We Can Do It!

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ETMA wishes its readers, friends, patrons and alumni a **Beautiful 2014** Praying for Health, Happiness, Prosperity and Peace.

COVER STORY

Sharing Suffering to Convert into Joy

This was sometime in the mid 1960s. We were in our village, Udang. I was either still in college or had just been out and joined school teaching. Sri Prafulla Chandra Sen was the Chief Minister of West Bengal.

There was unprecedented price rise affecting every item of daily consumption. The Chief Minister, Gandhian of the original version, made many appeals including alternative food. He came to be nicknamed as the 'Green Banana Chief Minister' because of his suggestion to eat green banana that was cheap and easily available.

Poverty was pervasive. In the village community, hardly five to ten percent could afford staple food with some nutrition. The rest survived without a minimum nutrition. Most of the villagers

were day labourers; real hard labour in the agricultural lands or in the village ponds or in the households. Almost no family could afford maid servants, so women could not

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IN THIS ISSUE

Sharing Suffering to Convert into Joy ...

contribute to the economic well being of the family, though they were equally hard working.

Rice is the normal staple food of Bengalis. Due to poverty many, including us, ate and drank the liquid extracts of cooked rice which are normally offered to cattle. A majority of the families could not afford vegetables except those that grew in their backyards. They ate rice with salt and an apology of some boiled vegetables. Under these difficult circumstances, the price of rice increased steeply. It was reaching far beyond the reach of the average villager. The families reduced the quantity of rice – bought only as much as they could afford. Hunger was rampant among children and adults alike. The worst affected were the women – the mother-women in particular. They would eat only after feeding everyone in the family.

It was really a famine like situation – an undeclared famine. Daktarbabu's (the village doctor and the MLA from Amta Constituency) and our family (teacher) were also seriously affected. The quantity of rice may not have been reduced much, but the peripherals that provided nutrition were almost gone. There was no indication of arresting price rise let alone price reduction. Daktarbabu as a qualified medical professional and Baba (Village school headmaster and my father), a well respected teacher-scholar who learnt homeopathy to help ensure wellness for poor people, were concerned about the impending health hazards on the village population due to poor nutrition, lowered immunity, etc., over and above the water borne diseases.

Daktarbabu was on the way to his clinic on his old bicycle, as old as himself and making more sound than speed. Daktarbabu, a short gentleman, an original Gandhian in his life and deeds, in his austere dress of a coarse dhoti-kurta, was riding a tall bicycle on the rugged village road which knew no

evenness. Baba is another dedicated Gandhian of the original flavor where austerity and helping others are epitomized. Baba would see Daktarbabu from his first floor balcony and shout at the top of his voice, "Daktarbabu, why don't you come? Why don't you have some tea and then go to the clinic?"

Ours is a two-storey mud house with Baba's innovative architecture – thick mud walls with a slanting thatched roof that needs change of the top layer of straws every year and a complete overhaul every five to seven years. The first floor is a layer of mud pasted

> *"If you look at the market prices, there are several alternative food stuffs that are not so expensive. These are nutritious; but our villagers are not used to them. They won't psychologically accept those food stuffs. If we can overcome the psychological crisis, we should be able to overcome the real crisis as well."*

on the bamboo pieces laid serially and tied, rested on beams made of palm tree. The palm tree beams are projected out and supported by bamboo poles as pillars to create the beautiful balcony with a mud layer.

Daktarbabu never refuses this call unless he is on an emergency call. He will either turn his cycle around if he hears the call in advance, or he will get down and turn back and walk down to our house. During monsoon, the approach road would go down under water. At such times, we would walk either through the water or create an impromptu bridge – lay one bamboo on the crossed bamboo poles as pillars. Walking on such a bridge, called *sanko*, is a good demonstration of sound kinesthetic intelligence. Those days, Daktarbabu will leave the cycle reclining on a tree on the main road and walk down.

Daktarbabu came home. I spread a mat for them. Baba and Daktarbabu sat and waited for the tea that was being prepared by my sister. The theme was contemporary crisis of price rise. After a round of discussion about the Indian national and state scenarios, they landed to the plight of the villagers. The good thing about these two village characters is a shared concern for others. They discussed in such a manner as if their own families are in the air and not affected. Both of them agreed, 'something has to be done'.

Daktarbabu: "But what can we do? There is no possibility of containing the price rise."

Headmaster: "I know. But I have been thinking of something. A solution."

Daktarbabu: "What's that?"

Headmaster: "There are three kinds of crises. One is the crisis of nutrition. Another is the crisis of rice, and more importantly, the crisis due to the emotional affiliation to rice."

Daktarbabu looked intently at Baba. Baba continued,

"If you look at the market prices, there are several alternative food stuffs that are not so expensive. These are nutritious; but our villagers are not used to them. They won't psychologically accept those food stuffs. If we can overcome the psychological crisis, we should be able to overcome the real crisis as well."

Daktarbabu: "What food stuff do you have in mind?"

Headmaster: "For example, whole *mung* and other such cereals have greater food value and are also cheaper. By replacing rice with *mung*, we'll save money that we can use for vegetables – radish, cauliflower, and tomato are very cheap now. If we combine *mung* with vegetables, all of us in the village will be able to afford some reasonably staple food."

Daktarbabu expressed his concern over the villagers' ability to adapt to this pattern of

food – "I mean whether they would be able to digest." The discussion led to a middle path – a combination of *mung* and a small quantity of rice, slowly raising the quantity of *mung* as the stomach learns to digest. The next question was creating the psychological acceptance.

Headmaster: "Daktarbabu, let us first give up rice in our own houses. After two/three days, let us spread this message that we have given up eating rice."

Daktarbabu: "Mastermosai, we also need to spread that there is no particular food value in rice. It is just carbohydrate. *Mung* and vegetables together provide much better food value. I'll tell all those who come to me for treatment, about 50 - 60 patients every day. You speak to those who come to you for homeopathy medicine, to your teachers, and students."

Both of them agreed to the strategy. Two-three days down the lane, it became hot news, an item for discussion all over the village and the surrounding villages, "Do you know rice is not cooked in Mastermosai and Daktarbabu's homes. We cannot afford it, but they could have. But both of them said that we are only used to eating rice otherwise there is not much nutrition in it. Both the families eat *mung*, boiled radish, cauliflower, and other vegetables."

The village started smiling up. The crisis seemed to be over. Most of the families switched over to the new food menu. Daktarbabu and Baba were continuously on their feet to monitor any adverse effects due to the new food pattern. By God's grace, there was no crisis. Rice was not selling in the market. The supply-demand curve was offset by this dynamic movement. It was an artificial crisis created through hoarding by some unscrupulous businessmen.

Daktarbabu selling Rice

Something dramatic happened in the wee hours of one of those days. It was almost a fortnight after the village had switched over to the new food menu. Early in the morning, it was still dark; there was a light knock at Daktarbabu's house. Some people had already woken up. So the door was opened. A labourer entered with a huge load of a gunny bag – completely sealed. Behind him was another gentleman. He asked for Daktarbabu. Daktarbabu was already up. He came out. The gentleman said, 'Daktarda, I understand you have given up cooking rice due to the price rise. I have brought half a quintal of rice for you and your family. When it is over, please let me know, I'll get you some more'.

Daktarbabu asked, "What's the cost of rice per kilo?"

"Don't bother. I have not brought it for sale. It is for you."

Daktarbabu: "OK. Thank you very much."

The man left the house.

Daktarbabu, as usual got ready and left for his clinic. Behind his bicycle, one villager followed him, on his head the rice-bag that came as a gift to Daktarbabu in the darkness of the morning.

Before Baba could call Daktarbabu, Daktarbabu shouted, "Mastermosai, I'm not coming now. I'll come on my way back and tell you." Baba shouted back agreeing to his proposal.

Daktrababu, after keeping his bicycle, asked the villager carrying the rice bag to unload, open the bag and display the rice. He sent a word to the whole village that all the families in the village can get half kilo rice for fifty paisa (half a rupee) except his own family, relations, and Mastermosai's family. The message spread like wild fire. One member from every family – almost 100 of them queued up. Someone started weighing the rice, only half kilo per family, another volunteer collected the money. We all watched the smiles and enthusiasm among the villagers. I witnessed it myself. 50 kilo rice at the rate of 50 paise fetched a huge amount of money - Rs.25/- which was used to buy medicines for the poor.

Daktarbabu came home in the afternoon and shared the entire episode with Baba (we of course, overheard with enormous curiosity) and only whispered the name of the Good Samaritan of the darkness of night who donated the rice to Daktarbabu and his family.

That was an eventful day. When the entire village enjoyed rice, the families of Daktarbabu and Mastermosai celebrated with *mung* and boiled vegetables.

■

Marmar Mukhopadhyay

Universal Elementary Education: How Do Indian States Rank?

Less that 10% Indian students are serviced by fee-charging high profile private schools, and about 90% Indian children are still serviced by government or government aided institutions.

Universal Elementary Education (UEE) is one of the Millennium Development Goals (MDG) set for the year 2015. UEE implies universal enrolment, universal retention, and universal performance. This MDG synchronises with the targets set by the government of India.

Although enrolment is reaching near 100%, the gains are lost due to 'burning at both ends' – high rate of school dropout and poor performance due to poor quality. The good news is that the dropout rate is also dropping, though slowly, but steadily. The quality of education and students' performance is still beyond the grip of systemic governance.

It is important to remember that less that 10% Indian students are serviced by fee-charging high profile private schools, and about 90% Indian children are still serviced by government or government aided institutions. Hence, India's future is still being shaped in poor classrooms in government funded schools at the hands of government recruited teachers. Attention needs to be focussed here.

Although all states are covered by the RTE Act and SSA Provisions, there is a wide disparity among the states in terms of their performance in elementary education. The performance is indicated by the EDI (Education Development Index). EDI was originally created by UN organizations after the EFA movement. India has adopted it and brings annual updates on the performance of the various states on EDI. As many as 23 indicators have been suggested which are further re-grouped into four sub-groups, namely *f* Access, Infrastructure, Teachers, and *f* Outcome (see Table below). There are separate Education Development Indices for primary

grades and elementary grades; then there is a composite grade for elementary school (grades 1 to 8).

According to the latest report (2013) of NUEPA [NUEPA publishes this and a few other associated reports on UEE every year at this time], the top five performing states, as per the composite EDI, are Lakshadweep, Puducherry, Tamil Nadu, Sikkim, and Karnataka. The bottom five states are Jharkhand (35th), Uttar Pradesh (34th), Goa (33rd), Assam (32nd), and West Bengal (31st). The traditional topper, Kerala has slipped into 14th position. Punjab is steadily moving upward from 13th to 6th position; and Maharashtra, one of the larger states is consistent, staying at the 8th rank.

These rankings create a lot of debates. Let me take an example, 'how do states lose out on ranks?' Functional toilets for girls in WB are 59.31% compared to the national average of 74.59% [89% schools with functional toilets for boys match with the national average]. The national average of primary to elementary schools is 1:2.06. In West Bengal, this ratio is 1:4.54. The implication is lack of access to elementary classes. The percentage of female teachers in all top-end states averages above 70% compared to less than 50% in the bottom ranking states.

There are often uninformed debates about the bias in ranking, etc. The ranking is done clearly based on a statistical formula where the values of indices are fed. The values of the indices are based on the data provided by the concerned state. National University of Educational Planning and Administration, New Delhi (NUEPA) processes these data, creates the report, and gets the data certified for authenticity by the highest officials in the state governments. The complete report can be seen at: *FS_2012-13_from_press_05.12.2013.pdf*

Table: **Variables used in Computing Education Development Index**	
ACCESS	Density of schools per 10 Sq. Km.
	Availability of Schools per 1000 Child Population
	Ratio of Primary to Upper Primary Schools/Sections
	%of Schools with Student-Classroom Ratio : Primary > 30 & Upper Primary > 35
	%Schools with 1:1 Classroom-Teacher Ratio
	%of Schools with Drinking Water Facility
INFRASTRUCTURE	%of Schools with Boys' Toilet
	%of Schools without Girls' Toilet
	%of Schools Required and have Ramp
	%of Schools with Kitchen-shed (Government and Aided Schools)
	%of Schools with Female Teachers (In schools with 2 and more teachers)
	%of Schools with Pupil-Teacher Ratio : Primary > 30 & Upper Primary > 35
TEACHERS	%of Single-Teacher Schools
	Teachers without Professional Qualification
	Average Number of Instructional Days
	Average Working Hours for Teachers
	%Change in Enrolment in Government schools over the previous year
	Gross Enrolment Ratio
OUTCOMES	Participation of Scheduled Castes Children: %SC Population (2011 Census) - %SC Enrolment
	Participation of Scheduled Tribes Children : %ST Population (2011 Census) - %ST Enrolment
	Participation of Muslim Children : %Muslim Population (2001 Census) - %Muslim Enrolment
	Ratio of Girls' Enrolment to Boys Enrolment*
	Drop-out Rate
	Transition Rate from Primary to Upper Primary level

Source: Mehta, Arun (2013), Elementary Education in India: Progress towards UEE (2012-13), New Delhi: NUEPA, 2013 (Link FS_2012-13_from_press_05.12.2013.pdf)

Back

Women's Entry, Survival, and Advancement in Engineering and Technology

All over the world, including India, Engineering and Technology education is attracting a large number of women students. According to the UGC reports, in 1950-51, the number of women enrolled in Engineering and Technology was just 19, constituting 0.02% of total enrolment. I remember very vividly, in 1945, a female student Ms. Jaya Kumari was admitted for her B. Tech. in chemical engineering in A.C. College of Technology. She was a sensation. She had a big built and her colleagues used to call her Giant Kumari. Things have changed dramatically since then. In 2010-11, the enrolment of women students has risen to 800,680 constituting 11.36% of total enrolment.

While the enrolment of women has gone up significantly, it must be noted that their number is still very small in prestigious institutions like the IITs and NITs. There is an interesting explanation for this. The entry into the IITs and NITs is based on highly competitive entrance examinations which require a lot of investment of time and money for coaching classes. Parents are not willing to invest so much money on women's entrance examinations. Also, coaching classes are often held till late in the evenings and are mostly dominated by men and hence the parents of women students are not willing to send them to these classes.

However, in recent years, the number of women students has gone up in private colleges and university departments. It is reported that in Anna University in Chennai, over 60% of the students are women. The explanation for this is, here the admission is based on high school board examination marks. It has been observed that women students perform well in these examinations and thus get admission easily in these institutions. I recently attended a convocation in a private engineering college in a small town in UP. It was interesting to note that most of the top places and prizes were bagged by women students. Another interesting trend is exclusive women's engineering colleges that are coming up in several parts of the country.

In addition, the UGC has a scheme called "Technical Courses for Women" in women's universities, and is also providing generous financial assistance for introduction of undergraduate courses in emerging areas under engineering and technology with a view to give women the opportunity in areas perceived to be prestigious and associated with better emoluments to reduce the gender imbalance in the sphere of science and technology. Under this scheme, Women's universities like SNDT in Mumbai, have introduced B.E. courses in (i) Electronics and Communication, (ii) Computer Science, and (iii) Information Technology.

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science
technology
engineering
mathematics

Debjani Ghosh
Aruna Jayanthi
Neelam Dhawan
Vanitha Narayanan
Kumud Srinivasan

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Having procured engineering education, women do want to enter the world of work in this area. However, women face a number of challenges in their entry, survival, and advancements in this hitherto men dominated area. There are several anecdotal reports available about the discrimination that women face at the entry level itself. It has been reported that companies do not even allow women students to appear for the campus interview. Sudha Murthy, in one of her books, recounts an interesting anecdote from her life. She had completed her Masters degree in technology and was looking for a job. There was an advertisement for a job in one of the Tata companies. But the advertisement said, "Women candidates need not apply". Sudha Murthy is not a person who would take things lying down. She sent a post card to Tata, asking why she should not apply while she had all the required qualifications. Tata was curious to know who this person was and she was called for the interview. In the interview she was told that this was a shop floor job and not suitable for women. She replied asking, how they could assume that she will not be able to cope with the job without trying her. She got the job. Later she taught in a college and became the trustee of the Narayana Murthy Foundation. But that is another story!

At times, the interviews are sexist in nature putting women graduates at a disadvantage. We cannot change the selection procedure, though it is being made mandatory to have women in selection and promotion committees. But still, it is noticed that several committees do not comply with this mandate. I understand that Prof. Armaity Desai, former Chairperson of UGC, had during her tenure made it mandatory that there should be women in every committee. When a committee list was brought to her, if there was no woman in the panel, she would simply reject it. The standard reply given was "Where are the women?" In the "old boys" network, women are not visible. We need to have a directory of qualified women to facilitate the identification of the right women. In addition, we need to sensitize men to be more gender friendly. Of course, there are several men who are gender sensitive and pro women. For example it was Raja Ram Mohan Roy who abolished Sati and Maharishi Karve who founded the SNDT University for women in Mumbai. More than that, we need to empower women students to be assertive and learn to handle wherever there is blatant discrimination. It is significant to note that women are becoming more aware of their potentials and slowly asserting their rights.

After the entry, there are still challenges for survival and advancement. We will continue this discourse.

- Jaya Indiresan

READERS SPEAK

Dear Prof Mukhopadhyay,

I had not thought that the second issue would be even better than the first. My intention was to take to a quick glance at it, to decide on what to read later. But already half the morning has gone and I am still engrossed in it. Really, we had need of such a magazine- informative, interesting and inspiring all at once. I loved the article on J.P. Naik and on P.V. Indiresan, and the story of my school.

I will be passing on the magazine to friends and colleagues at Hiroshima University (you will be surprised to know that one Japanese professor here is proficient in Bangla).

Dr. (Mrs.) Nalini Juneja
Visiting Professor, Center for the Study of International Cooperation in Education (CICE) , Hiroshima University, Japan

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Sir,
The magazine has come out really well.
Atul Temurnikar

Dear Dr. Mukhopadhyay,

Thank you for sharing the ETMA magazine with me. A glance over it whetted my appetite and I look forward to reading the enlightening articles in it.

Warm regards,
Srilekha

Dear Prof. Mukhopadhyay,

We've received your magazine and we've really appreciated it. I also like to share the comment of one of our youth and social worker. I gave him the magazine and told him to give a look and come back to me. He did it and came back enthusiastic. He told me, "I got a lot of ideas and inspiration for the job we're doing with our children."

Thank you and please send us the next issue.

Simona Sebatini
Watoto, Kenya, Onlus

Dear Mr. Mukhopadhyay,

I have just gone through your magazine and must say I am most impressed with the work you have put in to create this.

I am not an educationist but have two daughters in boarding school and admire the wide range of topics covered and the depth with which each contributing author has written.

I am forwarding this to Smt Jamila Singh, Retd Principal and Director of Mayo College Girls School, Ajmer and also to the current Principal of this school, Smt Kanchan Khandke for their reading pleasure. I am also forwarding a copy to Smt Bharati Sharma, who supervises six schools of the GD Goenka group.

With my hearty congratulations,
Sincerely,
Rajnish Wadehra

Back

Developing Better Writers

Chris Sloan

Series Editors
Punya Mishra & Matthew J. Koehler
Michigan State University

Introduction by Punya & Matt

It gives us great pleasure to introduce the third article for our regular series on contemporary educational research and its implications for practice. This column is by Chris Sloan a classroom teacher and doctoral student in the College of Education at Michigan State University. This column focuses on literacy and specifically issues related to supporting better writing in the classroom.

Not long ago being literate meant the ability to read and write printed text with some level of proficiency. Traditionally in schools this meant being able to read critically, research thoroughly, and compose coherent arguments and narratives.

With the increasing spread of information communication technologies, scholars now speak of *new literacies*. New literacies are generally thought to be texting, blogging, participation in social networks, and other skills necessary to make meaning in a technology-rich, digitally connected world. Our students are used to choosing topics that they're passionate about, and audiences expect interaction and collaboration with the writer.

When it comes to literacy, Lankshear and Knobel (2006) speak of two distinct mindsets. Mindset 1 holds that "the world is much the same as before, only now it is more technologized, or technologized in more sophisticated ways." Mindset 2, the post-Industrial mindset, holds that "the world is very different than before, largely as a result of the emergence and uptake of digital electronic inter-networked technologies." The authors conclude: "we think that for the foreseeable future, the people who are best equipped in literacy terms will be those who can move between conventional epistemologies and digital epistemologies."

What this means for educators today is that new literacies don't replace traditional ones; our students must master traditional, print-based literacy while learning the affordances of new literacies.

Students are writing more than ever

However literacy is defined, it is clear that our students are now writing more than ever. Their texts, tweets, and status updates add up to a staggering amount of compositions. Some educators think this is leading to a decline in overall writing skills, but others like Andrea Lunsford of Stanford University feel that we're in the midst of a literary revolution the likes of which hasn't been seen since Classical Greek civilization. According to Lunsford, technology isn't killing our ability to write, it's reviving it.

The Connected Learning Initiative from the MacArthur Foundation is at the forefront of researching how youths are incorporating these new literacies into their lives and is "a model of learning that holds out the possibility of reimagining the experience of education in the information age." It draws on the power of today's technology to fuse young people's interests, friendships, and academic achievement through experiences laced with hands-on production, shared purpose, and open networks. Kathleen Yancey, past president of the National Council of Teachers of English, argues that we need to make sure that educators don't create a "firewall" between students' in-class and out-of-class writing.

Wisely incorporating these new literacies has a significant role in developing better student writers. As students gain more access to mobile devices and tablets, educators are increasingly using these technologies in schools. According to Warschauer (2007), students feel like they're becoming better writers by having an authentic audience and purpose for their writing in computer-mediated writing.

Writing for authentic audiences

This shift of mindsets that Lankshear and Knobel describe means that we need to move away from the concept of the teacher as the primary audience for the student. One way to do this is to have students write for the authentic audiences that inhabit these new media spaces. For some teachers this means going where the students already are, repurposing popular social networks for educational purposes.

Marcie Lewis, a 4th-grade teacher in Ontario, Canada, brings experts
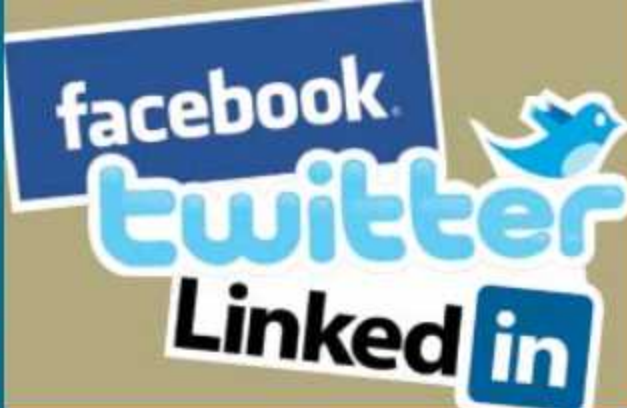
into her classroom for her students to interact with via Skype, YouTube, and Google Hangouts. Lewis says that having her students conduct interviews with those experts helps improve their writing "because they are more invested in the process and wanting to accurately share the information that they have learned. I think they are also empowered to take ownership over the process because there is real meaning in the task." Media outlet KQED in San Francisco provides resources for students to practice civic engagement and digital citizenship skills in writing and conversations around current events using Twitter in their Do Now program. http://education.kqed.org/edspace/category/do-now/

Another way to bring educational social networking into the classroom is to use spaces that have been created by educators specifically with student writers in mind. Some colleagues from the National Writing Project and I have developed a site called youthvoices.net where students from around the U.S. and the world discuss their digital compositions and connect their school learning with their interests outside of school. At Youth Voices, students blog about their research projects or discuss local and global issues.

Educator Kim Cofino highlights many examples of international collaborations that students have participated in at her school using blogs, wikis, VoiceThread, and Ning social networks at http://kimcofino.com/isb/. Even the youngest elementary students at Cofino's school have published multimedia projects and have collaborated with other youths thousands of miles away.

Public and private writing

Yet despite all this talk of connected learning and international collaborations, teachers need to remember that oftentimes the most powerful ways to improve student writing can happen locally, in a classroom without computers or the internet. The Young People's Writing in 2011, a survey conducted by the UK's National Literacy Trust, has found that all students benefit from the private kind of writing that can happen with teachers in the classroom. To assume that all students are savvy in digital environments can be a big mistake. According to the report:

An important self-development strategy uncovered in the children's reports was the need to 'practise your private conﬁdence' before you could develop 'public conﬁdence'. Children identified reading aloud and writing as activities requiring 'public conﬁdence', and needed a lot of 'private' practice. A striking characteristic of children from affluent backgrounds was how easy it was for them to access opportunities for 'private conﬁdence' building whereas children from low-income backgrounds had little, if any, opportunity for this (10).

Finally, perhaps the most important thing to remember is that developing writers is everybody's business, according to the report "Writing and School Reform: a Report of the U.S. National Commission on Writing." This is not a simple and easy task, or something that will be finished and out of the way by the end of next week, or even the end of next year. "Developing critical thinkers and writers should be understood as one of the central works of education. State and local curriculum guidelines should require writing in every curriculum area and at all grade levels. Writing should be considered every teacher's responsibility."

There are many opportunities to use new technologies to communicate and collaborate with students from around the world in educational networks and social media, but students still need the mentorship of classroom teachers who are well versed in traditional and new literacies.

Chris Sloan teaches high school English and media at Judge Memorial in Salt Lake City, Utah. He is also a PhD candidate in Educational Psychology and Educational Technology at Michigan State University. He has developed youthvoices.net with colleagues from the National Writing Project, where he has been a technology liaison since 2003. Join him on the Teachers Teaching Teachers webcast every Wednesday at 9pm Eastern Time.

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Quest for Excellence in Higher Education - *A Holistic Perspective*

Shobha Sundaresan

The will to win, the desire to succeed, the urge to reach your full potential... these are the keys that will unlock the door to personal excellence – CONFUCIUS

The paradigm shift in the process of growth in higher education created the need for adapting effectively to the changing environment. As a consequence, educators have started realizing that long-term sustained growth requires a holistic approach toward excellence. With a key focus on building value based institutional culture, educators must be oriented toward humaneness in the pursuit of excellence. This may require reorientation of perspectives toward a deeper sense of purpose and direction.

To excel is to go beyond the average and become the best. It also means that the individuals or institution must have a passion for excellence. The very foundations of our society demand that the main tie between the educator and the learner should be two sincere desires; the learner's desire to grow better and the educator's desire to see that the learner becomes better than he already is. In the quest for excellence, higher education institutions (HEIs) must necessarily care for their stakeholders, that is learners, educators, parents, community, and so on. The basic elements around which passion for excellence in higher education revolves are:

- Focus on quality
- Responsiveness to change
- Inspired Leadership
- Harmonious team spirit

Focus on Quality: To survive, grow, and develop in a highly competitive environment, HEIs require to focus on quality. Knowledge management, collaborations, state of the art infrastructure, outreach activities, teaching-learning methodologies, research and development, placement, innovative practices, student support activities, and governance are some of the key areas of HEIs that serve as indicators of quality. Sustenance of quality is essentially a people driven process in search of excellence. Achieving institutional excellence is about adopting an integrated approach to quality while investing efforts and resources in values of social justice, humaneness, and welfare of all stakeholders.

Responsiveness to Change: The current market scenario demands that HEIs must recognize the need for change as learner expectations and demands are constantly changing. The major challenge is to keep innovating and adapting to the change. Therefore, HEIs that focus upon innovation in curriculum design, teaching-learning methods, and all other institutional aspects can positively impact learners and contribute to excellence. Most importantly, there must be scope for learners to innovate and think differently for which the right learning platform must be provided.

Inspired Leadership: In order to effectively respond to challenges of the fast changing environment, value based leaders who are solution-centric must be developed. Leaders influence others and see growth as a by-product of excellence. Effective leaders have clarity of vision and goals as well as the ability to respond to global standards and challenges. Such leaders also ensure that there is focus on the long-term goals of the institution, generate positivity, improve self-image, and establish specific aspirations and objectives for others. They enable the alignment of individual goals to institutional goals and have a larger sense of vision for the common good.

Harmonious Team Spirit: Team spirit and team work play a vital role in creating a quality environment. Excellence or perfection in HEIs can be achieved by ensuring that there is mutual trust, mutual respect, personal pride, and most importantly genuine team work. This requires collaboration of all stakeholders in institutional processes and management's commitment, support, and encouragement. Transformational leadership skills facilitate the development of high performing teams. An environment and culture based on trust and faith will be conducive to harmonious team spirit in HEIs.

Conclusion: Passion for excellence requires institutional thinking and approach to valuing quality and keeping commitment. Human beings form the core of the existence and sustenance of HEIs. Therefore, investment in human beings by focusing on identification, selection, development and retention of high achievers is very essential. HEIs must necessarily inculcate human values as an intentional part of the education process in an integrated manner so as to foster the all-round development of personality, healthy team spirit, and high quality citizens for the nation.

We are what we repeatedly do; excellence then is not an act, it becomes a habit. - *Aristotle*

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Toward Campus Diversity: Jai Hind College

Retold from Prof. Marmar Mukhopadhyay's book *Leadership for Institution Building in Education*

Aakanksha Tomar

"We aspire to mobilize student strength for the sustenance of a healthy democracy and betterment of humanity by including leadership, creativity, aesthetic values, scientific temperament, citizenship and a rational eco-friendly approach through academic excellence," reads Jai Hind College's mission statement loud and proud.

This is the story of how an institution with a reputation for academic excellence moved beyond convention, toward building campus diversity and ensuring the all round development of its students.

When K B Patil joined Jai Hind College as the Principal, the college was just nine years old. The faculty was young, the average age being less than 30 years. Many of the faculty members were very active, enthusiastic, and hard-working. What drove him was the academic outlook of the management. The dedication and devotion of the chairman gave him the confidence that his value system matched with that of the institution. Patil was at ease; he felt that he could do something constructive and positive to this college. He says, "It was my belief that education was to be made more meaningful through the students' potential

and latent energies utilized in creative pursuits. Teachers were to be role-models, extending themselves towards excellence and access even outside the classroom."

Since the college was already renowned for academics, the goal was to concentrate on sports, cultural activities and other such areas necessary for the all round personality development of the students. More importantly, it was decided that one of the major missions of the institution would be to provide opportunities of higher education to the socially underprivileged and economically marginalized weaker sections of the society. Dhule, where the college is located, being predominantly a tribal area and an economically backward district, provided the perfect setting and opportunity to realize this goal. This led Jai Hind College to concentrate on students from the poorer sections of the society, the tribal students, and the girl students. There were several development schemes and financial aids like 'earn while you learn, book-bank, counselling, remedial coaching, teacher student-guardian committee, women's empowerment programmes and such other methods to reach out to the deprived students. This enhanced their self confidence and led to their inclusion in the mainstream of the campus life. There were weekly meetings of tribal students; special personality development workshops; economic help through alumni, staff, and different NGOs located in India and abroad. Sports activities helped build up a healthy campus climate. At present, Jai Hind College is at the top in sports in the university. Two

Jai Hind students represented India at international level sports and games meets.

The Campus Diversity Initiative (funded by Ford Foundation) was one of the major innovative projects introduced in Jai Hind College and the North Maharashtra University, Jalgaon. The project was implemented in two phases for six years. It aimed at bringing about an understanding, appreciation, and a healthy tolerance of all issues related to diversity. Diversity was to be made the strength of the society. The main thrust was in tune with the mission of faculty motivation to strive toward excellence as well as students' all round development through different activities. Some programmes conducted under CDI were: Inter-religion Studies, Science and Culture, National Heritage, and Women's Identity. Unconventional methodologies like seminars, presentations, workshops, screening of movies, visits to different places of worship, social surveys, etc., were adopted.

The faculty members were encouraged to submit research projects and undertake research for their Ph.D. Patil took a special initiative to get the college registered under section 12(8) of the UGC Act. This status and that of permanent affiliation helped the faculty to attend national and international conferences, seminars, and workshops not only in their own fields, but also in diverse areas like Leadership Skills, Communication Skills, Computer Awareness, etc.

Jai Hind College organized a series of National Conferences on Concepts and

Implications of Diversity, Religion as a Bridge to Humanity, Empowerment of Women for National Development, Tribal Culture, etc. The college started a special section on Gandhian Thought and Vinoba Bhave's literature in the library, coupled with National Integration Camps, and Cultural Exchange Programmes by networking with 13 CDI centers all over India.

Patil "never had any problem in taking people along" since the very beginning of his career. Maintaining transparency in all his relationships, Patil depended more on his personal power, rather than on his positional power or authority to influence people. A major challenge came in the form of a change in the management in 1996. His values clashed with the new Director's at every step. There were several confrontations and a lot of resistance. For five difficult years, with the help of his colleagues, he worked hard to maintain the traditions of Jai Hind College. "This was an arduous task that caused a lot of mental and physical turmoil," recounts Patil, and further asserts, "I overcame resistance through my openness, transparency, confidence-building, trust, discussions and impartiality, with the support from my colleagues and students."

He lists several lessons learnt during his service as the Principal of Jai Hind College. Some of the important ones are:

The traditions of quality education of an institution have to be vigilantly watched and maintained by the people who work there.

- *Personal power is more effective than positional power.*

- *People work more efficiently if they are trusted.*

- *A personal approach in building up team effort is important.*

- *One has to be a role-model and combine precept with practice.*

- *Financial and academic matters have to be transparent and clean for effective functioning.*

- *Self-discipline.*

- *Empathy with the students and a commitment to the work at hand.*

- *Accept responsibility for any mistake, without blaming others.*

- *A strong image built up socially and academically helps in administration.*

For Patil, working in Jai Hind College has been a pleasant and enriching experience. But he believes that if he were to work again to build another institution, he would adopt some changes in his style of functioning. To work efficiently towards a mission and fulfill the dream of an excellent educational institution, a helpful atmosphere in the nature of academic and financial autonomy is an imperative, he concludes.

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The B-School Dilemma

Hari Parmeshwar

A good Business School admission is no doubt the final frontier of education for most graduates in India. They may arrive here after obtaining some experience or gain a direct (fresh) entry. Nevertheless, for the last two decades or more, the advent of liberalization and its ally globalization has seen a plethora of mushrooming opportunities in the space of entrepreneurship, new ventures aided by new technologies and corporate growth. Skyrocketing salaries and challenges that the business environment presents makes management a sought after career. And yet there is a dilemma. Typically Business Schools rely on the corporate sector for sustenance in many ways. From the all important placement season when Companies visit campuses, to providing summer projects for students to learn, to facilitate research work of professors and providing material for case studies…the list is endless. Patronage in monetary forms often results in buildings, libraries, and auditoriums named after such business families or companies. Most Business Schools have business persons as the Chairpersons of their Boards even as many Business Schools are promoted by business houses.

Now here is the dilemma. It may be very difficult for the academics to maintain an independent, critical analysis of business be it the results, their strategy, their leadership or their decisions not to speak of the ethical and moral content of their actions. And in this manner Business Schools may actually end up perpetuating a deep lie that "all is well". And push their unsuspecting students into a world where one extreme is that CEOs are sometimes seen in jails if they get caught and the other extreme is that it is business as usual till they are exposed or caught. In between, some senior personnel can get lynched to death as well because of the repressive policies of the company.

So we notice IPR violations by companies such as Samsung and Apple and ridiculous efforts at mocking the consumer such as which soap gives more *safedi*. The environment and its sustenance are acknowledged but are not a matter of policy or strategy. Mounting non-performing assets with banks jeopardizing the public financial system tell another story even as corporate involvement in manipulating policies are the headlines almost every other day be it 2G or Coalgate. Tax avoidance the Vodafone way has become the stuff of legends as its logic held sway over both the judiciary and the policy makers. But "tax is the price we pay for civilization" said Justice Homes once not so long ago. We have come a long way since then Justice Holmes, and "it is civilization which pays the price now" sometimes in terms of environment, sometimes in terms of justice, sometimes in terms of equity of income and wealth distribution.

The overarching presence of Business School education at the cost of other disciplines such as pure sciences and social sciences has given our society a limited perspective. So today if someone does a B.Sc in say Chemistry or Physics we sympathize with him even as we look up to the B.Tech never mind from where and how or the BBA and B.Com. What about the languages, the arts? They are languishing in the sense that their impact on cultivating a moral, conscientious society is absent. So we have an entire press and media and civil society and consumerist society applauding companies and conveniently forgetting. We do not see movies like *Inside Job* or *The Smartest Men in the Room* (the story of Enron) or *The Madoff Affair*. Madoff was caught at the same time when Satyam happened, viz. in 2008. Madoff has been given 60 years of jail, while Raju of Satyam has been given bail. India's record in drug discovery is nil even as our companies are experts in copying. The Business Standard reported that the R&D expenditure of the top 4 South Korean companies is more than the entire R&D expenditure of India excluding defense R&D. How can we have R&D if the pure sciences are seen as an apologetic choice? The Director of IIT (Madras) once said that 40 % of his students at the time of admissions had not seen the insides of a laboratory.

GDP growth and per capita growth and power and roads and education and a strong economy are vital for a stable society but a society which loses its moral fiber and its ethical moorings is bound to falter and sway to the swift winds of greed and its consequences. In the above context, I was surprised and pleased to have delivered a lecture at IIM (Calcutta) on Corporate Social Irresponsibility. It's a good beginning and high time.

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In Conversation with
Dr. Gurpreet Singh

By Jaya Indiresan and Aakanksha Tomar

*A*n industrialist, a philanthropist, an innovator, an educator, a rebel, Dr. Gurpreet Singh is many things but a magazine article sums it all up perfectly in calling him "Dr Courage". The visionary behind Sikhya, a unique school that caters to the children of the underprivileged sections of the society, Dr. Singh believes that "if we can touch the lives of a few children, it would have been a life well lived..." Such influential a personality yet so humble, so warm!

We met the amiable Dr. Singh at his residence in Delhi, where he told us the story of how he decided to open a school for the poor, the hurdles he faced in this journey, and his plans and hopes for the future of the school he built with so much love.

You're an industrialist; what got you interested in starting a school?

This question has a longish answer. My maternal grandfather, S. B. Dharam Singh, got the contract for building the Rashtrapati Bhawan; my father supervised the active construction. My grandfather had four sons; he gave each one a stone mine at a very young age; all of these were very young people and he gave away to each one of them a substantive amount of business with which they could lead a good, comfortable life. I think it was something that later on backfired; they all became playboys. My grandfather died when he was quite young, but about 10 years before he died, he decided that enough is enough, that he had given his sons a chance and they had not responded the way they should have responded. So he gave everything else that he had after that to a

trust, called Guru Nanak Vidya Bhandar Trust, a trust for education, especially for the girl child, especially vocational. So it was a trust that was found and prior to the partition of India, the Trust was running 47 schools located in Punjab which was then bifurcated and we lost all the schools that were in the Pakistan area. When my grandfather died, he left everything to be handled by my father, who he thought was the most responsible of the lot.

The properties that my grandfather owned, had been rented out at minimal rent, and the tenants would not vacate. So it came to a point where after my return from America in 1954, we found that the income of the Trust was not even meeting the costs. When my father took over, we were running six schools in Delhi, 3-4 schools in the villages nearby, and an orphanage near the Secretariat. So ultimately it was my responsibility to try and arrange the

financial stability of the Trust and it took me more than 20 years to do that. After taking care of all the finances, we got a decent corpus. The question was, now that we had a decent corpus and we could dedicate it to develop something, what should that be?

The first thought was to set up a University, not a school. I was on the Board of Washington University, it is my alma mater; the Chancellor of the University became a very good personal friend. They agreed to partner with us in setting up a twinning University in India wherein a Bachelor's degree would include two years of undergraduate study in India and a Master's in America. This concept had become popular in Malaysia. But when I gave the proposal to the government; it didn't see the light of day. They said that setting up a University is a state subject; so I went to Chandigarh and the administrator there promised me that something would be done but nothing happened. It took me 8-10 years struggling in the effort to put up a University for which we had all the basic inputs: money, a joint venture program, a good University contact, everything. I wasn't asking the government for anything except their blessing for setting up the University.

After having wasted 10 years, I got a call from my Vice President in Chandigarh telling me that Chandigarh administration had announced that they wanted to allot 10-11 school sites. I asked him to go ahead and apply. Ours was the only application which said that we want to start a school for the poorest of the poor, no other criteria. It must be for the underprivileged, but we want to give them the very best of education and infrastructure that can be given so that they are better or at par with students from the best of schools. So we set up a school.

What was your vision and mission behind starting this school?

The rationale behind starting this school was that poor children don't get the opportunity or access to such education which somebody at Doon or Mayo or St. Columbus does. So can we give them that sort of an opportunity, so that when they finish, they can sit with us on an evening like this, interact with you, have the presence to be able to talk to you about anything whether it be about politics, the world, technology, or whatever else. And can we then ensure that these children will get good jobs so that they can pull up not only their own family, but also the whole family group, so that their education has a ripple effect. That was one of the major considerations for starting the school. The second major consideration was that I've been the President of the CII (Confederation of Indian Industry) and there we have all the top industrialists of India, and I figured that if the school is successful maybe we can replicate it; that some of my colleagues whether it be Tata or Birla or Mahindra, would follow the same pattern.

Can you tell us a little about the founding and growth of the school?

There were certain decisions to be made. One was that instead of building such a fancy, elaborate school, why not consider building 4-5 schools in villages where such fancy construction wasn't required. My logic was that we wanted the best of faculty and they weren't going to travel 50 miles and go to a village where there are no toilets, no air conditioners, where they cannot live. They would want to live in a metro where their children can get good education, medical facilities, shopping, everything; so it had to be in a good city. Chandigarh was the obvious answer. So we started the school and unlike most other institutions, when it came to the opening, I said we will not invite a well know personality. We had the opening ceremony with five kids who had come from the slums. The auditorium which could accommodate about 650 people was full of the parents of the children and I told the other guests that there were no reserved seats. So you could see the judge of a High Court sitting next to a rickshaw puller, or the Secretary of Urban Development sitting next to a street vendor. I said that I'm sorry but that's the way that we're going to run this school.

Next we needed a Principal to head the school and I spoke to various people about this. Everybody liked the idea of a poor children's school but nobody was really available. I spoke to Mr. Harish Dhillon who was the Principal of YPS (Yadvindra Public School). He liked the idea, said he's going to be retiring in a couple of years, and that he could take an early retirement. But then the Rajmata of Patiala came to Chandigarh

and said that she's not going to relieve Mr. Dhillon yet as he still had a couple of years before retirement. So he told me that he was sorry but he couldn't join. I said, "Alright, so give me someone else," and he recommended a teacher who had been with them for 14 years. So she became our first Principal. Her name is Sonia Channi, and she's still the Principal. This is the founding of the school.

Can you give a brief profile of the students, teachers and the school and the challenges you faced?

When people ask me what the criteria for selection in the school are, I tell them that the only criteria is that the children should be so poor that they are not able to afford schooling. I'm not checking their brain power, I'm not checking what their knowledge today is, because we have to give them that; they are already at a disadvantage. And we teach them the other things, whether it is hygiene or etiquette. So it started like that and within a year we had about 600 kids.

Another question came up regarding getting accreditation. We had purchased the school site from the government after paying them the full amount; the school was built yet they kept bothering us saying that the boundary wall of the school had been built with machine-made bricks which had been set to a certain pattern which is illegal so unless we demolished it and built it with hand-made bricks without the pattern, we will not get a completion certificate. The Department of Education said that unless we had a completion certificate, they couldn't come to examine the school and give us accreditation. The CBSE people said that unless we had accreditation from the Department they could not give us recognition of CBSE.

Since I had told Sonia that I did not want government interference, she said in that case she can run the school only up to class VII. The strength varied between 700-800

and 1200. It cost us somewhere between Rupees 80 lakh to 1 crore per year for funding the children's clothes, food, books, etc. There were over 200 computers in the school; every child who came became computer literate within three months, they enjoyed it; the classrooms had interactive boards, we were beaming educational material into the classrooms; we had sports arrangements with the Australian Sports Authority. Our school did well in sports, painting, music, and other such areas. Our children got to be known in the Chandigarh inter-school competitions as very well-mannered, that they always referred to others as "Sir or Ma'am", and if they saw something lying on the field they picked it up and threw it in the dustbin. We were happy.

Then I got a call from the governor of Chandigarh, General Rodriguez. He said he had heard a lot about our school, that he was very keen on coming and seeing it for himself. He came, said that they're very impressed by what we were doing and asked what they could do to help. I told them that the children who came from a distance could not afford the bus fare and asked him if he could pass a rule by which the bus fare from their villages to the school would either be free or subsidised. He promised that it will be done. Years passed and nothing was done.

There was no voluntary response from the local population of Chandigarh which I thought will contribute considerably in a school for the underprivileged. We contacted a hospital and they promised that they will provide free medical check-ups, 3-4 months later that also stopped. Initially the newspaper people came, TV people came, said "oh what a great idea!" clicked some pictures, made some videos, sometime later they were not interested either.

So we had no government help, we got no community help, and what surprised me the most was that the parents of the kids were not really into it very much either. Many of the parents were either alcoholic or both of

them working, or they had a baby in the house and they insisted that the child looked after the sibling when the mother went out to work, etc. They were jealous of the children. We saw that some of the children started carrying plastic bags and shovelling food into them. When we asked them why, they said that their parents told them that they got a square meal everyday while the parents didn't so unless they brought back food for them they would get beaten up. We had insisted that one day of the week, the parents must come to the school for two hours so that we can teach them on what education is all about. No one was interested.

So here we were with a school, taking care of everything; the government didn't help, the industry help, the community didn't help, and even the parents didn't help! It was quite disheartening.

Did you have any difficulty getting the teachers to adjust to this model?

Yes, many of the teachers that we first hired couldn't mentally adjust to the fact that the students who came to the school were at first dirty, ragged, maybe even had some kinds of sores and the teachers had to teach them how to take a shower, how to use the toilet, how to dress neatly. So yes there was some hesitation, but those who stayed on with us were fully committed; they loved their job and they were very fond of the children.

What were the things that were working well in the school?

The children who came, their smiles were a reward for me. They were very happy. Going there and sitting down for lunch with those kids was a joy. The kids learnt manners, they learnt values. We found employment for them in places like Reliance. My idea was that when the school was fully operational we will fund for education till 12th standard and give them scholarships for admission in good colleges, and for education abroad.

Can you tell us some of your memorable experiences from the school?

I think each moment was memorable. One time we saw a girl walking barefoot, we asked her why she was barefoot when we had given her slippers and shoes. And she replied that she didn't want to spoil her shoes by wearing them. Another time we were taking rounds of the school and we spotted a boy sitting near the boundary wall squatting and doing the big job; we asked him why he was not using the toilet when we had taught him how to use it. He said it might get dirty and he could not afford to do that. So ultimately we decided that we will give the management of certain things in the hands of the students. One boy and one girl would be responsible for making sure that when the children leave the toilets they leave them clean. When our girls won 13 gold medals and 2 silver, and our school won the shield in Chandigarh inter-school competition, those were memorable moments. Those were really the rewards that I had appreciated and wanted.

What is the present status of the school and plans for the future?

In 2009 came the RTE Act and it became operational from 2013. Under this act all the schools under any sector, whether they are paid or free or government, have to provide education to children in their neighbourhood and the children have to be admitted into the school. The result was that the children who were coming from a distance could now get admission in the schools close by and therefore there was a reduction in students coming to our school. The second thing was that we had not got affiliation from CBSE and so we had classes only till VII. The parents were unhappy because if they couldn't get a degree or a diploma then what was the point of studying here for seven years and then trying to find another school?

So everything that we had hoped for didn't happen and therefore in 2013, with the RTE taking away some of the things, the parents' finding it more convenient to give their children education nearby, the community and government not being supportive, we decided to shut the school down.

We had to change the model. Instead of a free model and having a homogeneous group of poor children, it made more sense to run a school with a heterogeneous group where 25 percent of the children are poor and the rest 75 percent from other social classes so that they get to mingle with each other, understand each other, etc. It will be from Nursery to 12th standard and will be a paid school except for a specified percentage of children.

We are looking at implementing this model in the beginning of 2014. We will keep the education of the underprivileged 25 percent totally free of cost. But the people who can afford to pay will have to pay so that the school can become self sufficient. That is the plan.

One of the challenges now is that we need to change perceptions related to the association of the name of the school with the poorest of the poor so that people from other sections of the society don't hesitate from coming to the school.

This was an 8-10 year experiment in which I had high hopes; it didn't work out. The kids who came to school enjoyed it; they got something out of it. Even the teachers who taught there enjoyed it; but the vision which we had didn't work out. But we are going to start again with fresh hopes!

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Learning English as a Second Language: Unraveling the Puzzle

Sweta Singh

In our country, parents across different social strata desire one common outcome for their school going children... the ability to communicate fluently in English. Acquisition of mother tongue occurs through a natural progression, wherein by the age of three, a child uses 800 to 1100 words; by the time the child reaches six he/she has an expressive vocabulary of 2600 words and understands more than 20,000 words; and by the time he/she enters school, one can notice him/her making more abstract and complex conversations. On the other hand, acquiring English, a second language occurs more slowly and at times is a cause of concern for parents.

Parents are keen that their child becomes fluent in English. Fluency in English has become a status symbol. This is a common phenomenon in many countries where English is not the native language. Knowledge of English is associated with greater educational opportunity and has come to signify a membership of the elite culture. It is true that English today has become an *ideological vehicle* as it has value that exceeds its practical use (Park and Abelmann, 2004).

Scholars have argued that English is the world's first "global language" and its importance in our workplace cannot be denied. It is also believed that new languages are more efficiently and effectively learnt at a younger age. So, there is no harm in promoting English learning in young children. However, this should not be coupled with anxiety at the parents' or teachers' end. Be assured that your child can learn to understand and speak English if ample exposure and experiences are provided to him. Children are natural acquirers of language and pick it up without much conscious effort. They have intrinsic language learning skills. So developing English literacy should be a steady effort with fun filled experiences.

So how do children learn a second language? What strategies work in the acquisition of an unknown language? As parents what can one do to aid this process? Research tells us that the following strategies are helpful in learning new languages:

Provide Rich Parent-Child Reading Experiences

Focus on providing your child with as much exposure to the language as possible. The more exposure your child has to English, the more he/she will begin to understand. Reading may be an ideal way to do so.

Researchers have provided evidence that "parent–child reading exposes children to vocabulary that they have not encountered in daily life, and provides a context for parents' labeling of pictures and use of more sophisticated language, and hence it is especially effective in helping children to learn novel vocabulary words and more complex language structure (Chow, 2010)". Reading aloud regularly is a valuable exercise. From as early on as possible, you should read books that are in English as well as in the child's mother tongue. Try reading books with very simple language to the child. The child may not respond and interact as actively when you read English books (as compared to being read books in the mother tongue) but will slowly progress from a 'silent and understanding' phase to an 'interactive' one. Remember that your involvement is essential in your child's linguistic development.

Chow (2010) further suggests using *dialogic reading technique* for second
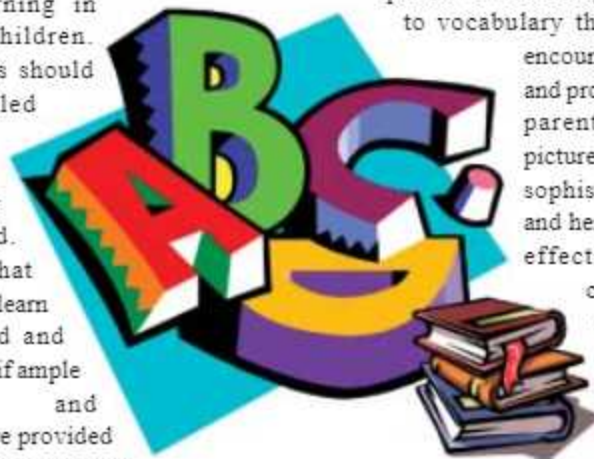
language storybook reading. While adopting this technique, the parent picks a simple storybook with little text; prompts the child to say something about the storybook; evaluates the child's response; expands the child's responses by rephrasing and adding information; and repeats the prompt to ensure the child has learned from the expansion.

Use Literacy Strategies: Text, Talk, and Pictures

Children learn language by using different literacy strategies. They create meaning in a combination of text, talk, and pictures. For example, the child may draw a picture to illustrate an event (example, his birthday party) and give it a brief caption. But when asked to describe the same, he/she may emerge with a rich description of the event. So meaning for the child does not reside just in the drawn picture or its caption but also in the child's tasks. This implies that all these strategies should be encouraged if we want the child to learn his/her first or second language. Some examples below illustrate the use of these strategies.

- **Drawing Stories:**

  You may ask your child to draw pictures and give it captions in English. If the child is too small to write, then these may be relayed to you verbally.

- **Providing Literary Models:**

  You may provide a literary model by describing something and then asking the child to repeat the exercise. For example, you may describe your home, 'our house is at… it has a…' etc. Next the child may be asked to speak a few lines to describe the house.

- **Pictures:**

  Engage your child by showing pictures and ask him/her to say a few lines about them.

Encourage both Oral and Written Work

Kim (2008) has reported greater efficacy in adopting an integrated approach (oral plus written) to second language instruction when compared to only oral instruction in his study with Korean children. This implies that we should encourage slightly older children to write too. One simple way to do this would be that after reading a 10-year-old a small story, you may ask the child to say two lines about one character and then ask him/her to write it down. Initially you will have to provide the child help in constructing the sentence and spelling.

Provide Guided Interactions

Involve other children (peers) who are also learning English as a second language. Engage them in games and activities while speaking English. In case you don't speak English well, invite a relative or friend who does to participate and interact. Singing songs and reciting nursery rhymes is another way to get your child engaged in learning English.

Role play is another interesting way to engage young children in joyful learning. You may provide some situations, such as "buying fruit at the market", "going to a library, "traveling by train", "visiting a park or cinema", "being a doctor", etc. Young children love to assume roles in such situations. They play the roles of doctors, teachers, customers, etc. and in the process have the opportunity of interaction in any social exchange governed by certain sociolinguistic conventions. The enthusiasm, the familiar settings and characters also contribute to children's increased understanding and recall (Smith 2006).

Be Your Child's Mentor

Children use both adults and peers as resources while learning. The school teachers inculcate spoken English, which must be reinforced at home. It would help to review the work being done in school, repeat, use the vocabulary in the school text, and translate it in the child's native language for the child's greater comprehension.

Above all, the learning activities for small children must be weaved around play, games, and interactive activities. ■

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In The World of
Foreign Languages

Aakanksha Tomar

> *Words are pale shadows of forgotten names. As names have power, words have power. Words can light fires in the minds of men. Words can wring tears from the hardest hearts.*
>
> **Patrick Rothfuss | The Name of the Wind**

If words have a similar effect on you, you're definitely a language junkie, and a course in a foreign language might quench your linguistic thirst, or even better, intensify it further! The great thing about a foreign language course is that irrespective of your other qualifications and field of interest or study, knowledge of an additional language always wins weighty bonus point.

Eligibility: There are various options to learn foreign languages. Whereas in some institutes there is no criterion as such for admission in a beginners' course, several universities conduct entrance tests for language courses at graduate and post graduate levels. Such tests aim at tapping the language aptitude, logical reasoning and general knowledge of the candidates. Some students start learning a foreign language in their schools; many others opt for courses after 10+2 and go for graduation courses that are offered by various institutes, colleges, and universities. There are also some certificate courses and diploma courses which are available in a condensed form and take less time and duration – candidates who have done 10+2 are eligible for such courses. Those who are interested in higher education in foreign languages can opt for post-graduation and PhD programs being offered at selected universities in India.

Job Prospects: Academic qualification and proficiency in foreign languages opens the gate for a career in fields such as tourism, diplomatic services, entertainment, public relations and mass communication, international organisations, publishing, interpretation and translation, etc. In the past few decades, with the rise in multinational trade, opportunities for people with multiple language skills have increased manifold. Not only this, experts believe that even the economic slowdown has not really affected the career prospects of students in this field, with BPOs, KPOs, and other multinational companies still offering attractive packages to students.

Some of the top companies that hire language experts are: Accenture, Evalueserve, Wipro, Fiserv, TCS, Tech Mahindra, Infosys, Kuliza.

Remuneration: Foreign language professionals can earn handsome salaries depending upon the work and the organization. Professionals working for PR or Marketing Department of any multinational company can earn Rs 30,000 – 50,000 per month. Teachers can earn any salary in the range of Rs 15,000 to Rs 25,000 per month. Translators, on the other hand, can make Rs 250 to Rs 500 per page; compensation depends a lot upon the proficiency in the language and the translator's experience. Similarly, an interpreter who is paid on an hourly basis can earn Rs 2000 to Rs 4000 per hour, again depending upon their competence and work experience.

Institutes Offering: There are a large number of schools, colleges, and universities in India that are offering foreign language courses at different levels. Some of the prominent institutes are: The Department of Germanic and Romance Studies, University of Delhi is offering programmes in Italian, French, German, Spanish, and Arabic; University of Mumbai; University of Calcutta; Kurukshetra University; Bhartiya Vidya Bhawan, New Delhi; Max Muller Bhawan; Chinese Language Institute; Instituto Cervantes, among others.

Back

Education in India:

A student's perspective; the brief, unscientific observations of a subjective layman.

Shievani Singh

I am not giving any background to myself, because then perspectives get coloured. It, according to me, is not important where I have done my schooling and graduate study from, at least not in this particular instance. I'm diving right into it now, here we go – cannonball!

We begin with a funny anecdote. It goes like this- an illiterate father and his educated son are camping. Late at night, the father wakes up the son, tells him to look up and asks him, "Do you understand what this means?" The son thinking that his father is challenging his knowledge, instantly replies, "Of course, it is our night sky made of several celestial bodies such as stars, moons, planets, etc., which make up our galaxy- the milky way." The father looks at him and says, "No, it means our tent has been stolen." Therein lies my first point on the education system of India, which is yes, slightly critical. A lot of knowledge, but very little learning. For instance, I know in detail the geography of India, which crops grow where, which rivers and lakes flow where, the mountains, the capitals, the highways, etc., but what are the implications? What happens in case of climate change? Which rivers will dry up, how will the crop plantation pattern change? Please do not ask out of syllabus questions!

My second point is the pressure to excel- you know it's getting ridiculous when you see coaching institutes for children in first standard. Does this sound familiar? "Have you seen Pari's grade average? She has got a 96 percent! You study and go to tuitions, why are yours so low?" or "80 percent marks?! You will never get into a good college. Instead of wasting all this time, why don't you go study?" I'm not continuing. It's giving rise to unpleasant childhood memories. Also I should point out that it is not just parents that pressure you for marks. The teachers do so as well. It is a nightmare of taunts for the weak in studies and a 'will never be satisfied attitude' for the toppers. Parents and teachers please drink some cold coffee and try to cool it a little. Marks are important, yes! But stop letting it be the meaning of existence of a child's life. There are other important things like, being a good person, a good citizen, having a healthy mind and body, building resilience against stress, things that are being largely ignored today. Encourage the kid to go out, play, participate in sports or nurture hobbies he/she has. A meaningful happy life is the ultimate aim, right?

There is so much that can be said about India's education system. The difference between government and private schools and colleges, the syllabus, the teachers, the literacy rate, the political involvement; in other words, people looking for a thesis topic for their PhD, lo - behold the answer to your problem.

My concluding statement Your Honours is this- We as individuals spend the first quarter of our lives studying in schools and colleges trying to get an education, the basic purpose of which is to equip us for life. Ask yourselves, are you ready? If today you step outside your house to work and travel, are you ready based on our education system to handle "life" as such? Where do you get your ration cards, your voter ids? Who would you talk to if the roads of the street are potholed and terrible? Where would you go to register a complaint of, for instance an officer of the law or the government? What medical insurance should you take? Forget all that, you are standing in a long line for some important purpose, it's urgent and cannot be done online, some boisterous man cuts in front of you and you know he is not above fighting, but the counter will close soon and he just reduced your chances of getting the work done, what would you do? And finally - How long will it take for you to tell that your tent has been stolen? As Oscar Wilde said "Education is an admirable thing, but it is well to remember from time to time that nothing that is worth knowing can be taught."

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e-mail: shv_3_16@yahoo.co.in
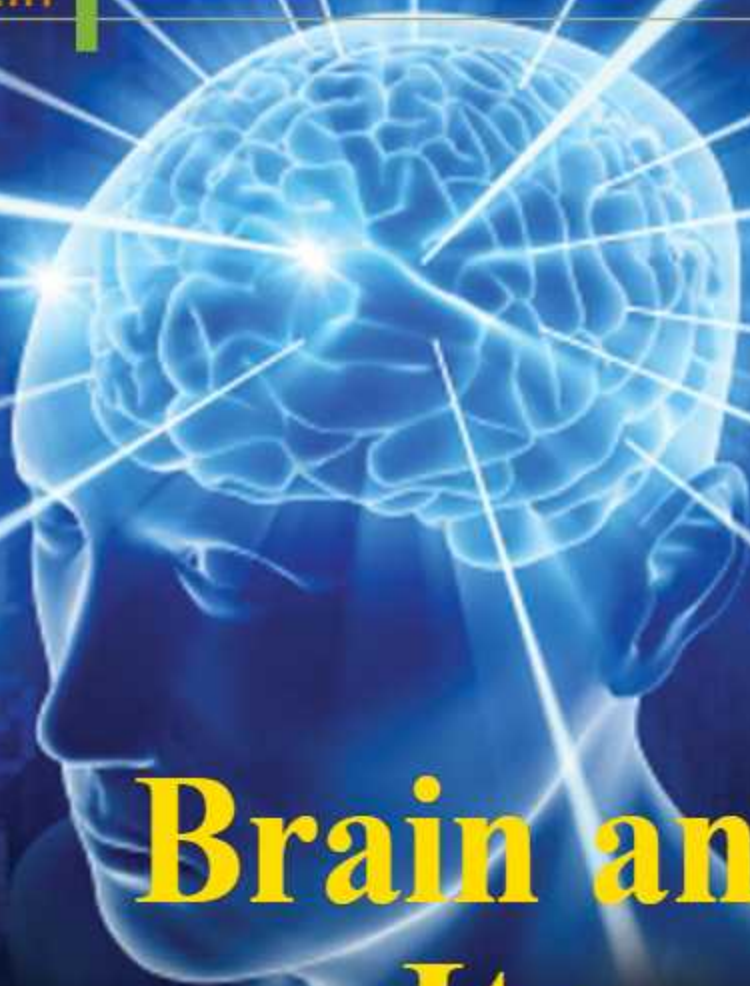
Brain and Its Anatomy

Dr. Rajesh Acharya

Brain, one of the most complex organs of the human body, gives us awareness of ourselves and our environment, processing a constant stream of sensory data. It controls muscle movements, the secretions of glands, and even our breathing and internal temperature. Every creative thought, feeling, and plan is developed by our brain. The brain's neurons record the memory of every event in our lives.

Anatomy

The brain is divided anatomically into three main regions:

The **forebrain** (or *prosencephalon*) is made up of cerebrum, thalamus, hypothalamus, and pineal gland.

The **midbrain** (or *mesencephalon*), located near the very centre of the brain between the interbrain and the hindbrain, constitutes a portion of the brainstem.

The **hindbrain** (or *rhombencephalon*) consists of cerebellum and pons.

HINDBRAIN (RHOMBENCEPHALON)

BRAINSTEM — CEREBELLUM
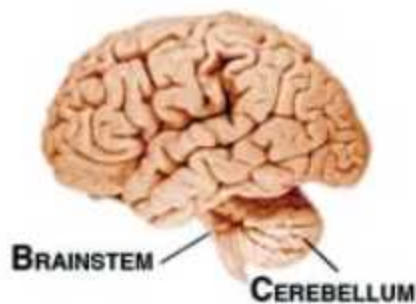
Brainstem

The brainstem is made of three regions: the medulla oblongata, the pons, and the midbrain. A net-like structure of mixed gray and white matter known as the reticular formation is found in all three regions of the brainstem. The reticular formation controls muscle tone, consciousness, and sleep.

The *medulla oblongata* is a cylindrical mass of nervous tissue that connects to the spinal cord and to the pons. Within the medulla are several regions of gray matter that process involuntary body functions related to homeostasis. The cardiovascular center of the medulla monitors blood pressure and oxygen levels and regulates heart rate to provide sufficient oxygen supply to the body's tissues. The medullary rhythmicity center controls the rate of breathing to provide oxygen to the body. Vomiting, sneezing, coughing, and swallowing reflexes are coordinated in this region of the brain as well.

The *pons* is the region of the brainstem which together with the cerebellum, forms *metencephalon*.
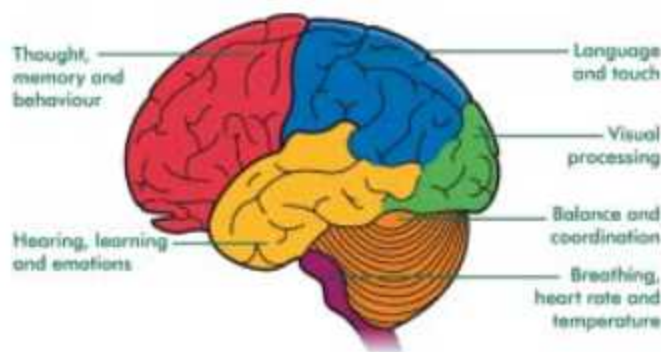
Cerebellum

The cerebellum is a wrinkled, hemispherical region of the brain located posterior to the brainstem and inferior to the cerebrum. The cerebellum helps to control motor functions such as balance, posture, and coordination of complex muscle activities. The cerebellum receives sensory inputs from the muscles and joints of the body and uses this information to keep the body balanced and to maintain posture. The cerebellum also controls the timing and finesse of complex motor actions such as walking, writing, and speech.
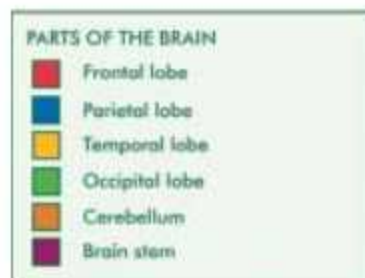
MIDBRAIN (MESENCEPHALON)

The midbrain, also known as the mesencephalon, is the most superior region of the brainstem. Found between the pons and the diencephalon, the midbrain can be further subdivided into two main regions: the tectum and the cerebral peduncles.

The *tectum* is the posterior region of the midbrain, containing relays for reflexes that involve auditory and visual information.

Thought, memory and behaviour

Hearing, learning and emotions

Language and touch

Visual processing

Balance and coordination

Breathing, heart rate and temperature

The lobes and functions of the brain

PARTS OF THE BRAIN

- Frontal lobe
- Parietal lobe
- Temporal lobe
- Occipital lobe
- Cerebellum
- Brain stem

The pupillary reflex (adjustment for light intensity), accommodation reflex (focus on near or far away objects), and startle reflexes are among the many reflexes relayed through this region.

Forming the anterior region of the midbrain, the *cerebral peduncles* contain many nerve tracts and the substantia nigra. The substantia nigra is a region of dark melanin-containing neurons that are involved in the inhibition of movement. Degeneration of the substantia nigra leads to a loss of motor control known as Parkinson's disease.

FOREBRAIN (PROSENCEPHALON)

Diencephalon

The thalamus, hypothalamus, and pineal glands make up the major regions of the diencephalon.

The *thalamus* consists of a pair of oval masses of gray matter inferior to the lateral ventricles and surrounding the third ventricle. Sensory neurons entering the brain from the peripheral nervous system form relays with neurons in the thalamus that continue on to the cerebral cortex. In this way the thalamus acts like the switchboard operator of the brain by routing sensory inputs to the correct regions of the cerebral cortex. The thalamus has an important role in learning by routing sensory information into processing and memory centers of the cerebrum.

The *hypothalamus* is a region of the brain located inferior to the thalamus and superior to the pituitary gland. The

hypothalamus acts as the brain's control center for body temperature, hunger, thirst, blood pressure, heart rate, and the production of hormones.

The *pineal gland* is a small gland located posterior to the thalamus in a sub-region called the epithalamus. The pineal gland produces the hormone melatonin. Light striking the retina of the eyes sends signals to inhibit the function of the pineal gland. In the dark, the pineal gland secretes melatonin, which has a sedative effect on the brain and helps to induce sleep. This function of the pineal gland helps to explain why darkness is sleep-inducing and light tends to disturb sleep. Babies produce large amounts of melatonin, allowing them to sleep as long as 16 hours per day. The pineal gland produces less melatonin as people age, resulting in difficulty sleeping during adulthood.

Cerebrum

The largest region of the brain, our cerebrum controls higher brain functions such as language, logic, reasoning, and creativity. The cerebrum surrounds the diencephalon and is located superior to the cerebellum and brainstem. A deep furrow known as the *longitudinal fissure* runs midsagittally down the centre of the cerebrum, dividing the cerebrum into the left and right hemispheres. Each hemisphere can be further divided into 4 lobes: *frontal, parietal, temporal,* and *occipital.*

The surface of the cerebrum is a convoluted layer of gray matter known as the *cerebral cortex.* Most of the processing of the cerebrum takes place within the cerebral cortex. The bulges of cortex are called *gyri* (singular: gyrus) while the indentations are called *sulci* (singular: sulcus).
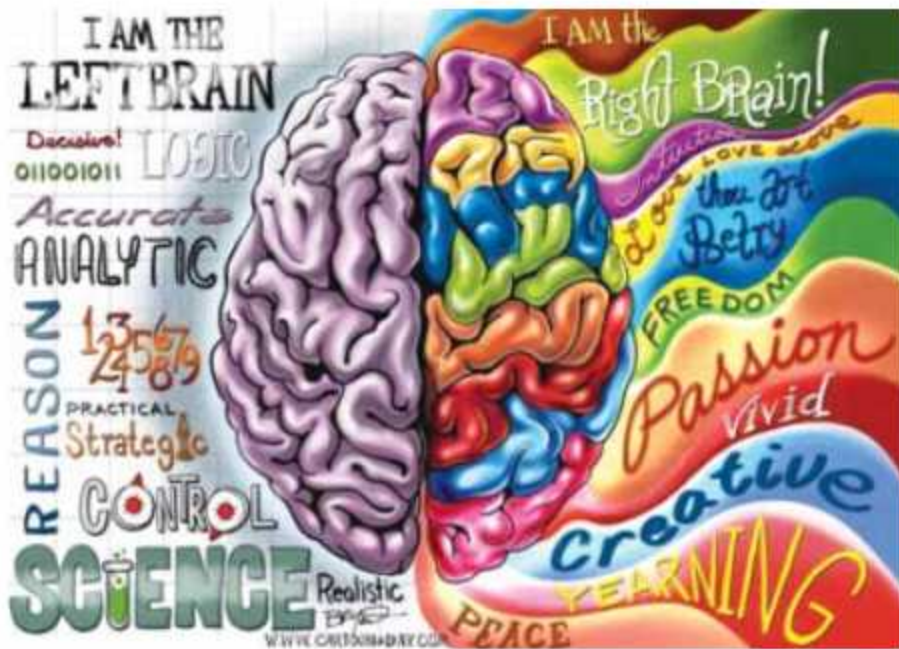
A band of white matter called the corpus callosum connects the left and right hemispheres of the cerebrum and allows the hemispheres to communicate with each other.

Deep within the cerebral white matter are several regions of gray matter that make up the *basal nuclei* and the *limbic system.* The basal nuclei, including the globus pallidus, striatum, and subthalamic nucleus, work together with the substantia nigra of the midbrain to regulate and control muscle movements. Specifically, these regions help to control muscle tone, posture, and subconscious skeletal muscle. The limbic system is another group of deep gray matter regions, including the hippocampus and amygdala, which are involved in memory, survival, and emotions. The limbic system helps the body to react to emergency and highly emotional situations with fast, almost involuntary actions.

With so many vital functions under the control of a single incredible organ - and so many important functions carried out in its outer layers - how does our body protect the brain from damage? Our skull clearly offers quite a bit of protection, but what protects the brain from the skull itself? Read on!

Meninges

Three layers of tissue, collectively known as the meninges, surround and protect the brain and spinal cord.

The *dura mater (latin=tough mother)* is the outermost layer which forms a pocket around the brain and spinal cord to hold the cerebrospinal fluid and prevent mechanical damage to the soft nervous tissue.

The *arachnoid mater (latin=spider like mother)* is found on the inside of the dura mater. Much thinner and more delicate, it contains many thin fibers that connect the dura mater and pia mater. Beneath the arachnoid mater is a fluid-filled region known as the subarachnoid space.

As the innermost of the meningeal layers, the *pia mater* rests directly on the surface of the brain and spinal cord. The pia mater's many blood vessels provide nutrients and oxygen to the nervous tissue of the brain.

Cerebrospinal fluid (CSF) is a clear fluid that surrounds the brain and spinal cord. The brain and spinal cord float within the CSF. The pressure of the CSF acts as a stabilizer and shock absorber for the brain and spinal cord. CSF is produced in the brain by capillaries lined with ependymal cells known as choroid plexuses. Blood plasma passing through the capillaries is filtered by the ependymal cells and released into the subarachnoid space as CSF. The CSF contains glucose, oxygen, and ions, which it helps to distribute throughout the nervous tissue.

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Why Indian Education System Needs Rebooting

Puneet Sharma

A good education is perhaps the single most important concern of the Indian middle class. Even before young couples turn into parents, they worry about whether or not their future children will receive quality education in this country. And the status of education in India in the last couple of decades has been such that this anxiety is not entirely unwarranted. As a parent with similar concerns, I would like to highlight three different facets of the current education system, especially school education, and how these are flawed.

First is the economics of school education. This basically narrows down to the fact that education is very expensive, not affordable for most parents. And if one is not able to afford private education, then there is no alternative other than sending their kids to a government school. Government schools in India completely lack quality at every level. They fail miserably at all the parameters of quality, whether it is the faculty or the emphasis on learning. So the big problem for parents today is that, on the one hand not everyone is able to afford a decent education for their children, and on the other hand, because education is a vital necessity, they send them to government schools, the effect of which could in fact be the opposite of what is intended through education.

The second aspect is the politics of education. Different kinds and classes of schools exist today and as a matter of fact, when a child goes to a specific school, a certain value of discrimination is being created in him/her. For example, certain private schools run a regular school for the children whose parents can afford to pay the full fees, and they also have an evening school which is run in the afternoon, after the regular school timings. A school can justify the existence of these differences by simply saying that the children who go to evening schools do not have the same level of understanding and therefore cannot be bunched along with the rest of the kids. But the fact is that it is actually the politics of schooling, or rather the politics of education, which has led to this kind of a bifurcation. Ironically, nobody seems to realize that the objective of education essentially is to do away with these very differences that exist in the society. In its stead, what is happening is that we are perpetuating these differences in the society by having two different schools for two economically different classes of students. And another troublesome detail is that the parents who have been paying the full fees for their child's education would probably not want their child to study with the children who come from economically deprived sections of the society. Not only is this a big problem, it is actually a mockery of the entire education system that on the one hand we are promoting education because we want to have an egalitarian society, an equitable society, and on the other hand the schools are displaying such class-based divisions. Of course, they claim that they are fulfilling their social objective, but in my opinion it is highly unfair.

And finally, the social and cultural aspects of education. The crucial question in this regard is: Are our schools actually imparting the kind of values that they are expected to impart, that are the basic purpose of education, the most important being the ability to be receptive to anything that is new? Are we doing that? Frankly, it does not seem so. School curriculums incessantly emphasise on the course content and on finishing the syllabus, hardly ever on learning. While there is a lot that has been done as far as the NCERT books are concerned for school children (for instance, science and mathematics books actually talk about certain experiments without giving the results, so that the child can develop curiosity to do these simple experiments), if one actually asks a child, they don't really seem to get to do all of these learning tasks. I have never known of any child who knows what is going to happen if he/she does what the experiment says. Schools don't seem to have the time to encourage children to discover knowledge by doing because schools are under a tremendous amount of pressure to complete the syllabus.

In conclusion, I would say that there is a desperate need of some kind of a paradigm shift as far as the school education system of India is concerned. Our schools need to rehash their priorities as the society needs 'thinking' citizens, citizens whose thinking would not be restrained by any boundaries, classes, or political mannerisms.

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Aakanksha Tomar

A Blast from the Past:
Making a Career in
Archaeology

We have all grown up watching famous archaeologists like Indiana Jones and Lara Croft go on awesome adventures to unearth amazing facts about the past. I don't know if you can, but I certainly cannot deny the unmatched excitement and thrill of discovering what lies buried in the past, frozen in time, waiting to be revealed. Nor can I say that I have never imagined myself being in the adventurer's shoes. If you have had similar fantasies then I am sure you would like to read what's coming next.

If you are driven by a passion for history and the cultures of the past, a career in archaeology might help you live your dream. Archaeology is a multidisciplinary subject that involves knowledge of History, Geography, Anthropology, Geology, Chemistry, Art, and Literature. It focuses on the study of historical times, cultures, societies, and their material developments most often through the investigation of historical sites. These sites offer prospects of discovering the remains of ancient cultures in the form of relics such as utensils, jewellery, coins, weapons, art, and even architecture like the Indus Valley Civilization where the architectural structures of entire cities have been discovered.

Identification of relevant historical sites, their excavation, and the recovery and analysis of the remains from them are the primary duties of an archaeologist. Thus, it naturally follows that the work involves spending a lot of time at the site of excavation. One is often required to camp at the site and maybe even remain there for months at a stretch, as it is a job that entails a long process of excavating, carefully cleaning, analysing, documenting, and preserving historical artefacts. It is therefore imperative that a person aspiring to make a career in this field has patience and persistence to stay focussed on a project in spite of its long length. They should have endurance and tenacity, endurance so that they don't lose heart when the results are slow or when external organizations stop funding their projects; and tenacious so that they can stay focused and determined under such circumstances.

To make a successful career in archaeology, it is advisable to take up undergraduate studies in disciplines such as History, Anthropology, Sociology or Geology. Nevertheless, it is wise to contact the University of one's choice and find out which bachelor's degrees are acceptable in order to enrol for a post graduate course in Archaeology. There are universities like the Maharaj Sayajirao University of Baroda that offers a three years bachelor's degree in Indian History, Culture and Archaeology. Similarly, the Banaras Hindu University, offers two undergraduate courses in this field: a three year honours program in Ancient Indian History, Culture and Archaeology and a three year vocational program in Museology and Archaeology. The Institute of Archaeology under the aegis of Archaeological Survey of India (ASI), New Delhi, conducts a two year Post Graduate Diploma in Archaeology. Also, there are two special programmes in Archaeology offered by the Delhi Institute of Heritage Research and Management.

Since Archaeology is a specialised branch of study, the career prospects are very good. In India, archaeologists have a very rich field for work as the Indian civilisation stretches thousands of years in the past. One can find jobs in the state Archaeological departments by appearing for the State Public Service Commission examinations. Similarly, one can find a job with the Archaeological Survey of India by successfully clearing the Union Public Service Commission (UPSC) examinations. The National Museum in New Delhi, the state Museums, and the National Trust for Art and Culture Heritage also employ archaeologists. Besides these, one can also teach in various colleges and universities.

But despite all the thrill and glamour, remember that it is real work. So after a hard day's toil in a cold, wet, and muddy trench, be ready to put your feet up and have a laugh about how popular fiction portrays the role of an archaeologist. And remember the words of Dr. Indiana Jones (from *Last Crusade*, 1989) that "*Archaeology is the search for fact, not truth ... we do not follow maps to buried treasure and 'X' never, ever marks the spot*".

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Internalizing ICT in Classrooms - Introduction to SAMR Model

Varadarajan Sridharan

Educational Technology is the buzzword today if you are one of the so-called "tech-savvy" stakeholders of our educational ecosystem. It is also abbreviated fondly as Ed Tech, which appears to increase our level of savviness or naivety depending on which side of the ecosystem we represent. We tend to think that Educational Technology is something that has arrived into our schools since the later part of the 20th Century or since the beginning of the 21st Century. But as Prof. Marmar Mukhopadhyay states it in his book 'Educational Technology Knowledge Assessment', we are often unaware that the roots of Educational Technology can be traced back to the 1600s by Western scholars, and to much earlier days in older countries like India, where they can be traced back to the Upanishads. The history and evolution of Educational Technology are not the subject of my topic here, however the adoption of it is.

It is widely understood and agreed upon that ICT in education is an innovation. And as with the life cycle of any innovation, its adoption is also staged, with the innovators and early adopters embracing it with open arms, and the late majority and laggards only postponing the inevitable. However, what should be a cause of concern especially in India is the rapidly growing number of educational institutions that bring with them a pressing need to stand out of this burgeoning ecosystem. So, where usually the early adopters also embrace and internalize an innovation, we are

seeing a string of early adopters of ICT in education in India who are rather adopting ICT for all the wrong reasons. The good part though is that we are adopting ICT in education. The bad part is the lack of a long term vision and strategy with such hurried technology adoption. To right this at least for now, we need to start focusing on what

Dr. Ruben R. Puentedura is the Founder and President of Hippasus, an educational consulting firm focusing on transformative applications of information technologies to education.

we do with technology once we get it in our classroom. How do we use it for its intended outcome and beyond, and to optimize human learning? How do we learn to digest the good food that is ICT which has been pushed down our throats, and how do we begin to take a liking for more of that food? How do we learn to eat it in healthy portions and not end up malnutritioned or become a glutton? (Did I tell you that I am a foodie?)

So again, we have the technology in the classroom, how do we integrate it to the teaching-learning process? Where do we begin our adventurous journey in ICT integration which may one day lead to technological singularity?

Fortunately for us, this question has been pondered by researchers, and we do not have to start from scratch to integrate ICT in the teaching-learning process. I present to you one such well-researched and widely-used model for technology integration in classrooms.

SAMR Model

The Substitution Augmentation Modification Redefinition (SAMR) model developed by Dr. Ruben Puentedura (http://www.hippasus.com/) provides a high-level approach to technology adoption. There are enough resources online to read and understand the SAMR model. Here is the link to a 2-minute video that you can watch to get started on the SAMR model - http://www.youtube.comwatch?v=us0w823KY0g

Let us understand this model from two separate usage case scenarios: a) Evaluating classroom assignments, and b) Collecting school fees.

a) *Evaluating Classroom Assignments:*

Let us say that the current process is that the teacher gives an assignment, communicates the deadline, and accepts written entries as submissions. Students use the resources at their disposal, and submit their assignments in written form

either on paper or in notebooks, which the teacher then evaluates. How does SAMR model of technology integration work in this case?
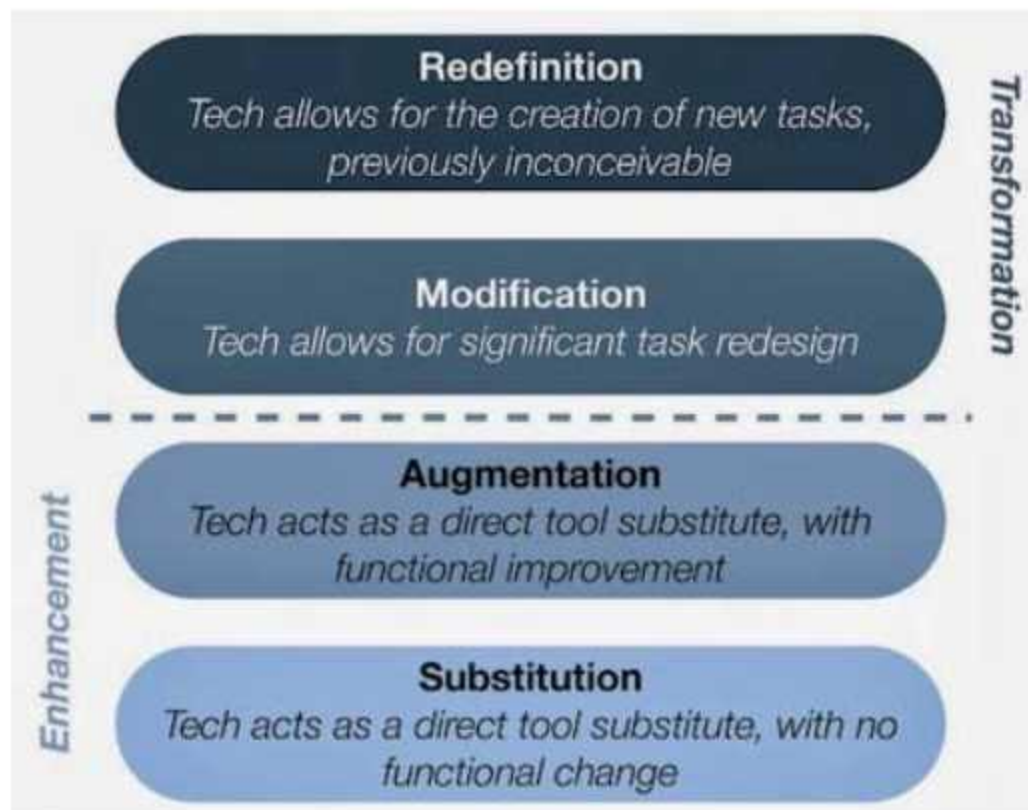
Substitution (S) – The teacher sends an email about the assignment to the all students in the class using individual email ids. She requests them to type the assignments in Microsoft Word, take a print out, and submit it to her for evaluation. She corrects the entries manually.

Augmentation (A) – The teacher sets up a Google Group for the entire class, emails the group about the assignment. She requests the students to submit the assignment via email as an attachment. She evaluates the same using Microsoft Word change tracking options and sends it back as an attachment to the students.

Modification (M) – The teacher sets up a Google Form to conduct an assignment. And she lets the students respond via multiple-choice objective questions and subjective answers. She shares the link to the Google Form with the class. She controls when the form is open for responses,

thereby controlling the deadline for the assignment. For the objective type questions, she uses one of the existing Scripts to auto-correct the answers. For the subjective type questions, she evaluates them manually. Students can also submit separate Google Docs for such subjective answers, which the teacher comments on. Students can respond to the teacher's comments on Google Docs and create a continuous thread for discussing that topic with the teacher.

Redefinition (R) – The teacher announces an assignment to the class. The class is divided into 5 groups; each of them is then given a part of the assignment. Each student group sets out to create a mindmap using Freemind or other mindmapping apps to research their part of the assignment. The groups then come together and stitch their mindmaps together, sharing their individual learning and evolving a common learning. The students then set out to create a movie using Final Cut Pro, documenting their understanding. The movie is then presented in front of their parents as a class accomplishment. Evaluation is done at 3

Redefinition
Tech allows for the creation of new tasks, previously inconceivable

Modification
Tech allows for significant task redesign

Augmentation
Tech acts as a direct tool substitute, with functional improvement

Substitution
Tech acts as a direct tool substitute, with no functional change

Transformation

Enhancement

levels, one at the classroom level, one at each group level, and one at the individual level. The entire exercise is integrated into an LMS, where these evaluation results are captured and used for grading the students.

b) Collecting School Fees:

Let us say that the current process is for the school to fix certain fee payment deadlines for each term. A parent is supposed to walk into the school within the deadline for each term, tender cash or cheque at a specific counter and collect the receipt for payment of school fees for that term. How can the SAMR model be applied in this case?

Substitution (S) – The school establishes an email and mobile number database of all the parents. The school sends an email or SMS notifying when the fee is due. A parent can pay by cash or cheque at a specific counter in the school, which then uses an ERP software to generate a receipt, thereby directly accounting for the money in the school's account.

Augmentation (A) – The school notifies the parents by email or SMS and provides a link to an online payment site or provides the IFSC code and the school account number, where the parent can directly transfer money online from the comforts of his or her home. Since the payment is done directly to the bank, the school then follows up to see if the payment was done on time.

If late, the school follows up with parent regarding the payment of late fees.

Modification (M) – The school runs a full-fledged website, including a payment gateway. Parents can subscribe to notifications on the website for different school related events, including fee reminders. Parents can choose where to receive such notifications, on which email ids or phone numbers. Parents can also setup an auto-debit account or credit card with the school website, which will automatically process the payment for school fees. But the school notification system will provide enough notices to the parents on when that transaction would occur. The school displays all available scholarships and educational loan options to the parents, which they can choose to apply for. The processing of such applications is kept transparent on the website and the school fee payment is adjusted according to the outcome of that process.

Redefinition (R) - As the school goes more and more modular in the way that it offers learning options, it allows the parent to build *a la carte* mode of payment for the services opted by their wards in that school. There is a single window system given by the school to the parents that takes care of any and all payments related to the school. Proration of fees based on teacher availability, course workload, student attendance, student personalization need, etc. can be derived from the school's LMS. A detailed school fee statement can then be generated to explain the break-up of such prorated fees. Parents are also able to visualize a return of investment on their wards' fee expenses.

As you can see in the above examples, our progression from Substitution to Redefinition phase has considerably changed the original scenario. The Substitution phase suggested using technology for a previously well established process, where the technology is merely a comfortable or easier way of accomplishing that process. The Augmentation phase introduces a new functionality to that process, taking into account some of the benefits of ICT integration in the Substitution phase. The Modification phase is when the school embarks on a significant redesign of the process (assignment evaluation or school fees collection). It is during this redesign that the school goes back to the original need of that process before ICT, and creates a solution using the current world advances in ICT. The Redefinition phase just helps the school launch that same process to an orbit that was previously never thought of, or was thought of as impossible. The scenarios presented above under the Redefinition phase may be, up to an extent, theoretical, however not improbable.

More such examples of SAMR model can be seen on the internet. Here are a few links to get started:

1. *A sample SAMR model for iPad integration use case - http://www.pinterest.com/pin/124482377174162766/*

2. *A series of iTunes vodcasts from Dr. Ruben Puentedura about the SAMR model - https://itunes.apple.com/itunes-u/as-we-may-teach-educational/id380294705?mt=10#ls=1*

3. *A presentation again from Dr. Ruben Puentedura about SAMR Model and its relationship to another widely-used framework for technology integration in classroom, TPACK - http://www.hippasus.com/rrpweblog/archives/2013/10/02/UnderstandingSAMR.pdf*

4. *A mapping of SAMR model to Bloom's Taxonomy developed by Kathy Schrock - http://www.schrockguide.net/uploads/3/9/2/2/392267/2797403_orig.jpg*

5. *A video of Dr. Ruben Puentedura explaining the SAMR model - http://www.youtube.com/watch?v=gYYcvADUovY*

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Mindset:

The New Psychology of Success.

How we can learn to fulfil our potential

-by Carol S. Dweck

Dharam Prakash

W hen I looked at the title of this book, it was the last part of the title, "How we can learn to fulfil our potential" which prompted me to read on.

The first question that the title raises is, "What is mindset?" The initial few pages help you to discover the answer that "a belief about oneself generally guides a large part of one's life." Much of what one thinks of as one's personality actually grows out of this belief or mindset. The mindset may also prevent oneself from fulfilling one's potential.

Based on the extensive research done by the author, it has been found that mindsets can be categorized into two types- growth oriented and fixed. In the initial few pages the book also poses some questions to the reader. By answering these questions, one can find out for oneself what kind of a mindset one has.

With detailed examples and their analysis, the author has been able to build up the core of having a growth-oriented mindset which will propel one to realise one's potential and be successful. This also raises another question, "Can fixed mindsets be changed? If yes, how?" The book provides

basic guidelines if one is ready to take up the challenge and have a learning or growth-oriented mindset.

Two sections, one on "Relationships" and another for "Parents, Teachers, and Coaches" will be of interest to readers across the whole spectrum. The section on relationships systematically unfolds the need for nurturing relationships by using our interpersonal communication skills and refraining from being judgemental. Relationships tend to become dull because quite lot of us either do not learn the skills needed or don't use the skills we have. Quoting from the book "a no effort relationship is a doomed relationship, not a great relationship." Stories of different people and their relationships highlight the myriad dimensions of relationships and how a growth oriented mindset helps in their nurturance.

The section on "Parents, Teachers, and Coaches" highlights the crucial role of the parents, teachers, and coaches in the development of children. Some of us
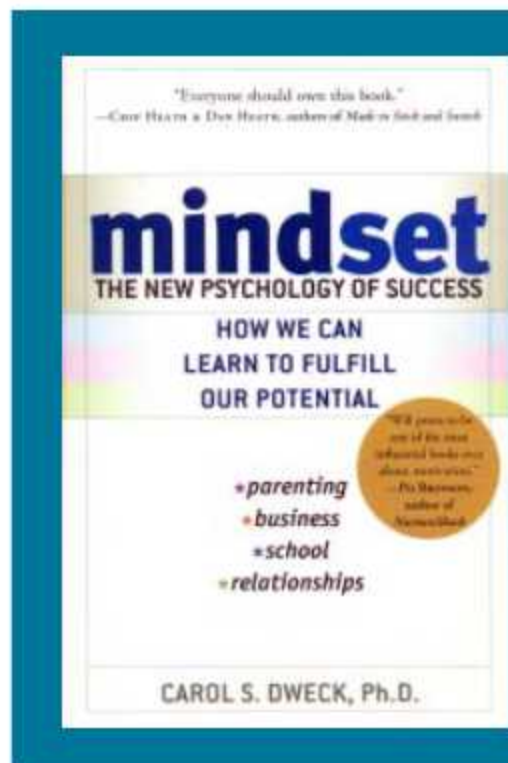
motivate the child by praising the child by using words like "smart", "brilliant", etc. The child may interpret this by thinking, "If I do not learn quickly then I am not smart" and may not like to take more challenging tasks, for completing which he/she has to take more time. Judging and punishing the child may not teach him/her what you want to. Children may get the message that if they go against the parents' rules, they will be judged and punished. Various stories taken up to illustrate different dimensions clearly highlight such gaps between the intended messages and the messages that actually get communicated through the communication and actions of parents and teachers. After reading the book, I realised that it presents a growth oriented-learning approach to various aspects of life and the different roles we play in those aspects. Some introspection and reflection after reading would help in realizing or maximizing one's potential.

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Multimedia Education for Teachers

Prof. Mukhopadhyay addressed CBSE's National Sahodaya Conference on School Education

Teaching may have to be banned to help students learn. Prof. Mukhopadhyay referred to his experiment in his experimental village school – high end quality low end cost school in Udang. It is a school that runs on the principle of minimally invasive learning where teachers just set the stage for students to discover knowledge. No books to home, no home work, hence no private tuition. The experiment has been visited by high power committee of the Government of West Bengal, and several other educationists. Drawing from this experiment, he presented another experiment on ICT integrated blended learning design for developing higher order thinking. He emphasised the use of Open Education Resources (OER) which are of high quality and available free of charge. He presented a 4.24 minute 3-D digital content on Newton's Laws of Motion that usually takes about 4 periods to cover. Even after repeating the same or other digital contents for three or four times followed by some explanations and/or group learning exercises, the teacher will have three periods free for a variety of other activities to take the learning on the Newton's laws to greater heights. Team ETMA of Varadrajan, Paushalee and Ritu demonstrated a role play. Sir Isaac Newton (a teacher wearing a Newton-Mask) himself came down to explain his laws; a student and the teacher asked questions. Sir Isaac Newton asked the students to design experiments outside the text books to test his laws and prove them either correct or wrong. Indeed, he challenged highest order thinking, namely creativity. According to Mukhopadhyay, one of the prerequisites of applying ICT Integrated Blended Learning Design is experiencing ICT integrated learning by teachers themselves. He then presented his recent experiment on multimedia course on CCE for training of teachers.

The project originated from the question of how to train approximately 7.50 lakh teachers in CBSE affiliated schools with authenticity, uniformity, quality, and cost feasibility. As a response to all these four challenges, ETMA engaged itself in an arduous research on concepts and practices of CCE, meaning and implications of all the components of CCE, questions and apprehensions in the minds of teachers and parents, bottlenecks in the process of implementation, and research on media. Based on such extensive and intensive research, ETMA carried out training needs assessment and curriculum development. The final product

comprises 10 interactive video modules with built-in exercises for collaborative learning. He provided a glimpse of the digital content from various modules.

The highlight of this multimedia course is advancing the science of mental measurement asking teachers to use OER - online tests for assessment of coscholastic, cocurricular skills, and values and attitudes. This reduces the teacher's load to a low of 8% while notching up the reliability of the assessment. The video modules are supported by a well designed reinforcement reading and a printed training manual. The taste of the pudding is in eating; how good is the multimedia material? ETMA has developed an online test on CCE that teachers can take at the end of the course and get certified.

Prof. Mukhopadhyay concluded by asserting that the course is authentic since the messages have been constructed by the originators of the innovations; because of technology support, content and communication are uniform, yet offering opportunities of situational learning through collaborative learning; quality is assured through involvement of top-end experts in design and construction of the programme. Technology enablement makes it low cost – almost 20% of face to face training cost.

Though the Interactive Multimedia Course on CCE (IMCC) is self contained and self learning, there is a provision of e-tutorials where trainee teachers can ask questions to experts in ETMA and get answers on a time-asynchronous mode.

The session generated a lot of interest among the participants. They wanted to know more about IMCC. He called upon to visit www.etma-india.in or send communications to etma.india@gmail.com

Appreciative Inquiry for College Development

Under the banner of ETMA, Prof. Jaya Indiresan conducted a two day workshop at the Lady Keane College, Shillong. Lady Keane is a women's college established in 1936 and has nearly 20 different departments today, including Science, Arts, Humanities, Computer Science, etc. The entire faculty of the college, numbering over 60, participated in the workshop. The Principal, Dr. Masser and all the senior faculty members were present throughout the two-day workshop and actively participated in the deliberations.

The framework of the workshop was the 3 D model developed by David Cooperrider and Srivastava. To start with, each of the participants wrote their "My College My Story", their assessment of what is working well in their college. This was the first D-Discovering what is working well in the college. This was a major breakthrough which put them in a positive frame of mind and there was a perceptible climate of realization of the need to look at the positive aspects of their institution.

This was followed by the second D- Dream.

The participants were divided into groups according to their departments and asked to collectively dream of where they would like to be relative to where they are now. It was heartening to see them come up with very out-of-the-box ideas of their visualization of the futuristic possibilities for their institution. Then for the third D of Design, they were asked as a team to make a detailed plan of action for achieving their dream. The fourth D is 'Deliver'. It is now left to the initiative of the college to follow up their plan and find ways and means of implementing their design.

It was reiterated to the participants and to the college authorities that Appreciative Inquiry is not just a two day process but needs constant follow up if they really want to achieve their goal.

It was moving to note the amount of enthusiasm and excitement that the participants showed, and the realization of their own potential to do things they have not realized so far.

Prof. Mukhopadhyay Addressed the International Conference on Global Network on Education in Amman

Prof. Mukhopadhyay addressed the International Conference on Global Network on Education in Amman, Jordan from 18 to 21 November, 2013. The theme of his address was collective quality improvement in rural primary education based on his 20 year long research and development effort in a cluster of villages around Udang in Howrah District, with more than 6000 rural poor students enrolled in 42 government primary schools. The initial goal of this project was reducing school dropout, but later on learning and performance were added on the agenda. The project has steadied dropout rate at 4% which is much better than the national and state average. Children perform much better than their brothers and sisters in schools not covered by the project.

The Government of India flagged Prof. Mukhopadhyay's Udang Experiment in the EFA 2005 document in HLG Meeting in Brazil.

He also presented his new experiment on high end quality in low (cost) end school at an experimental school set up at Udang by Howrah Rural Teachers' Forum set up by Prof. Mukhopadhyay. Pedagogy and student assessment in this experimental school have attracted both scholars and the state government.

Seminar on "Unravelling the Mystery of CCE through Multimedia" on 29th of October, 2013 at Choithram School, Indore

ETMA organized a seminar on introduction to its technology based training course for teachers- Interactive Multimedia Course on CCE (IMCC). The seminar was organized for the Principals of Indore Sahodaya Complex and was conducted by a team from ETMA comprising Mr. Varadarajan Sridharan and Dr. Paushalee Datta Pal. During their presentation, the team introduced the audience to ETMA, its council and its various activities. Various programmes conducted by ETMA especially for the teachers and principals, like ICT training for teachers, Collective School Leadership, ICT Integrated Blended Learning Design, etc. The audience was also familiarized with ETMA's beneficiary schools. During the session, Prof. Marmar Mukhopadhyay addressed the audience over Skype and answered the various queries of the Principals related to IMCC and CCE. After discussing the course algorithm, instructional design of the course, the house was also shown the video clips of the 10 different video modules. The instructional designs for the multimedia course and its various modules were thoroughly explained to the audience through the presentation.

Seminar on "Unravelling the Mystery of CCE through Multimedia" on 26th of October, 2013 at Calorx Teachers' University, Ahmedabad

Prof. Madhu Parhar, Professor of Distance Education, IGNOU, gave a talk on ETMA's technology based training course, Interactive Multimedia Course on CCE. She focused on the objectives of the course being developing deeper understanding of the CCE framework among the teachers and Principals. During the lecture, algorithm of the course, instructional design for the course as well as the videos and the course content of the multimedia course were focused upon. Prof. Parhar also discussed how the various types of skills: intellectual, social, emotional, scientific, literary, and ICT skills demand higher order thinking skills and hence the challenge is to develop a pedagogy that nurtures higher order thinking. She also talked about Prof. Marmar Mukhopadhyay's eclectic taxonomy and the thinking tree developed by him. Prof. Parhar's lecture highlighted the ICT integrated blended learning design — a design developed by ETMA through extensive research, which helps in developing higher order thinking skills.

Educating the 3rd Child

If you had a 3rd Child, wouldn't you educate her/him?

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- It all started with **Mithu** whose ambition was to study maths without means. We offered her a scholarship of **Rs.1000/pm for 36 months** till she graduated with Honours in Mathematics.
- Crusade continued. ETMA has so far supported **38** such scholars who are academically brilliant, but at risk due to dire poverty with a scholarship of **Rs.500 pm** for at least **two years** duration, extended on the basis of performance and further need.
- It is ETMA's PSR (Personal Social Responsibility) Programme. **31** members of ETMA Fraternity and Friends have made personal contributions to a project fund in SBI. They paid in multiples of **Rs.5000/-**
- Every scholar has a bank account in their nearest SBI Branch. Cash is transfered through Core Banking Facility.
- Project is completely managed voluntarily without any management cost.
- Donations to Educational Technology and Management Academy is exempted from Income Tax under IT Act.

Someone somewhere is waiting for your hand...

ETMA Council

Prof. Marmar Mukhopadhyay

(Chairman, ETMA Council)A distinguished research professor and author in Educational Management and Technology and an institutions builder, served as Director of NIEPA, Chairman of NIOS, Vice-President of ICDE, member of CABE and Chairman of CABE Subcommittee on USE.

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