



Expert Column

Transforming 'the Argumentative Indian' to a creative Indian

Prof. M. M. Pant

Two recent books, both best-sellers, have talked about India and considered together can be of considerable help in laying down an approach towards India's future and creating its rightful place in the Knowledge Economy.

Thomas Friedman's book *The world is flat* looks at today's India and sees its talent contributing to world-wide developments in

Science, Technology and business. He specifically refers to the creation of the IIT's in the 1960's and says that the creation of the IIT's was a very good decision. The greatest beneficiary of the IIT's was the USA and it benefited immensely from the resulting talent pipe that filled up at New Delhi and emptied at Palo Alto, in the Silicon Valley at California.

Amartya Sen on the other hand, in his *The Argumentative Indian* dwells on the past bringing up the glorious Indian tradition of discussion and questioning and a participative society. In his very first essay he refers to the eternal questions raised in the Vedas: Who really knows? Who will here proclaim it? Whence was it produced? Whence is this creation? The Gods came afterwards, with the creation of the

universe. Who then knows whence it has arisen? Whence this creation has arisen – perhaps it formed itself, or perhaps it did not – the one who looks down on it, is the highest one, only he knows—or perhaps he does not know. In the same essay he also refers to Javali, a sceptical pundit who gave the following epistemological advice to Rama: 'Follow what is within your experience and do not trouble yourself with what lies beyond the province of human experience'.

It is such traditions that encourage exploration and developing a scientific viewpoint towards the world.

A simplified view of the loss of our leadership in the world is that in the era when we were all limited to manual labour and domesticated animals as sources of power, India was a thought leader. As other sources of energy became available, we slipped during the last two centuries and in the last 50 years or so an inward looking, license and control regime, pushed us further behind in world rankings.

A study by the Pratichi Trust set up by Amartya Sen with the

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unemployable in mainstream activities.

The recent economic reforms have allowed us to recover some ground, though we need to speed up reforms and liberate the restrictions on the educational systems to rapidly get ready for the Knowledge Economy.

Among the types of persons who will succeed in the future, according to Thomas Friedman are the ones who are most adaptable learners and can continually learn to learn. If we create the right kind of people, we will go beyond the mere talent pipe to USA to a fountain of talent for the entire world.

award, found that elementary education in the year 2000 was in a depressing state. A very large proportion of the children rely on private tuition as a supplement to what they get from the schools, and those who do not are evidently prevented from doing so because of penury, rather than being satisfied with the teaching the children get in school. Effective elementary education has in practice ceased to be free in substantial parts of the country, which is of course a violation of a basic right. 'Like the electricity or water provided by public systems which have to be further processed by the user to make it really useful, education also has to be supplemented to create a useful person. We need to move beyond mere 'sarva shiksha' to 'sampoorna shiksha'. Higher education fares no better with almost 95% of the graduates being

It will not be possible to do so by the earlier model of some islands of excellence made very exclusive. But rather the vast population would also need to be improved in their knowledge and skills so that the cognitive capital of the nation can be raised.

To become a leader again we need to create a movement of encouraging all Indians to participate in events and programs which enhance creativity and demonstrate the pleasure that thinking afresh and thinking differently gives. My own view is that we are all intrinsically capable of creative and innovative activities and do them unrecorded throughout our lives, however since society rewards compliant behaviour, we tend to let our creative abilities fall into abuse.

Philosophers and researchers have been trying to find answers

to the central question: whether the creative problem is solved by the conscious mind or the unconscious mind, and therefore whether we can be actually trained to be creative. It is desirable to foster creativity and while there is a difference of opinion whether this can be done through systematic intervention, definitely an attitude to appreciate creativity can be developed and everyone can be stimulated to be a little more creative. And sooner than later these attempts at creative thinking and expression would yield significant giant steps as well. And once such a spirit has been developed and the sparks ignited, creativity can continue till very late in life, as the works of several writers have shown.

So, next time you get a new idea or think differently from the peer group, don't be apologetic about it. Say what you feel, record it somewhere and at your own pace continue to follow up on it. Who knows, one day the world will accept this thought and you would feel rewarded.

But creativity as I refer to here is not only about poetic license or an artist's imagination. It is also about creating useful items for everyday living. In the Knowledge Economy the central attention would be to Knowledge products, Knowledge processes and Knowledge workers. Bill Gates has, in one of his recent discussions, said that sometime in the last 20 years the word "knowledge" changed from a noun to an adjective. The phrase knowledge worker was however used for first time by Peter Drucker in 1959, and the IIT's created the first set of Knowledge

workers in the technology domain. But Knowledge workers are not only those who are deep in technology. Tomorrow's knowledge workers would make use of the latest Information and Communication Technologies and a set of generic analytic, problem solving skills, lateral thinking, creativity and innovation to create new universes of products and services. It is said that Alexander had felt disappointed that there was only one world to conquer. A Knowledge worker would have the opportunity to create any number of universes he is capable of.

So what would be the eight-fold way for preparing the Knowledge workers of the future? The following eight skills or knowledge sets would be inherent requirements for prospering and flourishing in the Knowledge Economy:

- ▶ Proficiency, not mere literacy in ICT skills.
- ▶ English Language Communication skills in Reading, Writing, Listening and Speaking both face to face and remotely over telephone and audio and video-conferencing systems.
- ▶ Analytic and critical thinking skills.
- ▶ Creativity, innovation and problem solving
- ▶ Multi-cultural adaptability
- ▶ Managing Self: Stress and Time management
- ▶ Awareness of scientific principles and their



applications

- ▶ Universal human values and ethics

So, how can we transform the argumentative Indian to a creative Indian with the above attributes? Surely not by a State delivered program. If you will see the findings of Amartya Sen's research, it endorses the general belief that the State intervention in elementary education has forced almost anyone who can afford to seek private additional help. This mission can be done by finding groups who would be catalysts and facilitators, who will carry out the above interventions concurrently while the learners are studying in the normal programs. To do this, paradoxically it is the higher end technologies that would be able to come to help. The 'hole in the wall' experiments of Sugata Mitra have amply demonstrated that given the resources and a good interface, children can learn a lot by themselves. The State however can and should play a catalyst and facilitator role, providing a platform for various organizations to work towards common goals, sharable resources

etc., much like the Internet itself. The successful expansion of the telecom sector allowing multiple players and technologies to be all deployed for the consumer benefit is a good example. There is no reservation for SC/ST, backward or other backward classes or worrying about the creamy layer as far as mobile phones are concerned. Why we have so in education? Simply because the State has prevented its growth, and what Gandhiji had criticized the British for in thwarting the spread of literacy in his Chatham House speech, is exactly what our Governments did for the last 60 years, denying quality educational opportunities to the majority of the population, even when it was willing to pay for it. This sinister approach will have to be given up, if we want India to occupy its rightful place in the future. If we fail to do so, even with the right demographic profile of a significant youth population, we will not be able to use their energies and the unrest that it will generate will be far more traumatic than we have ever seen before. We will once again be consigned to the dustbin of