloon, rubber band and a flywheel… It was too heavy and would not move. We noticed that it was a total failure. That made our group members split up.'

  Two days and several heartbreaks later, there were several proud inventors racing their 'cars'.

  Another group chose to study the mechanics of marbles by building a roller coaster which was two storeys high. Failing to get the marbles to move

through complicated loops, they finally scaled down their project and wrote: 'Conclusion: Big projects can be depressing flops. Small is beautiful.'

In the interim, teachers had to maintain the fine balance between offering assistance and yet not 'taking over' the students' work. Allowing students to make mistakes and yet encouraging them through the tough patches was an essential part of learning.

- We learnt many things working alongside our students and colleagues: toilet seats in school had fewer microbes than computer keyboards (from 'Grow a bacteria garden'); crystals come in fascinating colours and shapes; fruits have cells and DNA; the bread you have baked yourself is yummy even if it is hard!

  Now we look forward to our next celebration of science.

A Living Foundation: Being Educated With Krishnamurti

Geetha Waters

Self-inquiry is a process that delves into all areas of concern and conflict in life. Yet its relevance to the psychological well-being of children is largely overlooked because it is commonly regarded as an adult preoccupation. Its importance in the education of children was consistently explored by Krishnamurti while I was at his schools from the 1960s to the 1980s.

As we are aware, children are naturally inquisitive and genuinely interested in life. If we encourage them to address the nature of thought and to explore the impact of labelling upon their minds, they will readily do so with curiosity. Back in school, even at an early age, we began to take an interest in ourselves which naturally correlated with a growing concern for the world we found ourselves in. With great ingenuity, Krishnamurti used this relationship to create a mind open to life-long learning. He succeeded in this by challenging the forces of conditioning throughout our education.

We learnt not to expect ready-made answers to the questions we asked. Instead, we were thrown back questions to consider and answer for ourselves. Krishnamurti taught the art of putting the right questions so that our minds could get to work on them. This trained the mind to be vigilant to the perils of interpretation and prevented it from accepting second-hand information. This art added a different dimension to learning where the onus was upon individuals to keep track of the movement of thought, so that we could review and reflect upon received information and gradually wrestle with the serious issue of the nature of knowledge itself.

This process nurtures greater deliberation from the start. Instead of being conditioned to rely upon hearsay, the learner assumes the responsibility for exploring and challenging knowledge, as a natural given right. This is important because it does not allow the mind to go to sleep, basking in the content of received knowledge. Instead, with such an education, the mind is grounded in vigilance. It remains watchful, learning about the vagaries of thoughts, assumptions, images and myths throughout our lives.

The fact that the word is an approximation of the actual is tangible to a child. Therefore, realizing 'the word is not the thing' provides room for a depth of inquiry which continues to inspire one's curiosity right through life. Initially, insights help children to account for the differences between the 'word' and the 'thing'. Making do with half truths comes at a cost, generating a great deal of anxiety and anguish during childhood and later. For instance, we hardly realize the tendencies in our thought process by which we form and hold on to 'images' of others and ourselves, leading to disparities and conflicts with lived reality. Insights into the fabric of thought help to ameliorate the huge stresses involved in bluffing our way through life in the domain of human relationship.

Following this, other insights address the distinctive nature of thought, for instance the appreciation of how thoughts fragment reality. Awareness expands as intelligence awakens to the danger of complacency, as one sees that relying on a fundamentally fragmentary process to interpret truth or reality is bound to be riddled with difficulty. Krishnamurti was constantly addressing the problem of accumulated knowledge. 'Knowledge is the past!' he would exclaim, implying that awareness is in the present, is comprehensive, and is therefore directly in touch with reality.

Watching thought soon reveals the mechanics of thinking. Our childhood assertions and deliberations came under scrutiny constantly. We had the opportunity to delve into the nature of self, gender, character and identity, which are all important areas of adolescent inquiry. By proposing 'self' as an important subject of study, Krishnamurti engaged us in a discursive inquiry into learning. He was able to ensure that we would not succumb readily to a complacent, conditioned mindset as he worked to create a healthy disregard for the 'known'.

I often wondered why he used the words 'awakening intelligence'. Years later, as my interest in education blossomed after the birth of my own children, I understood what he meant by that phrase. He was challenging the notion that thought (and, therefore, language) is the sole arbiter of understanding. Without understanding the nature of thought, how can we address the content of our own consciousness and our mounting discontent with reality?

I feel that it is never too early at school to engage children in this inquiry. Even as one learns a language, the process of self-inquiry can be nurtured through interaction and skilful guidance. This requires affection and respect for the challenges faced by the child who is engaged in the process of converting a seamless world into a network of thought in order to facilitate communication. We marvel at the skill required by humans to do this conversion, but paradoxically we take it as a God-given right, taking refuge in the fact

that it is a mark of distinction which sets us apart from the rest of creation.

Distinction, however, comes with greater responsibility. It is important for us to realize that our attachment to a fragmented reality also leads to a life-time of frustration and failure. It inhibits our full potential as humane beings. The use of language inadvertently conditions us to accept fragmented world views. This, as we have seen through the ages, certainly sets us up for inhabiting a world of competing and clashing perspectives, along with violence and a collective sense of failure which results from not being integrated with the whole of life.

Children take time to process the meanings of messages they receive and rely on a whole battery of contradictory information to come to terms with what is required of them. While such complex skills already in place, children are also given the opportunity by such an education to begin watching the bubble of illusion created in order to sustain a discourse with people.

Krishnamurti had the sensitivity to address this challenge and to understand the demands placed on children. With affection and great determination he awakened our interest early, to undermine the authority of the 'word' in the hope of freeing us from our initial conditioning in order to savour truth. During our childhood, he was able to hold the door open long enough for us to keep in sight the immanence of life. He was trying to ensure that we did not inadvertently fall into the habit of simply accepting the assumptions implicit in the narratives of those seeking to educate us. Through deliberate, serious inquiry, our curiosity was aroused to look at the way the mind is divided by, and dependent on, language.

I never lost sight of the wholeness of life and the benefit of observation in the nurturing of intelligence. It was this hope that we would one day understand the background from which we operate, and the consequences of responding from a fragmented reality. Having had this insight, educating my own children became of enormous interest in my life. I am convinced that in order to liberate ourselves from a blanket dependence on abstractions, we have to foster an environment where children are allowed to challenge all assumptions in order to address the vulnerable networks of their own emerging and fallible assumptions.

By addressing the forces of conditioning present in education, Krishnamurti held open the door for a complete revolution in education. This revolution is grounded in sensitivity, inquiry and mutual regard for those engaged in the learning process. This will not happen unless each mind explores intimately the mechanisms set in place to define all that can be divined.

Becoming sensitive to the problem of definitions even as we cultivate them has a

clear advantage. By sowing the seed of doubt in my mind, Krishnamurti made sure that I would not while away my entire life giving words the benefit of the doubt. I was not fully conditioned to do that. Instead, my education undermined the forces of conditioning laid down during the early years of my life when I learnt to use language to communicate with those who nurtured and cared for me in the nursery. Undermining the authority of the known reinforced my own trust in intelligence as I went through the travails of making sense of a fragmented world.

At his school, we got to live, love and learn, in that order, in a climate free from the pressures of conformity required by traditional and conventional content-based approaches to education. So we had the opportunity to realize the significance of context to content, and we learnt in the long term to place our knowledge in perspective. I was inspired by a sense of wonder at the immensity evident in the greater phenomena of life forever unfolding around me. Understanding the self was just a part of my education, but life remains my true learning ground. In that I can rest assured. I need nothing else.

Stepping Out: Issues and Challenges of Leaving School

Kartik Kalyanram

Transitions are a way of life: some expected, some planned, some unplanned and some forced by circumstances. Examples of these transitions include changing jobs, getting married, moving to a new town, changing schools. In any event, these transitions take us out of our comfort zones. They cause a certain amount of stress and readjustment, and call for relooking at the way one has lived life, and giving up what one has taken for granted. Psychologists popularly call these transitions *life stress events*.

A very significant transition occurs when young adults, already coping with the issues of late adolescence, step out of school and into college. Heralding the abrupt onset of adulthood, this significant transition takes them by the scruff of the neck and hurls them into a world they are quite unprepared for. There are several factors that make this a challenging and significant transition for students who leave our schools.

How do adults perceive the eighteen-year-old?

Age can be both chronological as well as a matter of perception. When I ask a young adult—say, an eighteen-year-old—what she is doing, and she replies 'I am in college', almost immediately my entire way of looking at and interacting with her changes. Somehow this person is more like me—an 'adult'. If this same young person tells me that she is in class 12, my interactions with her change. Our conditioning makes us believe that somebody in college is on the way to being an adult, while three months earlier, in school, she was a kid. These perceptions or stereotypes are probably reinforced at every step of the young adult's journey. Oft-repeated innocent statements such as, 'Soon you will be in college and that means responsibility' or 'You have to look after yourself in this big bad world' add to the burden of transition.

How does the young adult respond?

Wow, I am free. No parent, teacher, house-parent looking over my shoulder, nagging me—It's PT time, have you had breakfast, what about homework, stop playing, start studying! Classes are there, but I have the choice to attend or not. Okay, attendance is compulsory...but let me see how I can wriggle my way out of this.

Such choices abound in the young adult's life. They have to learn the fine art of balancing their new-found freedom and the need for rigour with the understanding that they are now totally and wholly responsible for the way they live. This has to be achieved without the benefit of having an adult looking over your shoulder. Suddenly, the security provided by the parent or teacher is no longer immediately available.

Let us look at some of the issues these young adults face when they step out of the protective confines of a school system. These become more pronounced if they live away from home.

It is an entirely new world out there: new town, new buildings, new teachers and new friends. By this time the young adult's head is filled with stories of college from well-meaning (!) seniors. Nothing of the familiar remains. Struggling with a maelstrom of emotions, this young person has to find ways of not only coping with, but also making the best of, what this new world has to offer.

New paradigms and the need to fit in

In many ways, the young adults leaving the secure confines of the KFI schools—with backgrounds somewhat different from the homogenizing urban middle-class culture—find it necessary, at least in the initial few months, to 'fit in'. There seems to be a world of difference in attitudes, ideas, language (the jargon or slang in colleges), street-smartness, dress-sense and ways of 'hanging out'. Most important for any new college student is the need to establish new friendships and form new relationships with groups and individuals who may be vastly different from what one has grown up with.

Physical environment

Whether one is from a residential school or from a day school, one has to get used to staying in hostels (some of which are poorly kept) or paying guest accommodations. Room-mates are new and all sorts of adjustments are needed in the room to make one's accommodation liveable. Food is different,

toilets are not as clean or tiled, rooms are small and so on. Adjustments to these physical changes typically take about six months to a year.

Financial concerns

For many a young adult, this would probably be the first time that they would be handling cash, living on a budget and buying things for themselves. With a minimal idea of the costs and how much a rupee is worth, they find themselves at sea. There is a tendency either to splurge—a manifestation of a new-found freedom—or to become miserly or insecure about money.

Competitiveness and aggression

There is no denying that competitiveness is more pronounced in colleges than in our schools. More so in professional colleges, where every fraction of a mark makes a difference, particularly in GPA-based assessments. Suddenly the openness with which these young adults would share notes or help out a fellow student is no longer there. They find that some students take advantage of such open attitudes in order for them to make it to the top. Trust, a concept taken so much for granted in school, flies out of the window. Suddenly, one may grow suspicious of fellow students. One tends to read between the lines. Questions such as 'Why is so-and-so friendly with me?' assume importance.

Issues arising out of this transition

Loneliness is the single most important issue that the young adults have to deal with. This is, in a sense, something that would stay with them even as they begin to find their way in the world. One can be in the midst of many and yet feel lonely. Even a simple sharing of happiness is, many a time, not possible. Many factors account for this: questions of identity, differences with peers and friends (some reconcilable, some irreconcilable), relationships with even near ones, and so on.

Identity

In many colleges, you would be hard pressed to find a lecturer who knows your name. Imagine the young adult fostered in an atmosphere of care —where not only the teacher(s) but also the parents form a part of the whole—to be thrust into an atmosphere where you are suddenly reduced to an impersonal roll number?

For many of us, our identity is defined by the institutions we are associated with: where you have studied, where you work/live/shop. For the young adult entering college, the question of identity becomes paramount. College is the time when one's adult identity takes shape. While in school, a composite sense of identity forms over a longer period of time; even the occasional 'oddball' is accepted as belonging to a larger whole. But in college, groups quickly form around region, language, social status, religion and caste. From this flows an expectation of behaviour. If you are from Andhra Pradesh, you must be seen to speak Telugu, eat spicy food, be rustic in behaviour—in short, fit a preconceived image. So where do students stepping out of cosmopolitan residential schools fit in?

Relationships and communication

While this is a complex issue at any time of one's life, it takes on a whole new dimension in college. Let us look at three axes of relationships.

With peers: In college, a group of young adults who are mostly strangers to each other are thrown together. A few may be from the same school, or there may be some seniors to guide them. They are in the process of getting used to a new institutional ethos, understanding shifting paradigms of behaviour, of what is accepted and what is not. Here again, students from different backgrounds may find themselves alienated from one another. Young adults during their college years also come to terms with their own sexuality and orientation. Acceptance that there could be both homosexual as well heterosexual relationships amongst adults is something new. Casual sexual relationships tend to happen more frequently. This brings with it the usual problems of emotional upheaval, heartbreak, parental non-acceptance, unwanted pregnancies and sexually transmitted infections.

With adults: Students from our schools tend to be casual, at times seemingly disrespectful. Standing up when the teacher walks in, raising your hand before asking a question, or using 'Sir' or 'Madam' are all unfamiliar to students brought up in a more informal environment. The dress code too in some colleges is stricter than what they have experienced. The process of learning about this happens rather quickly. What most students, however, miss most is a teacher with whom they can talk freely and discuss whatever strikes

their fancy. A patient hearing, helping the young adults along, seems to be lacking in many colleges. To be fair to the lecturers, they themselves are probably overwhelmed by the numbers they have to teach and perhaps labour under the same misapprehension that anyway their students are adults and so can take care of themselves.

With parents: There is a sea change in this relationship as well. The so-called generational divide becomes starker. Parents now seem over-protective and old-fashioned. This situation becomes more difficult if the young adult continues to stay at home. Parents find it difficult to deal with and accept late nights, parties, dating and all the 'freedom' that goes with college life. This gap becomes more pronounced for students in courses such as film making or design, as opposed to the standard degree courses.

Engaging with academics

The purpose of going to college is to acquire a higher education and from then on to find a suitable career. However, there are so many other interesting activities in college (dramatics, debates, quizzes and generally 'hanging out') which might draw students away from their classes. Students need to be helped to focus on this important aspect so that they can get the most out of their education. And yet who is there to help them find the balance? Young adults need to realize, often on their own, that if they take the initiative there are actually opportunities galore to explore and excel in their chosen subject areas, apart from in extra-curricular activities. College experiences come at a time when the students are more capable of thinking for themselves, of discerning differing value systems and making crucial life choices, and therefore they do ultimately shape the students.

What are the support systems available to young adults in college?

The support systems available are mainly informal. The peer network is very active and functions like a large support group. The availability of instant communication and social networking is a huge help. Seniors within the college system also are sources of help, particularly if they are also alumni of the same school. Some institutions have student as well as campus counsellors. Student counsellors are generally older students, identified by the institution to help freshers settle in. Campus counsellors are psychologists, trained to deal with young adult problems.

What role can adults in schools play in supporting young adults in this transition?

There is a need to build a life skills programme, particularly in class 12, when thoughts of leaving school come to the fore. These could be a series of sessions covering various aspects: from making choices, to setting limits, to saying no. Briefly set out below is an outline of such a programme conducted by the author.

SAFETY

The programme delves into various practical aspects of life after school. While we would like our students to set an example, be the ideal student in college, not get lost in indulgences or stray off the straight and narrow path, the reality of temptation is powerful. It is to be expected that students will experiment and explore. The idea is that students are able to follow some safety norms in the process of growing up into adulthood.

Sex: Students need to be educated on safe sexual practices.

- Students should recognize that many relationships are sexually driven.
- There will be explorations of sexuality with all its consequences.
- There are rules of safe sex.
- Say NO to intercourse (whether homosexual or heterosexual) before one is ready for a long- term commitment.
- Students should learn how to prevent unwanted pregnancies, and how to avoid sexually transmitted infections.
- Stay safe in parties to avoid date rape.
- Know what to do in case there is a campus rape, or if there is an unplanned or forced sexual encounter.

Substance use and abuse

- Say NO to drugs.
- Know how to say NO, how to be careful; e.g. not accepting a cigarette which is either crumpled or hand-made, as it could be laced with marijuana popularly called a joint or a reefer.
- Discuss various types of narcotic as well as non-narcotic drugs.
- Discuss recent laws that legalize the use of marijuana in some countries.

- Explain the neurological effects of substance use/abuse.
- Use real-life examples to emphasize the deleterious effects of substances.
- Discuss the effects of addiction on the individual as well as on the family.
- Recognize potential addiction or dependence either in oneself or amongst friends.

Alcohol: As with sex, many, if not all, will indulge in it at some stage and it is important to help students understand that while it is best not to have a drink, they need to know what safe drinking is.

- Know what alcohol is and understand how it works.
- Know the stages of intoxication and recognize these symptoms.
- Know about the delayed effects of alcohol.
- Understand aspects of safe drinking: setting limits, never drinking alone, having a designated driver, and ensuring that at least a few people in a group remain sober.
- Be aware of surroundings especially when there is a mixed group (women are particularly vulnerable in a pub).
- Recognize dependency, habituation and addiction.

The other important message given is that when they suspect that a friend is depressed and is getting dependent on alcohol or drugs, the matter needs to be reported to a responsible adult, so that appropriate and timely help is given. This is not sneaking or letting a friend down; rather it is a way of saving a life and a family.

Firewall (online security): There have been reams written about it, from ensuring the safety of debit/credit cards to online financial transactions, to recognizing and dealing with cyber-bullying or cyber-stalking. Students are advised not to accede immediately to online friend requests and not to click on a link however official or inviting it may appear. These are all dealt with briefly as students tend to be broadly aware of these issues, albeit theoretically.

Explorations: This is in the form of a general discussion, broadly exploring one's physical neighbourhood/city, one's own individuality, figuring out what makes one tick and what does not. We also look at the influence of media, the culture of 'hanging out' and what produces group dynamics. An important

message to all students is that they need to be aware of themselves and their environment at all times.

Tobacco: Tobacco use has decreased over the last couple of decades. What is worrying is that this dreaded substance is making a reappearance in colleges. The long-term effects of tobacco use are discussed. The bottom line is to say NO and never start using tobacco products.

You: Last but not the least, it is how you as an individual respond to changing situations in life. We talk about communication with peers, parents, trusted adults and what comes in the way of communication. Here again the emphasis is on ensuring that channels of communication with parents, responsible adults and peers are always open. A few safety tips generally rounds off the discussion.

A very important message shared at the end of the sessions is that college life is an exciting time of life which shapes one's future and individuality. Such an opportunity to explore and live life to its fullest comes only once in a life-time, so seize it wisely.

The Challenge of School Education in Our Times

G Gautama

Once upon a time, a long time ago, there were teachers who were actively sought out by students and their parents. Students were immersed in a lifestyle dictated by the times and by the teacher's predilections and resources. They were socialized in such settings, and they not only gained knowledge but also cultivated attitudes.

Then came the era of schools. What mattered was no longer the individual teacher, but a structured tradition. Immersion now was in the shared lifestyle of the school or college. There was a common purpose: to learn the subjects. Subjects became important, as did proficiency with pen, argument or hand skills.

Subsequently, with the Industrial Revolution, there was the growth of factories and big business houses. Schools were radically reshaped by the demands of this revolution, which was characterized by the mass production of goods and delivery of services. This revolution in manufacture was followed in the twentieth century by a silent revolution in selling. If, earlier, people purchased things to satisfy their needs, now they did so to satisfy desires. Society was reshaped subtly to allow for this shift by using psychological techniques. Major thinkers and policy makers argued that people would have to be told what is good for them, as they were unlikely to know. As individuals would resist, this shift would have to be done by subtly breaking down their resistance. Marketing and advertising went further:

A struggle different than any before in world history is intensifying between corporations and parents. It is a struggle over the minds, bodies, time and space of millions of children and the kind of world they are growing up in. Year by year, parents are losing control over their own children to the omni-penetrating hucksterism of companies. Driven by tens of billions of dollars in sales, profits, bonuses and stock options, the men-driving giant companies are in a race to the bottom with their competitors —always pushing, pushing the range of violence, sex, addiction, and low-grade sensuality through evermore manipulative delivery systems… They use television, radio, videos, arcades, movies, toys, malls, advertisements, magazines, even schools and cyberspace as well as

stores, physicians, day care centers, fast-food restaurants, clinics, theme parks, maternity wards and the streets themselves. Thousands of employees and consultants analyze, test and interview children, hoping to learn how to stimulate and exploit their anxieties, fears, loneliness and sensual drives in order to sell, sell, sell.

Corporate America's Exploitation of Children, Ralph Nader and Linda Coco, 1997

Through a persistent media barrage, a child experiences hidden and not-so-hidden messages. Brand and purchase influencing is not an accidental happening. Through the use of psychological techniques, corporations tap into hidden desires, urging the individual to buy. Further, they find out the kind of messages that will get to you, in an individualistic age when each wants to be 'himself or herself'. By seeming to offer choice, the marketplace finds a predictable consumer. The forces that operate on the child, in a strong and subliminal way, demand the following: conformity in appearance, tailored lifestyle aspirations, relating through objects and artefacts, fear of not belonging and of making a mistake, all leading to an insensitivity to the world around, to the environment and to people.

Round one has gone to the corporations with people reduced to consumers. This is a matter of concern, and we need to ask if we should rethink our education, our family systems. Is there something we can do, something different from what we have done so far? In other words, is there a round two, or has it been a knock-out?

What is the purpose of school education? Is it to find a college seat, and if possible in a 'reputed' college? And is this merely the first step to a predictable future of earnings, ownership of property, establishing a family and having offspring, all the while being a good consumer?

During interviews of parents wishing to admit their children into school, we often hear a desperate helplessness: 'Anyway the child is going to make his choices and lead a life which we cannot control.' Parents may have doubts whether the values and ideals they hold are really valuable, really worthwhile in the modern world. Will these values help the young survive? When parents are asked what they would like for their child, the answers come across as weak, unclear and helpless. Parents seem to dread saying what they wish for their children, wondering if what they wish sounds old fashioned, impractical and hollow.

Contrast this with the strong voice of the advertisements and the corporations, which set the trends. We must admit that, as parents and concerned citizens, we are unsure about what we really wish for our children; our words and vocabulary are not clear. It is therefore obvious that our voices are not potent enough to challenge the paradigm. Such a voice will grow stronger

only if exercised and used, however thinly to begin with. If we wish to be at the table where the big decisions are being made for us and for our children, we need to have vision and clarity. We need to make a start.

We would like our children to have good lives, happy lives with people they relate to and with livelihoods that provide for them. We would like them to have a 'good work' in the spirit of E. F. Schumacher. Many of us may not have thought about these questions carefully. Possibly the tide of society does not wish us to think about these.

As an exercise, it may be valuable to see what we hold in our minds when we think of our school-going child in ten years. This is not to prejudge or determine where our children will be going, or what they will be doing, but to get a sense of our certainties and our doubts. Let us ask the following questions, which may include our worst fears:

- Where will he/she be living and working?
- What will he/she celebrate and how?
- What values will he/she live by?
- Whom will he/she be influenced by,
- What may not influence him/her?
- To whom will he/she be attached,
- To whom will he/she be strangers?
- What risks will he/she face?
- What external as well as inner resources will he/she have?
- What problems can we say with confidence he/she will not have? (alcoholism, obesity, aggressive driving, dysfunctional relationships with partner, children, or friends, inability to hold a job, overspending and in debt, in bad company?)

Krishnamurti said, 'Children grow up in our schools and then we throw them to the wolves.' The marketplace has the rapaciousness of a wolf. How are we to engage with our children, to educate them so that they are not just consumed? What inner resources would our children need so that they are able to lead a life that is intelligent? To begin with, we could identify a few important relational and existential imperatives that would help them discover inner resources and strengthen our voices. The following appear significant:

- Krishnamurti has spoken at length on the art of listening. How do we enable the young to learn this art? Listening offers a core around which a different relational spirit can be built in schools. This will offer a core strength for one's life-long journey, for listening enables learning and allows the individual to think independently.
- Can each child feel completely safe in school? Teachers and adults may treat children extremely well and with dignity. But do we know how to ensure that children are not bullied or treated in undignified ways in school by other students? Can school build the potential

for deep, respectful collaboration and cooperation through carefully thought-out processes?

- The central message of academics is finding the right answer. This does not encourage the wisdom of multiple right answers, multiple narratives and possibilities. It seems that journeys of discovery, inquiry, in the light of the teachings, can be sustained for the young in our care, if 'multiple right answers' can be consistently used in academic and other transactions.

At a time which is increasingly being recognized as dangerous and difficult, the challenge for us as parents, educators and citizens is to rethink and re-examine our structures, processes, academic priorities and allocation of time so as to give a thrust to these essentials.

Playing with Numbers or Delving into History? Thinking Mathematically in Junior School

MARINA BASU

It was the year of major changes in the academic programme of our junior school's mixed age group classes. The environmental science curriculum took a renewed clarity in its intent, approach and content, which arose from the lush natural surroundings of the school with its incredibly rich biodiversity. The English curriculum shifted its emphasis from completing comprehension passages and filling up grammar worksheets to discerning the nuances of the language from a wide range of children's literature. There was significant rethinking of the mathematics curriculum as well. A word of clarification here: while the curriculum as a sequence of steps including the fundamental mathematical operations necessarily remained the same, the look and feel of the mathematics classroom and the materials changed drastically, reflecting a fresh approach to the subject. Instead of focusing on procedures and algorithms as most of us have been trained to do in our childhood, we wanted children to understand the nuances of mathematics as a language with a historical evolution, with its own vocabulary and syntax that can provide a mathematical framework for comprehending the world. This article focuses on changes in one module of the mathematics curriculum —numbers and place value—to give an idea of how mathematics can be approached very differently from the textbook or conventional mode.

Along with language, in his essay *On Proof and Progress in Mathematics*, Thurston (1998) explains that the various facilities that help us in mathematical comprehension are vision, spatial sense, kinaesthetic sense, logic and deduction, intuition, association, metaphor, stimulus-response, and process and time. However, conventional maths education focuses heavily on stimulus-response, the procedural approach ('if you see 3927 × 253, you

write one number above the other and draw a line underneath'[1]). We thus attempted to shift from this mainstream procedural approach to a more organic approach where the child's lived experiences, real-life problem posing, and sometimes simply playing with numbers could become starting points for 'thinking mathematically'.

Our lessons were so structured that the focus in the class was not on the booklets or written procedural work, but more on games, activities and story sessions, thus involving the verbal, kinaesthetic, visual, spatial, logical modes of being, and sometimes even including leaps of imagination, though in a mathematically guided manner! The vital role of stories in our maths curriculum needs to be highlighted here. Researchers and practitioners have discussed the importance of integrating literature and mathematics in the classroom because 'children's literature provides a context through which mathematical concepts, patterns, problem solving, and real-world contexts may be explored'[2]. That is, a word problem becomes more meaningful if children are introduced to it through some appropriate story that provides a context for the underlying mathematical concept.

We used literature to provide a cultural and historical background to the concepts being learnt. As mathematicians and maths educators have often lamented, the subject of mathematics is usually taught in a dry and somewhat dead manner, where the formulae, definitions and theorems seem to be set in stone and given to us as final products. However, this very mathematics can instead provide a rich soil where the churning of thoughts and ideas of generations and cultures can be explored. As philosopher and educator John Dewey clarifies, 'the various studies… embody the cumulative outcome of the efforts, the strivings, and the successes of the human race generation after generation'[3] and children end up feeling disconnected from the curriculum when these human stories are forgotten in the classroom. Alternatively, if the curriculum can take off from the daily experiences of the child, or if the teacher can show the parallels between the child's attempt to make sense of numbers and the historical development of numbers, an absorbing world of discovery and learning opens up. In Dewey's words, 'To interpret the child's present crude impulses in counting, measuring, and arranging things in

[1] Thurston (1988, p. 343)

[2] Moyer (2000, p. 246)

[3] Dewey (2001, p. 109)

rhythmic series involves mathematical scholarship—a knowledge of the mathematical formulae and relations which have, in the history of the race, grown out of just such crude beginnings.'[4]

Consider, for example, the apparently simple yet profound concept of zero and the related decimal system of counting. To most children, zero is just a number that acts weirdly at times and does not seem to have any value of its own unless it is in some particular position in multiple digit numbers. They also know that if you had four marbles in your hand, and all of them fell down and rolled away, you are left with 'nothing' or 'zero marbles'. Yet, as mathematicians and philosophers know, and as John Barrow encapsulates in *The Book of Nothing*, 'Nothing, in its various guises, has been a subject of enduring fascination for millennia.' Moreover, once the zero or mathematical nothing was invented, there followed 'the development of universal counting systems that could evolve onwards and upwards to the esoteric realms of modern mathematics.'[5]

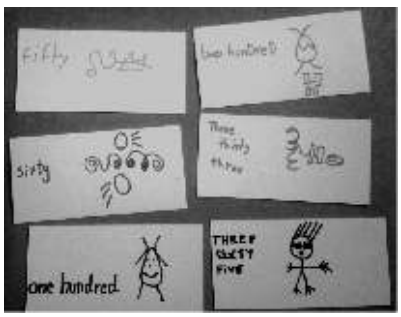
So what happens when this fascinating journey is brought into the classroom and how might one actually go about it? By delving into history, the idea of zero as a number and as a place-holder and the base-ten number system can be introduced to children over a couple of weeks of activities, stories and discussions, but in a way that is far removed from the typical textbook approach. Textbooks deal with numbers in terms of number sequences, what comes before/after/in-between, or with place value in terms of counting beads and bundles. Although such work is necessary, we need not be limited by these parameters. Instead, it is worthwhile to step back in time into a mathematically nascent world through open-ended questions such as 'How would you count in a world where numbers (as we know them now) have not yet been invented?'

This halts even the mathematically proficient students in their tracks as they are encouraged to look deeper into the ideas behind numbers. The very suggestion that there could have been a world without numbers is intriguing. Children might suggest making marks or notches or knots. Once we brainstorm different ways to count objects and keep track of them—that is, record the information from the counting exercise—we need to find a way to communicate that information to someone else. Children can be prompted to

[4] Dewey (2001, p. 113)

[5] Barrow (2001, pp. xi-xii)

come up with their own symbols for different numbers, and the seven-to-nine-year-olds enjoy getting creative with the chalk. At this stage, their numerals are primarily pictorial. Next comes the challenge of remembering which symbol stands for which number and, in a world where the decimal zero has not yet been invented, they soon realize that for the number 15, you would need to invent and remember at least 15 different signs, and to reach any larger number—say 365—astonishingly, you would need those many symbols! Here are some of the numbers the children invented:



There can be a parallel or subsequent discussion that takes up a different strand, starting from tally marks. Kinaesthetically or intuitively, children can deduce that the reason behind counting tally marks in groups of five perhaps has something to do with the fact that we have five fingers in each hand; it is just a short step from there to counting in groups of tens. At this point, the usefulness and the probable origin of the base ten system of counting can be investigated through various hands-on activities, the 'Shepherd and Boy counting activity'[6] being a notable example.

Now the stage is set for the children to explore number systems in the ancient world. The ancient Egyptian base ten number system readily lends itself to the junior school age group. The system had different hieroglyphic numerals for each successive power of ten; the first three of them are shown below:

One	Ten	Hundred
|	∩	𓆼
(Vertical rod)	(Heel bone)	(Coiled rope)

[6] SMP (School Mathematics Project) booklet on numbers.

Different numbers were made by repeatedly using the necessary symbol(s). For example, three is 𓏺𓏺𓏺 while thirteen is 𓎆𓏺𓏺𓏺. And,

Ninety-nine is…	𓏺𓏺𓏺𓏺 𓎆𓎆𓎆𓎆 𓏺𓏺𓏺𓏺𓏺 𓎆𓎆𓎆𓎆

Once the children know that there are different symbols for units, tens, hundreds and so on, they can also see the usefulness and advantage of this system over their invented numbers, since now they need remember only three different symbols to write any number below thousand. In playing with these numbers, the children soon realize that the position of the symbols do not matter in such a number system, since the symbol itself would tell them if it is a ten or a unit or a hundred. In fact, children have great fun coming up with different patterns or ways of writing the same number in the Egyptian system. For example, here is twenty-six written in three different ways :[7]

twenty-six:	𓎆𓏺𓏺𓏺𓏺𓏺𓏺
𓎆𓏺𓏺𓏺 𓎆𓏺𓏺𓏺	𓏺𓏺𓎆𓏺𓏺𓎆𓏺𓏺

Furthermore, they also figure out that while only three symbols (one of each kind) are sufficient to show the number one hundred and eleven, things cease to remain as simple for all numbers. For example, to write the number nine hundred and ninety nine, you would need nine of each of the three kinds of symbols—in other words, the number would have twenty seven digits![8] We stumble upon the limitations of the Egyptian number system, where large numbers become cumbersome to write and work with.

Now what if we could have just a few symbols, but introduce the idea of positional or place value?Though in the Egyptian system, 𓏺𓏺 is two, 11 in our

[7] While position of the symbols did not matter, original hieroglyphs show that similar symbols were usually grouped together over multiple lines to facilitate the quick counting of the total number of symbols and thus enable quick reading of the number itself (as shown with the number ninety-nine above). Our students, however, were free to arrange the symbols in patterns of their own choice.

[8] It is noteworthy that such a system of numbers whose absolute value is independent of position obviates the need for a zero.

system is not two but eleven. This is where we can discuss the significance of columns in our number system. Suddenly, the numbers we had taken so much for granted become so much more—and one begins to fully appreciate the simplicity and brilliance of our ten digit number system. While three ancient civilizations—Mayan, Babylonian and Indian—independently invented the zero, it was only in India that the zero played two significant roles. Firstly, it marked the absence of a number or acted as a place holder; secondly, it was a number by itself and was the answer in sums like $4 - 4 = 0$. And with the zero around, we can write an infinite number of numbers using just ten numerals!

How was the zero invented? Did India just happen to be the place where zero was invented or is there an explanation behind it?[9] Nina Shabnani's animated film *All About Nothing* and the Tulika book of the same name sketch a possible historical origin of zero. This is one resource that I feel is a must-have in the maths class, as the story is not only thoroughly researched and well presented, but also touches upon the underlying philosophical framework in an accessible way. *The Story of 1*, a BBC documentary, is another resource that discusses the history of numbers. And books like *Blockhead* take off from where *All About Nothing* ends. *Blockhead* is about Fibonacci, who recommended the Indo-Arabic number system in the days when Europe was dominated by Roman numerals. Such resources bring alive for students the strivings, tensions, breakthroughs, cultural exchanges—in short, the genealogical development of ideas, and show how humans thought through problems before they could get to answers. The pressure of finding the 'one right answer' loosens its grip on us through such processes.[10]

French mathematician Laplace referred to the 'grandeur of the achievement' when he stated: 'It is India that gave us the ingenious method of expressing all numbers by means of ten symbols', and he considered it among

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[9] The second question can be gone into more appropriately with an older age group. The philosophical connection is elucidated in Barrow.

[10] In addition to the stories and activities discussed here, we also played games on number lines to learn about comparison. Children themselves became numbers and climbed up and down staircases for ascending and descending orders, learnt about uncountable numbers from stories like 'How many stars' (from Mathematwist: Number Tales from Around the World by T. V. Padma, Tulika Publications) or the poem 'The Boy Who Counted Stars' (by David Harrison), among other activities and games.

the 'first rank of useful inventions'.[11] Without being nationalistic or promoting a false sense of pride, I have sometimes found it useful to highlight the 'Indianness' of this invention, since it has the potential to challenge children's unquestioned assumptions or conditioning of the modern world dominated by a Western world view. For instance, a student in my class firmly believed that zero and the decimal system had been invented by the Americans. When asked why he thought so, his answer was that the Americans have invented all the really important things!

When we start looking into the thinking behind mathematical concepts, children make connections, raise questions, come upon an insight. Once when we were discussing the importance of zero in class, a child wondered why we cannot jump from the number 9 straight to 11 and then again from 19 to 21 and so on, and thus make the zero irrelevant. A rich discussion followed as my students and I shared this insight. It is in moments such as these that we find sudden beauty in the subject, a beauty which often moves mathematicians and which eludes the students mired in algorithms. Winston Churchill says in his autobiography that his maths teacher helped him realize that 'Mathematics was not a hopeless bog of nonsense, and that there were meanings and rhythms behind the comical hieroglyphics, and that [he] was not incapable of catching glimpses of some of these.'[12] From the teacher's side, there is immense satisfaction in watching children trying to figure out a mathematical problem and finally getting that beaming smile when they have been able to come up with their own solutions. Bounded by procedures and computations, children soon come to dread the subject, but give them a glimpse into the fascinating world of thoughts and ideas and you will hear refrains of 'I love maths!' from the junior school children.

References:

Barrow, J. (2001). *The Book of Nothing*. London: Vintage Publications.

Churchill, W. (1958). *My Early life: 1874–1904*. New York: Touchstone.

[11] Laplace cited in Shumway, p. 80.

[12] Churchill, p. 25

Dewey, J. (2001). *The School and Society* and *The Child and the Curriculum*. Mineola, NY: Courier Dover Publications. (First published separately in 1899 and 1902 respectively)

Lockhart, P. (2009). A *Mathematician's Lament*. New York: Bellevue Literary Press.

Moyer, P. (2000). 'Communicating Mathematically: Children's Literature as a Natural Connection' in *The Reading Teacher* 54(3), pp. 246-255.

Shumway, J. (2011). *Number Sense Routines: Building Numerical Literacy Every Day in Grades K-3*. Portland: Stenhouse Publishers.

Thurston, W. (1998). 'On Proof and Progress in Mathematics' in Tymozcko ed. *New Directions in the Philosophy of Mathematics.* (Revised and enlarged edition). Princeton: Princeton University Press.

A Vital Role for the Librarian: Assessing Children's Reading

USHA MUKUNDA

As children journey through reading, there are markers along the way which can inform the librarian-educator about their understanding, deepening engagement and discernment of the written and the spoken word. These markers are an approach to a formative assessment in the library that is truly continuous and ongoing. In the environments where I cared for the library and its users, the key factors I looked for were movement and growth in reading complexity along with making meaning, both direct and implicit. Resistance or hesitation to read were some of the main hurdles I faced in my thirty years as a library educator. In this article, I will share how I perceived these aspects and how my own strategies and/or fortuitous circumstances conspired to help overcome these seeming barriers.

A preliminary comment: my experience has been mainly with middle-class children coming from homes with educated parents who are, by and large, comfortable with their reading skills. I also worked primarily with small groups of children. However, for the last five or six years I have been working more closely with larger groups of children from a range of backgrounds, languages and income groups, and prima facie I do not see a problem with the methods I used being acceptable and valid in these situations as well.

My assessment approach has three segments.

1. Preparation for assessment is a process of familiarity with the children's abilities and includes taking pre-emptive action.
2. Continuous assessment consists of regular monitoring and mentoring of children's reading patterns.
3. Assessment leading to the librarian's learning includes methods for tracking 'tortoises' (slow readers), 'bulls' (raging readers) and 'burros'

(resistant or hesitant readers) and devising individualized strategies to spur them on.

Preparation for assessment

The task is to recognize slow and hesitant readers and give them more attention right at the start. If the gap between them and the other more ready readers widens, it gets harder and harder to woo them and win them over. So it is necessary to find time for one-on-one interactions to identify specific difficulties without conveying a sense of judgement or superiority.

Here are some effective strategies:

- Have a word with the class teacher and other teachers, mainly in art and craft and sports, to gain more insights into the child's interests.
- Try to find interest-specific or relevant books to create an interest in reading.
- Talk to parents and give them tips on gentle ways of encouraging reading (if parents are themselves able to help).
- Ask children to predict their rate of reading and the kind of books they will read and let them see for themselves whether these were realistic, optimistic or pessimistic (much can be learnt by the library educator in this exercise).
- Have a friend to read with the child during library time, but make sure the book is chosen by the slow or hesitant reader.
- Take help from children for book repair, book sorting and arranging, selecting for display, creating new book jackets and making book marks. Each of these activities has a possibility for awakening the children's interest, besides making them feel valued members of the group.

Continuous assessment tools

- Story-telling: A good deal can be learnt during this activity about the children's level of comprehension and engagement, especially if the librarian pauses to note the attention level of different children and asks some simple questions.
- Browsing: Watch a child's ability to navigate the collection, select interesting material and settle down with something to read. This is a tremendous way of learning about the child's growth and movement in library awareness.

- Treasure hunt: This activity affords the library educator plenty of scope to observe the child's level of awareness and familiarity with different kinds of books and their locations. A treasure hunt is done by the librarian for the children and, as a return engagement, children ask for their chance to set the hunt for the adults!
- Book auction: This is a fun activity in which children advertise the merits of a book they love and their audience 'bids' tokens to borrow it. Children's comprehension of the game and their familiarity and interest in the kinds of books being auctioned can easily be gauged.
- Book chats: The child talks about a book she has finished reading. The librarian can immediately see what level of understanding and engagement there has been during this chat as well as by the questions that follow from the participants.
- Book selection and purchase: Taking children to book fairs and book stores is an invaluable experience both for the children and for the librarian. This can be done from as young an age as seven years. Their level of comfort among many kinds of books, ability to focus on the task at hand and to demonstrate the beginnings of discernment for quality, value and price are all good pointers for assessment.

The child's borrowed-book history

A quick way to get an overall feel of the child's reading is to go through their borrowed-book history. Too much, too little, not much variety, not adventurous, too simple, too advanced or nothing being read! Generally, intervention can be gentle, with a suggestion here and there or even a reading challenge. This works remarkably well, but the ground for it to happen is a strong relationship between the child and the adult, as well as a complete knowledge of books available in the collection. It also helps to keep in touch with books and authors not in your collection!

At the end of each week, I documented a quick review of each child's reading. Alternatively or additionally, as I awaited the children's boisterous entry into the library for the period, I would take a quick glance through their cards or borrowing records. So I was ready to meet each child with just that awareness for possible action.

At the end of each year or term, library reports were written by me for every child to be read by the teacher, the parent and the child herself, for the understanding of where she is in her journey in reading and making meaning. These reports were written by referring to the notes made about each child. The reports also covered what had been done with each group, thus providing an assessment of the librarian as well!

Assessment leading to learning for the librarian

An inherent aim of assessment is to bring about supportive action in the case of hesitant or resistant readers. Therefore it is essential to hold assessment with a light grip because we have often seen that children take quantum leaps, making the assessment outdated. I would like to share some examples of this.

Manushi was with me in the school library from age six. Her father is an artist and seemed to have unknowingly conveyed a lack of importance to reading. As a result, Manushi struggled with the skills of reading and became more and more resistant and defiant when books were suggested, even for leisure reading. The two of us had a silent struggle for a number of years which soon developed into stances taken by each of us. I was sure she was a lost cause as far as books went, and she was sure I was a hateful librarian. Two more years went by, and I was feeling increasingly uncomfortable at the breakdown in relationship. Then came the breakthrough! In our school we have community work each morning where children are assigned different places for work. I had noticed that she was a meticulous cleaner, and so I secretly asked that she be put into the library cleaning group. Then days followed with the library displaying shining floors. I moved her to dusting shelves, and slowly I saw a change. From just mechanically dusting books, I noticed her opening a book and getting absorbed in it. More and more books were being looked at, and fewer and fewer books dusted. But I could not care less! Until the day when she came up to me to ask, 'This book looks very interesting. Can I borrow it?' We hugged and the book was taken home. She did not become a voracious reader but became a very discerning one. She always knew what she wanted, and her choices were excellent. As a senior student, her choice of place to study was the library!

Pramod always had a ready answer when a book was suggested to him: 'No way. You can't get me to read.' One day he apparently missed the bus home. Next morning when I reached the library, a beaming Pramod greeted

me. 'Aunty, you don't know what fantastic books you have. You must read *White Fang* by Jack London. I discovered this book when I got left behind and spent the whole evening reading it.'

Sanjay was an avid sports player and felt strongly that reading and sports were mutually exclusive. When I went to the table tennis room one evening, he looked askance at me, but was red in the face when I beat him completely! Next day I saw a face peeping into the library. 'Aunty, is there a book in the library that I will be able to read?' That was the beginning of a slow but sustained relationship between Sanjay and the library!

Ayesha was a slow reader and therefore avoided the library. But she had a passion for animals, and my ploy was to reach out by reading out animal stories to her and others until she was ready to try a simple book. I asked her to come in after lunch, and we would read together for a while. Her parents too were roped in to help her get over her inhibitions by reading out a few pages to her, after which she read a few pages. Her page of borrowings slowly began to fill, so much so that in a year or two she was hounding me to get more books by a classic writer of animal stories, which was a challenge for me.

Priya was wonderful with her hands and seemed to feel that the library was an alien place. I invited her to display her craft in the library. Gradually, as teachers and other students recognized her abilities, I could see that she felt welcome to the library. She began by glancing at some craft books. Gradually, as her comfort level in the library grew, she began to try other books. Now she tells me how valuable it was that I did not give up on her.

These examples did not happen according to a set of strategies I had tried, but were more serendipitous. So the point is that in assessment, one has to leave room for such small miracles. As a librarian, these instances taught me never to give up on a child and to try different approaches.

A library educator can create a rubric to reflect this assessment approach. One of the prerequisites for creating such a rubric is that he be in close contact with the child's growth and reading patterns. He must also have a wider picture of the vital role played by reading and reflecting for children from a young age. In the words of educationist Krishna Kumar:

> *Children have a natural drive to explore and understand the world; hence, reading should give them the opportunity to make sense of printed texts from the beginning. 'Making sense' as an experience involves relating to the text, generating a personal*

engagement and interpretation. If children are not encouraged to relate to the text, or if the text they are given has little meaning or relevance, the outcome will be a crude kind of literacy, which will remain isolated from their intellectual and emotional development. If this wider meaning of reading is applied to make an assessment, our system of primary education will arouse far greater concern than children's test scores in achievement surveys do.

From Reading is Basic to Democracy, The Hindu, January 20, 2011.

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Schooling, Exams and Livelihoods: Parents' Perspectives on Education

TANUJ SHAH

Last year on a 'sabbatical' from Rishi Valley School I had the opportunity to work with a variety of educational projects, three of these in association with 'Shishukunj', an organization I have known since my childhood. In Bagasra, Gujarat, Shishukunj has teamed up with another NGO to provide literacy and numeracy skills to a nomadic community. In Bangalore, Shishukunj runs an English-medium school till class 10 on the campus of an NGO providing shelter for children with single or no parents from economically and socially disadvantaged backgrounds. In Bhuj, Kachh, we linked up with a group of people running a nascent alternative school and provided training and inputs based on Krishnamurti's educational philosophy. Apart from these, I also interacted with CN Vidyalaya, an old Gujarati-medium school, based on Gandhian values, inside a 65-acre green campus in the heart of Ahmedabad. This school was keen to adopt the MGML (multi-grade multi-level) methodology developed at the Rishi Valley Rural Centre. Through my work with these initiatives, I become more aware of the perspectives and concerns of parents from different socio-economic strata of our society.

Setting A

Sitting on a hand-woven mat under a canvas canopy, a beautiful tent-like structure, were a group of men and women from the Sawarnya community, animatedly discussing how they could see life around them changing at a very fast pace. They felt the threat to their way of life. The Sawarnyas are nomadic people who serve the farming community in Saurashtra, Gujarat, by sharpening their tools as well as buying and selling bullocks from/to them. Nobody from the community had ever gone to school and therefore no one was literate. They were constantly on the move except for the four months during the monsoons. Recently, we had taken on a trial project to induct their children into formal education. This year some of the family members would stay back to look after the children. We would make arrangements for the children to be picked up and dropped and provide two meals at

the day-care centre where they would be given classes in mathematics and Gujarati. The parents felt that the lack of literacy in their community was putting them at a disadvantage in getting government services. Some parents felt that educating their children would enhance their employment prospects in the organized sector.

We mused over what that could mean: completing class 10 would allow them to sit for the bus conductor exams. One or two probably might go for higher education, though the employment prospects would be primarily in the government sector. The private sector would remain out of their reach. But what about vocational jobs? —these children are so good with their hands, putting up their tent-like houses in no time at all. The coaching centres and tuition classes have still not penetrated this sleepy town of Bagasra, with a population of around 50,000. The children's prospects of 'doing well' rest on the dedication of government school teachers: 30 of the 42 children who started out have joined government schools. Fortunately, we have found good schools for these children, though what happens after they complete their elementary education is still unknown. However, the question haunts us: what is the right kind of education for these children? On the one hand, modernity is pushing hard at traditional lifestyles which, at least for now in these parts, they have been able to resist. What will modern education do to these people? Yet the unavoidable fact is that the skills these people possess are becoming irrelevant in this fast-changing world with the advent of cheaper disposable farm tools and the introduction of tractors.

Setting B

The setting was a school hall of a reputed Gujarati-medium school in Ahmedabad. A group of middle-class parents of lower primary school children were raising questions about the curriculum. This was in the context of the school's deciding to move towards an MGML structure in which there are no textbooks and children work primarily on their own through a series of cards tracked on a 'learning ladder' with specific milestones. The parents could not fathom how learning could take place without a textbook. 'Will all the content of the textbooks be covered through the cards?' How will we know what to revise for the unit tests?' What should my child take to the tuition teacher to work from?' All these questions with their underlying assumptions came flying at us! In my interactions with various schools (barring a few progressive schools), I have noticed that the textbook is regarded as sacrosanct, the repository of knowledge that the child must master. Reading any other book is considered a waste of time, and as a result very few children acquire the taste of reading for pleasure. The fact that the content to be selected for inclusion is a matter of curricular choice, and that different boards make different judgments, does not even cross their minds. This may

be partly due to the way the exams are conducted and the premium it puts on getting 'the facts' correct. The other side-effect is the tuition industry this has spawned, with children even in kindergarten going for tuitions!

These questions gave us an opportunity to uncover the assumptions of the parents, who later themselves started recounting their experiences of how education had been much lighter in their days and how they learnt as much from experiencing life as from textbooks. In fact, some of them were able to recall teachers who had connected their learning with life. Suddenly the whole mood lightened, and we were also able to go into questions of testing, of the effectiveness of a highly structured system of unit tests and exams. We explained how the assessment is built into the MGML methodology through the idea of 'milestones'.

Setting C

Though the setting was again a school hall, the purpose was different. We had decided that we would not conduct examinations till class 8 in the school, and we wanted to communicate this to the parents of the school in Bhuj. At present the school goes only up to class 7. The audience was more receptive as this set of parents had made a conscious decision to send their children to an alternative school rather than a mainstream school. Some parents, apparently pleased with the decision, had their own stories to tell. One of them recounted how her neighbour's daughter had become depressed despite scoring 82% in her exams, all because her friend (who went to a different school) had got 84%. Though most parents could see that comparing children's performance was unhealthy, very few could see the absurdity of comparing performances from two different schools (in which exam papers would also have been different!) Marks somehow have a way of taking on a life of their own and give a sense of absoluteness about a child's capacity, hiding the various sub-texts behind them.

Another parent who had recently moved his child to this school said he had seen teachers in the previous school manipulating the exam system. One teacher would go through the exam questions the day before in the guise of revision. Once he had also seen that an answer written by his child had been erased and the correct answer written in its place by the teacher. Actually, this is not surprising, as the privatization of education creates competition to get more students enrolled. When combined with the premium that parents place on schools where students secure good marks, this is bound to happen. The pressure to get more students to improve the 'bottom line' of schools finally percolates down to the teachers who, knowing their students' capacities well, are left with no option but to make the exams easier and, in some instances, to resort to unethical practices.

Then came the inevitable question: 'How do we get to know how our children are doing in their studies if there are no exams?' This was not unexpected, for the whole idea that assessment can be unobtrusive, diagnostic and a spur for furthering a child's learning, as opposed to an exam with its mark or grade which effectively labels a child, is new to parents. In the latter case, the school usually transfers the responsibility on to the parent for addressing the child's difficulties and taking appropriate remedial measures. We explained that the school would use the two weeks which would usually be set aside for the exams to work with children in those areas where they have experienced difficulties, and in this way the parents' fears were put to rest. Some of the mothers were very relieved, because the exams are a very stressful time for them too, having to force their wards to sit down to study. We gently questioned the need to monitor their children so closely—wouldn't it be better to give space to the children and allow them to connect to their learning in their own way?

On a sombre note, one parent reminded everyone of the incident of two students committing suicide in a nearby school just that year. The effect of stress caused by an exam-driven education system was present in everyone's consciousness and needed no further spelling out. Teenage suicide and depression have increased at an exponential rate in the last ten years. Parents hold unrealistic expectations of their children, in many cases not commensurate with their capacities. If one looks at the statistics for those attempting the IIT exams and finally getting selected, one is struck by the fact that less than 1% gain admission. What happens to the other 99%? Leaving aside the few who get into decent colleges, the vast majority—some of whom may have started the IIT coaching from class six—end up in third-rate colleges. Their stories are never heard, even as we laud the small minority that has 'succeeded'. We also do not hear about the drop-out rates from these premier institutes, which are on the rise.

Another parent spoke about how her child, who is in class three, rarely finds a playmate these days after school hours because the other children are either busy attending tuitions or preparing for exams. Childhood becomes a casualty in this race for good marks throughout the school years. When it may finally matter, at the school-leaving stage, the child may have become too exhausted to perform to her potential.

In fact, children have plenty of energy and are very keen to learn new things. They have hundreds of questions to ask. With the right environment, good emotional support and the freedom to explore and develop their own thinking, most children —given a little training at the right stage—will be able to perform well in the board exams. This has been the experience

of the Krishnamurti schools. However, trends in the wider society seem to be going in the opposite direction, where questions in the textbooks are the only important questions and children's questions become irrelevant. Success is defined in a narrow and constricted manner, and the whole joy of living is squeezed out of the child.

Setting D

She said she had come to meet her child as she had managed to get some time off from her work. We were on the campus of the Bangalore Shishukunj School. She said she was working as a maid in a house in north Bangalore, 15 km away. Today, her employers had gone out for the day, so she thought she would come and pay a surprise visit to her daughter. I asked her what she would like her daughter to become when she left school. She said the only thing she wished for her daughter was that she would find a good husband. 'But would you not like her to graduate from a college?' I asked. This seemed to come to her out of the blue. She had never thought of her daughter as being college-educated. In fact, there was nobody in her family who had gone beyond class ten. She had run away from her husband's family as she was being badly treated after her his death and come to this NGO, which had hostels for battered women and children. Eventually she had found a job as a maid and rented a single room in north Bangalore. Finding money for a bus fare to come here was not easy, and she visited only once in two months.

There are many students in Shishukunj who do not see further education as meaningful for them. Last year, one of the class ten students left because he had been offered a job in a petrol pump. However, when eight out of ten students from the first batch this year joined college after completing school, we felt that they could become role models for the others. Many of these students come on the week-ends and conduct activities at school and also support children with their academic work. We feel that a good academic education together with an inculcation of good values could help these young people escape from the cycle of poverty and low aspirations in which they find themselves trapped. Teachers keep complaining about the poor academic work ethic among students. But we try to appeal to them to see the bigger picture—lack of parental support as well as role models.

But hold on! Haven't I heard the same outpourings in Rishi Valley School: our children do not utilize their time well, do not complete their work, have bad study habits. Do our students also suffer from lack of aspiration? They too probably go through confusion about careers and livelihood; but all this is in the context of an economically supportive family. Exams, in both these cases—the economically disadvantaged and the upper middle class —do not seem to have the same hold as

they do on the middle-class parent. For the moneyed, there are management seats or the possibility of going abroad. They also have the luxury of experimenting with alternative career options. However, it is not the case that this way of thinking comes naturally. Even affluent parents have all kinds of insecurities. Some students are able to persuade their parents to allow them to follow their inner calling; others end up following the diktat of their parents. Some are able to change careers later on in life. The affluent parent is just as worried about his children 'fitting into' the existing structure of society as the middle-class parent; hence the frequent question: 'How will my child manage in the outside world after having been cocooned in your school for so many years?'

Perspectives and prospects

That education is a panacea for alleviating poverty is a widely held view. My experience of last year seems to suggest that this may be only partly true, and hidden in this view lies a more dangerous reality. While I see Shishukunj in Bangalore being able to provide some children an education that will help them escape the poverty trap, those not inclined academically will fall through the gaps, even though they may have talents in other areas. We need to give a lot more thought to vocational skills. The real tragedy, however, is that school education on offer to the poor, especially in the rural areas, is sub-standard. We end up creating a generation of young people who may not find jobs in the formal sector, and yet think that it is beneath their dignity to work in the traditional occupations that their 'illiterate' parents followed—a sure recipe for social unrest. On the other side, the middle class, with their upward mobility and status consciousness, have allowed their vision of education to be funnelled into a narrow tunnel of materialistic aspirations, turning education into a tool to secure a comfortable 'lifestyle'. This, coupled with a lopsided exam-driven education system that focuses on a narrow set of skills, has spawned a whole coaching industry that makes exams an even bigger monster. Inevitably, the stress of this is being felt by students all over the country.

The Krishnamurti schools—with their varied attempts at a more wholesome and humane education—have shown that there are alternative ways of approaching the whole question of exams and livelihood. It becomes imperative that these schools continue deepening their efforts as well as spreading their models of teaching-learning as widely as possible. What I have observed is that only when people see 'working models' of an alternative approach do they feel encouraged to move away from the mainstream. Otherwise, their insecurities have a way of overcoming their better sense.

The School as a Centre of Inquiry for Adults: Inviting Parents into the School

VIJU JAITHIRTHA

Shibumi, in Bangalore, is a small alternative centre started by a group which includes a trustee of the KFI and teachers who have worked and studied in various Krishnamurti schools in India.

The adults who came together in 2008 were very clear that the intent of Shibumi was drawn from the teachings of Krishnamurti. Therefore those who came to work as teachers would have to have a serious, sustained interest in the teachings. From that understanding of the intent, we decided that the school would start small and remain small.

The way we structured our educational programme would reflect our understanding of the teachings. There would be no classes, and each student would have the space to work at the level appropriate to him or her, and a pace that is right. Students would be encouraged to discover their own interests, and they would not write an examination unless they were completely ready and therefore able to approach it free of stress. We assumed that parents who understood and accepted such an approach would be right for the school and that we would be able to work with the students in freedom. So Shibumi was projected as a school interested in inquiring into Krishnamurti with an educational programme drawn from the teachings. There was an invitation to the parents to engage with this intent. Some took it up, many did not.

We soon discovered that this was not sufficient. For the intent to become actual, we needed parents who walked together with us all the way, and not merely parents who 'agreed' with the educational programme. To hold the students rightly through the whole period of their maturing (which may not end with school), the adults in the student's life, the parents and teachers must have the same vision.

How does one do this? Is it at all possible? Will parents be open to such a demand? These were (and are) the questions that naturally came up. There was no way to find out except by trying.

One major step was to change the way we now projected the school (Shibumi) to people interested in our educational programme. We said we were a centre of adults interested in self-inquiry and the teachings, and that there was an educational programme available for the children of such interested adults. We emphasized the new approach on every Open Day, which happened once in two months, for groups of people who had inquired about the school. Fifteen to twenty people would attend. We did respond to functional queries of transport and fees, but the main purpose of Open Day was to convey the intent of the school. We started by emphasizing the importance of dialogue around the teachings of Krishnamurti with prospective parents; anyone interested in the educational programme would have to understand the necessity of coming for at least twelve to fifteen dialogue sessions spread over two to three months.

I remember that we came to the Open Day partly because we were curious to see the school, partly because we thought it would give us a better sense of how a Krishnamurti school functions. Shibumi was too far for us to even consider it an option at that point. Attending that Open Day was not planned. It happened by chance.

Afterwards we were clear that we would continue interactions with the school; attend dialogues because it impacted us in a much deeper way than we thought it could. And then there was no looking back, so to speak.

I think attending dialogues is really essential for parents to understand what the school is all about. It was very useful in our case. The dialogues helped us see what we were committing ourselves to, if we decided upon Shibumi for our children. The way I see it, initial dialogues are a start to a longer journey and if, as parents, we find that a hard thing to do, how would we be able to make that commitment to the school and to ourselves in the longer run?

These dialogues are held four times a week, three times at school and once in the city. Both current and prospective parents, and teachers in turn, come together.

The books we have used as a starting point for discussions have included *Commentaries on Living, The Whole Movement of Life is Learning,* as well as DVDs

and audios of Krishnamurti's discussions with David Bohm, Pupul Jayakar and Allan Anderson. As we read, we would pause for our own reflections, discussions and clarifications. With some newer parents who were quiet and hesitant, we learnt the importance of waiting and giving space for the inquiry.

Those who wish for a deeper and more intense engagement meet on Wednesday mornings, to read carefully the transcripts of *The Limits of Thought*. Two of the participants are a parent couple who have had to shift to Denmark for a year. They get up at four in the morning to participate in the dialogues on Skype.

Through dialogues we are able to see the construct of what is called the individual or the self and its actions that are rooted in the seeking of security, pleasure, gratification and in the avoiding of pain, fear, loss or failure. But right action is not an outcome of such a process. Right action is the ending of this kind of a movement. From time to time, over the last few years, we have had insights that have brought in its wake actions that seemed counter-intuitive to the intellect, but by leaving no residue these actions have enriched our lives…

We notice that the parents who have been explicitly told that Shibumi is a centre for adults interested in Krishnamurti's teachings and self-inquiry are quite regular in their engagement with dialogues and the teachings. The parents of the older students who had joined in the first two years of the school and were not given such an explicit invitation continue to view the place primarily as a school for their children and only secondarily as a place of inquiry. Those who have moved from the latter to the former have said that the infrequency of the earlier dialogue sessions—once a month—had created a disconnect; if they couldn't make it on a particular Sunday, there was a gap.

…I feel that if I am away from the dialogue meetings for a while, it is very easy to get used to the routine and dullness in the mind, and the mind gets caught up with the way the world functions. It is a wonder that a human mind needs dialogue to keep our minds alive and look at things!

It was an opportunity lost and we have, in different ways, communicated the shift in the intent of Shibumi and tried to persuade them to come for dialogues. Their children are older students, and we have our own relationship with them and regular dialogues in the school. If there are younger siblings who will be with us for a long time, we do persevere to ensure that these parents do come for the dialogues. All this may seem like coercion, and one

may rightly wonder if the dialogues have any value unless conducted in an atmosphere of freedom. This is completely true. It is equally true that without such intense engagement, the intent gets diluted and the very image of the place as being a 'school' comes in the way of serious inquiry. It is commonsense to realize that if the adults have jointly and cooperatively taken responsibility for right education over a period of time stretching over years, such a dialogue about the whole of life becomes absolutely necessary.

I think I will talk about the dialogue because that has impacted me the most in the interactions with school. I look forward to them especially in the school environment—everything comes together there in that open space. I think these dialogues and Krishnamurti's work have been great ways for me to connect with myself and see myself more clearly. And that I can see is reflecting in my relationship with myself and the world. It has given me a greater understanding of the work I do in terms of helping resolve conflicts so to speak, and insights into how it is not separate from who I am, which is the same as who we are.

One of the outcomes of such a serious engagement with parents has been that several of them have either joined the school as teachers or are in the process of doing so. These are serious, mature people, with an exposure to life and a commitment that goes beyond the education of their children. This parent body, deeply supportive of the intent of the centre, has raised almost all the funds necessary for the infrastructure of Shibumi.

I was part of the parent body which was entrusted with the task of deciding the salaries for the teachers (with absolutely no interference or coercion from the school), though I believe in several schools this may be considered a sensitive and 'private' matter. As a result, we even got Mediclaim insurance for all the students, non-teaching staff and teachers.

Deciding salaries raised several questions in our minds. Should we base it on present standards of living? Should we just decide on the basis of what other schools are paying? Should we look at tenure and experience before deciding? Should we look at what would 'attract' potential teachers if they were to take it up as a career? Should teachers look at it as a career? Shouldn't we provide some sort of security for the teachers, where they need not be concerned with providing the basic necessities for themselves and their families, but give their energies to help nurture 'good' human beings in school? Some of these questions, I realized, need not apply to teachers as such, but it made me introspect on my own 'needs' and standards of living.

It goes without saying that if such a serious demand is made on the parents, then an even more serious and intense demand has to be made on those who wish to come in as teachers. For some parents the deepening interest in the larger questions moves them to take the next step. Discussions happen over a sufficient period of time so that there is clarity on all sides.

My involvement with Shibumi as a resource person started when I volunteered to tutor students in mathematics a year ago. Very quickly I realized that most students were independent and quite comfortable learning on their own. While I had always known this [theoretically], it was my first direct exposure to the Shibumi student body—they were not being fed fish, but being taught how to fish. Perhaps coming with a traditional teacher mindset, I did feel quite useless being there. But the space of doing [apparently] nothing helped me—in understanding the role of teacher with respect to the student, in understanding my children at home, and in taking a step in understanding myself.

The question for the teacher really is whether one is interested in working together with a group of people with a sense of responsibility for the whole of mankind, rather than the narrower question of whether one wants teaching as a career. It is most significant when a group of individuals come together to see if human consciousness can be transformed.

My involvement with Shibumi started as a parent whose two children joined the school in 2010. Over the years it has blossomed into a deep and engaging relationship with different dimensions. From being a resource person who spends one to two days of the week in the school participating in different activities (computer science, maths, table tennis), to being a part of different parent groups for operational and financial guidance and upkeep of the school, participating in dialogues around Krishnamurti's teachings and exploring how it reflects on my daily life, the engagement with the school has only deepened with time.

The dialogues, which I have been a part of with teachers, parents and students, provide a platform to inquire deeply into why our minds are caught in innumerable problems, fears and desires associated with daily living. The diverse nature of the groups and world views reflected against the mirror of Krishnamurti's teachings also add multiple dimensions to understanding the fundamentals of human condition and, personally speaking, help in refining the act of listening. Overall, Shibumi plays a central role in our (my family and myself) lives. We can see that one of the important functions in educating one's child requires no separation between

the 'home' and the 'school', and the involvement of parents in the daily functioning of the school is a way towards this.

The earliest interaction—other than dialogues—parents had with Shibumi was in the kitchen. While school meals were generally simple and nutritious, when the parents came in to cook they became rich with deep-fries, carbohydrates and sugar! There was a great need to please the children. Meanwhile, the Shibumi kitchen was moving towards organic food; shopping was still the responsibility of a teacher.

My first interaction with the school started with the Sunday meetings in 2010. These were pretty formal. The dialogues were thought-provoking, but as the frequency wasn't too often (once in a month) they did not have much impact on my life. I used to feel lost too, as I didn't know most of the parents and some teachers as well. I did not understand the functioning of the school or really appreciate the deep purpose.

Over the years this has changed in many ways for me. My interactions increased especially via cooking and the kitchen. Initially, it was to make my child comfortable that I started volunteering. Today, I do it out of my own interest and a feeling of being part of the school. The school team and the invitation to be part of its various activities were probably always the same; my feelings and levels of interaction have changed slowly since the initiation to the present.

In the kitchen a sense of freedom and community exists. Discussions are open and communication too (thanks to WhatsApp!). Feedback is immediate and openness to ideas exists. An overall understanding of expectation and needs exists.

A major shift happened when we invited parents to the curriculum meetings last summer. While there was much discussion on what Shibumi could offer as healthy alternatives, it was also the moment to confront our deeply held need for comfort food!

This year we have made a conscious effort to focus on healthy and nutritious food at school. What this really means is a shift to complex carbs and whole grains; raw food and fruits daily and a shift away from fried snacks and store-bought juices.

I was always conscious about cooking healthy, so my food was never too spicy or greasy. But after joining the Shibumi kitchen, I noticed a significant difference in the way I was now cooking. . . . the millet workshop showed us how millet could be a replacement for rice and wheat which we use daily. At school, the kitchen team started exploring new dishes with millets which could be both healthy and tasty.

The kitchen is now totally managed by parents. They have taken over the entire shopping, which is now completely organic. The challenge for the parents is that they cannot come to school with a pre-decided menu. They have to use whatever is fresh and available on a particular day. Later, two parents attended on their own initiative a millets workshop organized by Bhoomi College. When they realized its value, a workshop was organized for other parent and teachers. Thirty people attended, many of them younger parents. It was noticed that those who came for dialogues also attended the millet workshop!

It is a fact that in our schools, even with the best and most sincere of intentions, parents and teachers inhabit separate, enclosed spaces. These spaces touch each other with meetings often arranged around cultural events, dialogues and report meetings. Such interactions are often bewildering, fraught with tension and frustrating, with the student in the spotlight in more ways than one. Surely, it must ensure a deep security for a child to watch the adults in her life being in contact, talking and working with each other, where the concern of the parents envelops all the children in the school and not painfully or selfishly focused on their own. Otherwise, how are we to nurture children in our care with 'one mind'?

> *If the teacher takes a real interest in the child as an individual, the parents will have confidence in him. In this process, the teacher is educating the parents as well as himself, while learning from them in return. Right education is a mutual task demanding patience, consideration and affection.*
>
> J. Krishnamurti: *Education and the Significance of Life*, Chapter 6.

Book Review
Hindi Ki Duniya Series

MANJU MAHIMA BHATNAGAR, WITH RIMA ANAND

Hindi Ki Duniya, *by Chandrika Mathur, is a set of five textbooks for classes 1 to 5, accompanied by a workbook as well as an audio CD for each class level.*

Although Hindi is considered an elegant and easy-to-learn language, this is so only for Hindi-speaking people. In regions where Hindi is not spoken, teaching this language has been a truly daunting task. This task has now been made interesting, effortless and easy by Chandrika Mathur, who presents a new and attractive approach to teaching the language in the form of textbooks for children.

In the past our textbooks used to be quite lifeless. Can we not recall the times when we would be asked to listen to a lesson being read aloud, and found ourselves nodding off? If we were asked to read the lesson out loud, this would be done haltingly and slowly, with minimal interest, until the teacher would finally ask us to stop and herself continue with what she considered a model reading. The text of the lesson would, at best, have had one or two illustrations; and there was hardly any colour to brighten the pages. How then could we be expected to read the lesson with interest? But we can also recall the several Hindi magazines available for children—*Parag, Bal Bharati, Chandamama,* and *Nandan*. These we would read with keen interest, for the contents were quite engaging: stories, poems, plays, conversations, information about lands far and near, jokes, riddles and comics. How we wished that our textbooks too could be like them: they would have been so much more fun!

Now, on seeing these beautifully produced new textbooks by Chandrika Mathur, one feels elated, wishing that one was a child once again. For, these books are replete with just those kinds of materials that appeal to a child. They are highly interactive, activity-based and put together in an engaging yet scientific manner. Apart from being firmly grounded in child psychology, the *Hindi Ki Duniya* series has also been designed as a practical methodology, keeping in mind the specific needs of children who are from the non-Hindi-speaking States.

For instance, in the textbooks for beginners, the Hindi alphabet has been conveniently broken into clusters, introducing a few letters and *matras* at a time. Short four-line poems for each letter, often related to a child's daily life, introduce the child to the sound-script correspondence, as well as a set of nouns. Each page is supported by large illustrations, so that the meanings become clear, and children learn a range of vocabulary along with its usage. The basic requirement of imbibing knowledge of the complete *varnamala* (alphabet), including features such as half letters, is achieved without any confusion for non-Hindi-speaking children.

Each of the textbooks in this series has an accompanying CD which enables the child to hear the poems, songs, lessons, or conversations, and learn correct pronunciation. In addition, each textbook also has a workbook to go with it, in which children can write in Hindi, practising and consolidating each and every detail of their learning. The textbooks and workbooks include several activities—games, riddles and puzzles—which serve to motivate children while also expanding their grasp of vocabulary, idiomatic expressions and grammatical elements. Children's creativity is given ample room for expression. Even the textbooks contain slots for children to express themselves. Instructions for the varied activities are given in English, so that children studying Hindi in an English-medium environment will have no difficulty in following them.

The lessons in the textbooks for each successive class introduce new themes, along with increasingly wider sets of new vocabulary. Objects, places, people and creatures as well as verbs are all introduced through pictures and flash-cards. Another unique feature of this series is the inclusion of a number of dialogues and conversations connected to daily life. The basic patterns of grammatical structures are woven into the progression of the lessons, and made clear through examples and illustrations. So the students gain a simultaneous understanding of applied grammar-in-usage; a separate grammar book is not needed. A section at the back, 'Some useful information', provides answers, removes misconceptions and explains the logic behind the finer details of Hindi; it also helps to recognize and reinforce the patterns behind them. This should prove very useful for both students and teachers.

In the fifth textbook of the series, composed of texts of different genres, from different sources, the selection is based on a modern approach that takes into account children's interests. New authors of contemporary stories are included alongside traditional tales. A novel feature is the set of word labels provided alongside illustrations accompanying the text, so that meanings of several nouns along with their gender are conveyed in an interesting manner. Instructions are given on each page for engaging in specific ways with the texts and illustrations. This should be helpful for teachers as well as students.

A variety of exercises support the development of logical and analytical abilities.

The cover design using children's drawings, full-colour illustrations, and the innovative layout of the books, all these go into making this outstanding publication. Overall, we can affirm that this series belongs to the rare category of 'ideal textbooks', in which a variety of creatively designed visual-auditory as well as spoken-written activities support the development of all the language-learning skills: reading, comprehension, speaking, writing, as well as thinking and creating in Hindi.

Credit for this work goes not only to the publishers, Orient Blackswan Ltd, but also to Rishi Valley Education Centre, which enabled this concrete form to be given to the author's long years of experience in researching and teaching the language.

One can say with confidence that these books will be a source of joy for children. No matter which country or State they belong to, they will be able to befriend the Hindi language happily. A series such as the *Hindi Ki Duniya* is to be welcomed in the world of education.

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