

16. BOOK REVIEW

Title	: Global Visions & Missions in Technical Education - A rich Source of Ideas to Ensure Hi-Tech Future
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The authors say, Indian technical education desperately needs to adopt new visions of new world, so as to make Indian economy competitive by global standards. Visions of most of the institutions are not compatible to globalization. The authors say, visions ignite minds for creative action. The book presents a comparison between technical education in India and the counterparts in developed world. The organization structures, policies and practices, systems and procedures of worlds best institutions like MIT Boston are presented. The authors seek to improve understanding of how the institutes can advance the Indian economic, industrial, and enterprising culture while contributing to strategic social goals of equity and redistributive justice. Now is the time, for colleges and universities, to build leadership in India of global standard, in technology, industry and all other walks of life.

Prof T K Basu of IIT Kharagpur has written the foreword. He says, the book is a cradle of new ideas to mould society on progressive and constructive lines. Reformers, innovators, administrators and principals of colleges would get a kick by reading the book on issues like technological innovation, research park, patent & IPR, entrepreneurship etc. The book is an eye opener to all our educators.

The book observes that, of late, India is gaining importance in world economy. It has emerged from the global financial crisis with a powerful storey to tell. Rightly so, it is dreaming to be a technology power. Technical education is now the driving force of development. So as to achieve this, the book says, up grading technical education to world class standard is not an option but compulsion. It makes a note of the positive steps taken by the Government of India, like starting "Technical Education Quality Improvement program [TEQIP], National Knowledge Commission 2006-7, YeshPal committee report 2009. The authors appreciate the progress made by India in the recent past. However, it is yet not aligned to world dynamics. It is far too behind the world. It has still to go a long way to be equal to developed world. How to make it happen, you will find answers in the book.

**President, Engineering Education Foundation, Pune.*

The chapter on gap analysis begins by raising the question, why thousands of students every year go abroad? Why foreign universities are coming? People want world class education. Have we failed as a society in creating vibrant educational ecosystem that supports cutting edge research? People are ready to pay for, in terms of time, effort and money. But where do you find world class institutions? IITs are far too few. Our institutions produce far too few doctorates. For example, in Computer Engineering, India produces PhDs in hundreds, but China and USA produce in thousands. How do you increase output and make institutions world class? You will find answers in the book.

The book recommends “dream big” for colleges and universities. They should aim at technology generation, technology diffusion, which is achieving high importance in enabling a nation to win. The book emphasises adoption of new organizational inventions like technology incubator, research park, patent & IPR, entrepreneurship centre etc which when implemented, will contribute to India's international competitiveness. The institutions will have, now, to look beyond the traditional lines of teaching and learning and adapt to corporate development, and help industry to win. They should have to restructure themselves to become fountain heads of new knowledge and new technology. They should deserve the status of “Light House” for industry. Synergy between the industry and institutions would have to be achieved. The book explains how to go about it.

The book observes that, but for privatization in technical education, India would not have become a leader in software. This is the distinct advantage India has already derived from privatization. However, the authors in the book have cautioned on the negative aspects of privatization, and urged to guard against the poor people being left behind. Children of bottom 50% of population, need to be provided scholarships and financial support. They need to be included in technical education otherwise instability, insecurity, may result. The book observes that when the need of knowledge is increasing for getting jobs, due to rising fees opportunity for getting higher education for weaker sections of society is decreasing. Ways and means must be found to tackle this problem.

The book says Indian technical education should improve governance at various levels, grant autonomy to colleges and start technical universities. The book adequately deals with quality assurance, which is the crying need of the hour. Quality cell, quality audit, quality manual and bringing TQM in practice are recommended. Without quality assurance the book says that the institute may be having all the resources it needs, yet it may not be able to achieve the desired standard. The book explains, in detail, how to prepare quality manual. Improving quality is not a matter of just putting more money and more resources or appointing more men on the job, it is matter of adopting correct strategies. How research universities in USA and professors working in them have created technical entrepreneurs, in Silicon Valley, How Germany has successfully transferred technology from institutes to industry, is explained in detail.

India has huge human resource. This is our strength. We must build on human capital. It needs to be developed in world class manner. Do we realise that winners in global fierce competition will be those who develop talent, new technologies and patent & IPR? This is the Guru Mantra of the book.

The readers will find the book illuminating. It provides a wide spectrum of information required in technical education institutions. It is a good reference book for principals, professors and all those who are involved in management of technical education.

