

## THE FUTURE OF EDUCATION

Arvind Gupta

A recent survey conducted by Educational Initiatives – a prestigious testing-house in the elite, English medium schools in our major metros of New Delhi, Kolkata, Mumbai, Bangalore and Chennai revealed some shocking results. The students were from class 4, 6 and 8 and the sample size was reasonably large - 32,000 students. The children were administered a test to evaluate their understanding of mathematics, science and English.

The test papers consisted of “intelligent” questions. Some of the questions were application orientated and they tested the child’s ability not just to reproduce the text-book answer but to apply it in a real situation. The children were able to answer standard text-book questions based on recall. But if the question varied even slightly from the text-book, and involved an element of thinking then the children were in a fix. The evaluators wanted to give a practical test too, but the impossibility of administering a “practical exam” to thousands of children ruled out its possibility.

For instance, an open umbrella was shown and the children were asked the function of the thin metal rods in the umbrella? Which organ system in the human body did the thin metal ribs represent – muscular, skeletal, and respiratory or the digestive system?

Another clever question was

What is the chemical formula of pure steam? There were four choices

1. CO
2. H<sub>2</sub>O
3. O<sub>2</sub>
4. Pure Steam does not have a chemical formula.

The survey revealed that schools – even with good infrastructure, qualified teachers and high charging fees failed miserably in helping children make sense of the world. All the chalk-and-talk method, rote learning dulls the mind and does not help critical thinking so essential for living.

In the past few decades many progressive schools have shifted to “integrated” learning – where subjects are not divided into artificial compartments. Buckminster Fuller – the famous American designer was very fond of this pithy saying, “Whenever nature designs something it never calls a meeting of heads of departments of Chemistry, Physics and Mathematics.”

The natural world as well as the social world is not divided into compartments. They form an integrated whole – an interrelated web of life. Looking at the parts to understand the whole is a modern phenomenon. But it has its limitations. Often the whole is more than the sum of the parts. For, reality is far more complex than what it appears on the face of it. At the very basic level there is only a continuum of knowledge, and in the ultimate all artificial categorizations must meld together.

### Mirambika

It is difficult to describe an integrated approach in abstract terms. So, I will try to capture its essence through an example. Fifteen years back I taught for a couple of years in an experimental school. Mirambika – the school was situated in the Sri Aurobindo Ashram, New Delhi. At that time the school subscribed to no curriculum. The class teacher along with the children decided on the curriculum. The children chose a “topic” of their interest and worked on it. The role of the teacher was to help the children. Having decided on the topic of “birds” the first thing the children did was to make a bee line for the library. Here they pulled out all the books on birds and brought them into their classroom. These would be their text books for the next two weeks. Now everything centered on “birds”. The first thing the children did early morning was to go bird watching in the lovely Ashram Campus. They made a checklist of birds. With the help of the teacher they tried to record some bird calls. What were the local Hindi names of these birds? They folded paper birds, wrote their daily “bird” diary, composed poems on birds and drew them in all their glory. They collected bird feathers; fallen and abandoned nests. They made lists of resident and migratory birds. Where do these small yellow and white wagtails come from? The children actually looked at their migratory routes on the globe. For two weeks school life for these children was centered on the study of birds. It involved writing, drawing, making models, composing poems, counting, imitating bird calls and many other skills. At the request of the teacher two parents piled up all the children in their vans and took them for a day long bird watching spree to the Sultanpur Bird Sanctuary located on the outskirts of Delhi.

Children learn best not in the confines of a classroom but in places brimming with human activity - happening places. Like the vegetable market – scores of vendors, haggling, weighing, stuff being loaded / unloaded, different smells are fascinating for children. Places where things of daily consumption are being made, manufactured, transformed hold great interest to children. The *atta chakki* (alas very few left), rice being puffed, the baking of bread, a saw mill, a visit to a potter. Education is slowly distancing itself from real life activities.

### Inclusive Education

A good school should also ably mirror the society we live in – its varied people, regions, castes, classes. A homogenous school meant for just one community or sex is bad to start with. Of late, a few progressive schools have embraced children with differently abilities. The St. Mary’s School in Delhi and the Rewa Chand Bhojwani School in Pune, are such wonderful schools. Despite being mainstream almost 15% of their students are differently abled – on crutches, wheelchairs, wearing hearing aids. These children are a source not of impediment but deep humility and inspiration to “normal” children. Instead of preaching tolerance, these schools practice it. Here rich and poor, normal and differently abled, boys and girls from different backgrounds study together to form a rich context for social

learning. Compassion and tolerance are a part of living. They need not be taught as desirable “values” in moral science lessons.

### Home Schooling

Dissatisfied with existing schools many sensitive parents are shifting to home-schooling. This option is open only to a very small section which has the resources – time, ability and money for home-schooling. The basic thrust behind this movement was aptly summed up by John Holt a great proponent of home-schooling: “We have given birth to our children and have the highest stake in their education. We don’t trust schools whether government or private. So we will teach our own children.” Often it becomes very difficult for parents to home-school their children all by themselves. Sometimes when groups of parents – pool their time, skills and abilities then home-schooling becomes less arduous. One critique of home-schooling is that it becomes an impediment to the socialization of children. Normal schools – despite their authoritarianism, at least allow children to meet other children. Children learn a great deal from their peers. In our country, with a large unschooled population and many first generation learners, the home-schooling option can be exercised by only a few.

### The International Baccalaureate

My city of Pune has four International Baccalaureate (IB) schools. The famous Mahindra World College (MWC) is just a 40 minutes drive from the city. The IB curriculum is more flexible and responsive to social needs. There is a strong emphasis on Community Development. Children from 80 different countries study in the MWC. After completing their 12<sup>th</sup> around 60-70 of these students spend what is called as a “gap year”. They spend a year in India or in their own country working with a NGO or the local community. Most of the IB schools in Pune charge between Rs 3 to Rs 5 lakhs per year – depending on the age and class of the child.

There are several good aspect of the IB curriculum. Our own CBSE is highly bureaucratic and too slow to respond to changing times. According to one estimate to date the CBSE has given affiliation to only 8,000 schools. 20,000 new applications still await recognition. The real power of the sick CBSE stems from “accrediting” schools. The board is excruciatingly slow on “exam reforms”.

### Common School System

In our country the poor children attend Municipal schools. These schools are in a bad shape and for good reasons. The Municipal Corporations can be squarely blamed for this state of affairs but that would only be a half-truth. The real reasons why our Municipal Schools are in such a shoddy state is because the rich, even the middle-class don’t send their children to these schools. They build exclusive enclaves for their children and let the others stink.

In a country like ours where society is divided into so many layers it is most imperative to prevent “ghetto” schools – schools which are exclusive preserves of one particular economic class or single communities. A pluralistic society must be reflected in the schools richness. In the long run, reviving the “common school” system appears to be the only way to ensure inclusive growth for our children.