

Intelligence can be taught'



Learning afresh: Israeli developmental psychologist Reuven Feuerstein. - WFS

How many parents can claim to have never lost their cool while sitting with their children to help them finish an after-school assignment or prepare for a class test? Quite likely, none. "Why can't you understand what I am trying to tell you? Why don't you apply your mind to the problem? I don't know why we are wasting our time; maybe you simply don't have the aptitude for it?" Most home study sessions, presided over by irate parents, are routinely punctuated with such remarks. Alarm bells start ringing for parents when their children get poor test scores or are unable to grasp particular subjects, and trips to career counsellors become common.

Of course, if Reuven Feuerstein, the renowned Israeli developmental psychologist, is to be believed then most parents needn't spend hours worrying about how to ensure their child's academic success. According to him, intelligence can be taught and is not static. He asserts, "Score cards are no indicators of a child's intelligence. The performance efficiency of every child can be improved. They have to be equipped to deal with change, to face unknown situations."

Founder and director of the International Center for the Enhancement of Learning Potential (ICELP) in Jerusalem, Israel, Feuerstein doesn't believe in IQ tests. He says, "The conventional IQ test takes one specific point of time in an individual's life, often under stressed conditions, and tries to identify characteristics which are supposedly stable and unchangeable. On the basis of this, the tests and those who conduct them claim they can predict how an individual will fare in 20 years under any conditions. Is that logical?"

Feuerstein has spent the better part of his life developing learning strategies. But his tryst with education began years ago, during the dark days of the Holocaust. Born in Romania, he was forced to flee Bucharest — where he was enrolled in college — in the wake of the Nazi invasion during World War II. He was yet to complete his degree in psychology when he made mandated Palestine his new home. This is where he decided to give the children of Holocaust survivors a new life through education.

Says the 90-year-old, "When I was watching children survivors of World War II disembark from a ship, eyes downcast, minds traumatised, with no hope in their hearts, I saw the need to revive them. Just as in India, Gandhi saw the need and then found many ways to mobilise the whole country. Once the need is felt, there are no limits."

He began teaching these children the alphabet, numbers and the script. To those who were able to understand more complex concepts, he even explained mathematical concepts such as the Leibnitz series, or philosophy. They grasped everything quickly and seemed interested in class. But every time

he asked them to repeat what he had taught them, he found they could not. He made them go through the lessons, both orally and in written form, several times. But the teacher would come back the next morning only to find his students unable to remember anything.

It is not that they had forgotten. They just seemed to have had a blackout. To find out why, the educationist stole into their dormitory one night and found that once the lights were out and the children were in different stages of sleep, they were screaming or crying in fear. They were still traumatised by the memories of their past. Feuerstein then realised that he had to teach the children to think; he had to teach them to learn afresh.

Over the years, by making many fundamental observations on human nature, he developed the Feuerstein Instrumental Enrichment (FIE) programme. His first observation is that we all have an intrinsic desire to communicate and we engage in wondering which aspect of ourselves we would like to transmit to posterity.

From this follows his second point. Says Feuerstein, "It is important to know how to impart education. A teacher is not just a pipeline, but a mediator. The mediator has to equip the learner to learn. S/he has to impart ways of thinking; has to create the need to find meaning. This search is more important than the meaning itself."

Third, he firmly believes that the cognitive functioning of people can be increased and there is no limit to it, either in terms of age or in terms of a qualitative increase. Based on these ideas, Feuerstein has created nine parameters of mediated learning. They include, among other things, developing a feeling of competence, sharing behaviour, setting goals, and monitoring behaviour.

"The human brain shows flexibility. Instrumental Enrichment has been tested for a very long time on a very large population of great variety. It has demonstrated that regardless of the source of cognitive damage, be it from the culture shock of immigrant children, damage from physical injuries, the trauma of child abuse or extreme poverty or parental neglect, the cognitive functioning of people can be increased. Experience tells us that this increase is without limit," says the man whose works are being implemented in classrooms in over 80 countries today.

To make an average teacher an excellent mediator, Feuerstein realised that they needed methods that would ground their work in a curriculum format. To this end, he developed 14 "instruments" that mediators and students should use to enrich cognitive functions and to build habits of efficient thinking.

As the world moves towards being a knowledge society, the ability to think is the greatest asset. And to promote effective thinking, the tools developed by the Israeli professor are absolutely content free. Both illiterate children and well-educated adults can benefit from them.

One tool is something most people would have used at some time during their childhood. It is called comparison and perception. A few similar pictures are placed alongside each other and the learner is asked to identify the similarities as well as the differences among them. Very often the learner is impulsive and hasty. The teaching here is to lengthen the response time. Another simple tool is categorisation: according to size, colour or any other criteria.

The exercises seem simple but are sharply honed to improve cognition in the learner. Feuerstein cautions that application of FIE, which comes in the form of these exercises, may seem easy but unless the theory is learnt and known, the applications by themselves will not lead to the desired results.

There is one tool that talks of identifying emotions. This strengthens the relationship between emotional states and their cognitive correlates. It also supports and is inter-related to other tools, such as 'Thinking to Learn to Prevent Violence' and 'Empathy to Action' — which are among Feuerstein's 14 "instruments".

These tools have been modified and interpreted for different problems in different ways. Visually impaired children, children with special needs, adult learners, not to mention autistic children and children with Down's syndrome, have all benefitted.

From the Jerusalem campus of his institute, the ICELP, Feuerstein shares his vision for the future, "Individuals have to be taught or given the strategy necessary to deal with the world. Humanity is being alienated from itself by the rapidity of change. I want to reach the last child. We need to reach the child who has no wherewithal, either economically or environmentally."