

Learning 221: A manifesto for education in the 2nd decade of the 21st Century

There is a general belief and acceptance that the present state of affairs in education and in fact the whole education system and practices, is not able to even live up to our own benchmarks of the past and is totally out of sync with the needs of the future, especially the challenge of preparing our youth to participate meaningfully in the emerging Knowledge Economy.

As we begin the year 2007, and hear of the year 2010 as the one by which we will have new airports, new metro lines and the Commonwealth Games, and we see the first glimpses of the fight within the Knowledge Commission, the approach to the 11th plan and the completely myopic vision therein, it is time for all of us to realize that a response from an 'enlightened self-interest of all' view is required, rather than a small bunch chosen by the Government. We have finally arrived at a point where the principle and the expectation that "The King can do no wrong" is evolving to the current predicament that "The Government can do nothing right".

During the emerging decade we will have the challenge of swiftly educating to universal secondary education level about 10 crore children, and re-educating a similar number, whose education would be either obsolete or irrelevant to the society they would find themselves in. These twin challenges can only be met by leveraging the new technologies in a massive way and at great speed. It also requires a complete business process re-engineering of the current education model, beginning with freeing it from the current stranglehold of the politicians and the bureaucracy, and making it a citizen's movement led by civil society.

A system which could not bring bare literacy to all in 60 years cannot be expected to even be able to tinker with the challenge of universal secondary education. The basic principle to be followed up by a universally accessible system of life-long learning is really very simple. "Everyone who wants to learn should have access to an opportunity to learn, and everyone who can teach something should be allowed to teach". And when we say everyone, we mean everyone, man woman, child, disabled or otherwise, independent of age region, caste or present level of education. And to the surprise of many, this is actually do-able by leveraging the current and emerging technologies, especially the mobile phone.

Most responses to the above challenge are in terms of incremental expansion, and knee-jerk reactions. My view however is that

there is a need for a fundamental transformation involving about several major shifts. I have listed them as 10 dimensions of change, just because it sounds nice and rounded. We could do re-visit them and maybe create a more complete list. They are as follows:

1. Letting go of the Government's dominance and control over the entire educational system. There was a time when education of the young was primarily driven by the community, with little or no state intervention. The British rule changed that, Gandhiji in his Chatham House speech decried that, but after Independence our rulers continued with the same policy and with such a vengeance that 85% of our graduates, 75% of Engineers and almost 70% of our MBA's are unemployable, as indicated in various reports. Continuing to expand this system, without addressing the core issues is completely irresponsible. The expansion policy in the recent decades of the 'growth for growth's sake' has been a reflection of the philosophy of the cancer cell.
2. Establish a clear cut goal of inclusive education and surrender all the trappings of an exclusive elimination system of access. Abolish the very need for reservation by making available educational access to all, and if necessary, go back to the drawing board and design the basic model of education so that this goal is met. Any model that does not do so, should be declared against the Constitution. This means that everyone who wants to learn should have the opportunity to be able to learn what he wants to learn, and all barriers in the way should be removed.
3. Encourage de-institutionalization of intermediary Institutions such as traditional schools and colleges as the sole entities that put learners in touch with their teachers. Every post office and every cell-phone could become an access device to learning. The axiom that all learning must take place inside a class-room, is fundamentally flawed. The context of learning is the environment in which a learner lives and he must be encouraged to construct learning from it, rather than a set of boring and controversial books created by the State machinery. Suitable Business Process Re-engineering has enabled many organizations to expand many times and serve a larger base.
4. Re-establish the supremacy of the teacher in the educational process, strengthened and supported by the latest technologies, allowing the possibility of independent educators and the emergence as a

profession of education. In this country, a person with suitable qualifications, acceptable to the appropriate professional bodies may practice as a lawyer, doctor, chartered accountant, and architect etc. independent of working for the Government or large corporate house as an independent professional. In fact the recent changes in rules allow them to practice their professions from their own homes or even from rented residential premises. A qualified teacher however cannot practice education except within the precincts of an Institution created by or licensed by the Government. And of course even an authorized teacher cannot teach in a residential building. This in a country that had a Gurukul tradition, where in fact the students stayed with the Guru.

5. Give sanction and legitimacy to e-learning and e-education. In a sense the Indian Information Technology Act 2002, permits this, but the regulating agencies are still negative about their approach. Even though the Government has at a considerable cost launched a satellite exclusively for education, there is no legitimacy and recognition to a satellite based educational system, and the entire money has been a colossal and criminal waste of public funds. The Courts also need to be made aware that learning happens in the brain, and that new media is very effective in creating mental models. The continued view that large tracts of land are an essential requirement for learning to take place may not be quite true. A set of goggles and an earphone with wireless connectivity may connect a student to almost all sources of knowledge and learning in a far better and effective way than the State run schools, colleges and universities
6. Not merely permit, but encourage the private investment in education, by doing away with the constraints on the returns to investors on investments in the field of education. The current model only encourages creativity and innovation in how funds can be siphoned from the trusts and societies to their promoters, as opposed to innovation in access and delivery models. We just have to see how the liberal policies of tele-communication have provided access to mobile phones for a large population. A model of education that builds on them, and I am not talking of smart phones with 3G, but plain vanilla phones with voice and sms to connect learners and teachers.
7. Create a new system of facilitation and enabling the growth with quality assurance of education, rather than a constraining and inhibiting framework, which does not allow adequate infra-structure

- to be created. SEZ's, IT Parks and others could also be easily deployed for continuing education for life-long learning.
8. Appreciate that preparing for the future involves moving away from one-time learning to life-long learning. The goal at the school leaving level should be to enable joining the work-force at the entry level and then continue life-long education in a different mode. By the time a learner finishes school, he should have acquired, in addition to the specific knowledge in the domain areas, such as English language, Mathematics, Science, Social Science, Hindi/Sanskrit/Regional Language, some generic skills such as learning to learn, problem solving, information gathering and validation, creativity and innovation and an inter-cultural value system. Instead of prescribing very rigid curricula at each class from 1 to 10, and severe age restrictions for them, we must accept that learners will vary in their stages of learning, styles of learning as well as their learning rates. So, for each of the 10 knowledge areas listed above, we could have about 10 stages broadly spanning the 10 years of secondary schooling. I propose to call them A1,A2,A3,B4,B5,C6,C7,C8,D9,D10. The numbers refer to the usual class, and A, B, C, D refer to the stages of Primary, Elementary, Middle and Secondary. In fact the National Institute of Open Schooling already has an Open Basic Education model that has created descriptors and standards for 'A', 'B' and 'C' levels corresponding to class 3, 5 and 8 respectively. The major departure that is being proposed here is that a learner may be in say class 6, and while he may be at level C6 for some subjects he may be at level D9 and for others at B4. His learning pathway would take this into account so that by the time he reaches Class 10, he would achieve level 10 in all the 10 Knowledge areas.
 9. Having set the Standards at the end of a year of learning effort, in order to measure progress and provide for the desired learning experience, we further define sub-levels to be reached in about a month. Thus we would have levels A1.0 to A1.9 as 10 sub-levels during Class 1, approximately as monthly goals. Measuring and ensuring progress and achievement of learning outcomes is now better and everyone can hope to reach the endgame.
 10. Finally the notion of a one hour lecture by the teacher as the core of the educational requirement, needs to be replaced by participation in experiencing a series of 'learning events', which have a granular structure using small chunks of resources, and lead to moments of enlightenment in which the cognitive conflicts existing in or created in

the minds of the learner are removed, and he exclaims “wow, this is wonderful...I never knew this...isn't it fascinating.....etc” in a spirit similar to the Eureka moment of Archimedes.