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### Education @ School: Paradigm Shift from Teaching to Learning

*“A prince should learn the alphabet and arithmetic in the third year after birth. After the thread ceremony is performed he should learn philosophy, the three Vedas, economics and science not only from theoretical exponents but also from practicing politicians till he is 16 years.”*

- Kautilya - The Arthashastra (III.i)

Almost two millennia ago, the great statesman/strategist Kautilya Chanakya laid down a model code for the prince to follow. Here, he not only emphasised the significance of early teachings, but also stressed upon the inputs and involvement of the practitioners. As the ancient Indian system of *Gurukul* was based on *Guru-Shishya parampara*, teachers and disciples sharing a common habitat ensured that teaching-learning process was a way of life. Incredibly, the lessons in arithmetic were practiced while counting and minding the cow/sheep/goat or harvest on which the very sustenance of both teacher and disciple depended. The power of the alphabet and the language was leveraged to win their daily bread at the courts or schools of learning or public platforms. Archery and martial arts were not a mean to fight phantoms or dummies, but to ensure their survival in the wilds and adversities. Thus, teaching and learning were the two sides of the same coin, and were required to be followed as tirelessly as light follows darkness on this planet.

After the fall of this unique system of learning, and decay of institutions like Nalanda and Takshshila, a long dark night of a millennium cast its shadow on the country. However, there is few exceptions - the Pandians and the Chola dynasties in the 10<sup>th</sup>/11<sup>th</sup> Century and the Marathas/Peshwas in the 17<sup>th</sup>/18<sup>th</sup> Century - encouraged growth of learning centers. In due course, education was left to non descript, faceless teachers who themselves survived at the mercy of the proletariat or the village *mukhiya*. Later, the struggle for survival against a foreign oppressor virtually decimated the learning habit in the country. It led to a scenario where few centers of learning like Kashi, and the holy mutts like Kanchi or the *madrassas* had abundance of knowledge, while the masses remained ignorant and impoverished.

The credit for establishing the modern system of learning in India must however go to the British rulers and Macaulay in particular, in the 19<sup>th</sup> Century. He developed uniform curriculum based primary and secondary education structure, which is being practiced till date. As the emphasis is more on classroom teaching at the school and college level, it resulted into textbook based

learning. Except for streams like engineering, medicine and advance science, the system provided little opportunity for developing and judging application skills or aptitude of the students. Whether it is history, literature or economics, the assessment of the student revolved around his capability to reproduce the text rather than justify its application. It resulted into evolution of a teaching regimen where curriculum was being downloaded with rigour and robotic efficiency, and students were nurtured to master the art of reproduction, thereby severely limiting the creativity and originality of the students.

This is not to deny the fact that despite such rigid educational system, the country managed to produce the 'Raman effect' and 'Bose-Einstein Statistics'. But in the retrospect, one wonders how many such prodigies would have been nurtured had an application based and experiential learning system been in place.

An educationist from India was shocked to find that Class 8<sup>th</sup> student in Israel was busy studying hydraulics installed in the advanced F-111 swing-wing reconnaissance aircrafts in the '70s. Whereas the children in the surrounding areas of Toyota and Mitsubishi car plants or the Seattle plant of Boeing had easy access to the shop floor. Surely, this interaction and experiential learning enlightens nay ignites the young minds. It creates an urge to explore new avenues of knowledge, thus initiating them into the art and science of learning without boundaries, which is the true purpose of education.

In conclusion, I would submit to teachers and trustees of education that the method of judging 'poetry' or knowledge of 'principles of electricity' should be writing of a poem or building up a utilitarian gadget by the student. And if and when that happen our country will produce a million Shakespeares, Amartya Sens and Boses!