

Building World Class Universities

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In his budget speech, the finance minister P Chidambaram announced a grant of Rs 100 crore to the Indian Institute of Science (IISc) at Bangalore to initiate the process of creating 'world class universities'. If this announcement is indicative of a new interest in higher education, it should be welcomed. But surely the irony of the announcement cannot be missed – successive governments, at the centre and in the states, have over the last half century reduced India's once proud universities to a state of almost irreparable mediocrity.

Politicisation intertwined with bureaucratic control, ignorance of merit in appointments and promotions, starvation of funds, and recruitment freezes have prevented Indian universities from doing their jobs competently, let alone achieve world class standards. Many universities have not recruited faculty for years and are

managing with temporary staff. A predominant part of the average university's budget is spent on paying the salaries of the existing faculty and very little is left over for laboratories and maintenance. Fees are low, but the students get a discounted education in return. There have been some well intentioned efforts at quality improvement like the setting up of the National Accreditation & Assessment Council but there are concerns about whether it is setting high enough standards.

The only silver lining in this dark firmament has been the advanced technical education system, spearheaded by the IITs and IISc. The IITs have several positive features – large well endowed campuses to provide a conducive academic environment, well qualified faculty (a large proportion of whom have foreign degrees), excellent laboratories and libraries, contemporary curricula, and above all reasonably robust internal governance mechanisms that prevent dilution of the

institutes' main mission. However, even the IITs have been better known for the exceptionally bright graduates they produce than the research they do. And a worrisome development is that the IITs have not been free of political involvement. Concerned that it might lose control, the previous government frowned upon the efforts of some IITs to raise funds from alumni. In an effort to strengthen control, the same government gave, for a time, liberal grants to the IITs, leading to reports of wasteful 'gold plating' of infrastructure on campuses in order to use up the extra money that was provided. Also, some directorial appointments in recent years appear to have been influenced by the political predilections of individuals.

Since the early 1990s, private technical education institutions have mushroomed all over the country. But this is not a part of any stated plan or vision to privatise higher education: the demand for technical education from prospective students was high, employment opportunities existed in fast growing sectors like software, and entrepreneurs (often politicians) used the space created by the lack of initiative of the state to meet this demand. The quality of many of these private institutions is suspect, yet there has been no sustained attempt to address this issue.

The higher education system in India is thus in a state of considerable disarray characterised by a lack of vision or clear policy. The intent to create 'world class universities' must be seen against this backdrop.

Ranking Universities

What is a 'world class university'? It is easier to define an ideal university. An ideal university is a hothouse of ideas and scholarship. Ideas hold sway over authority and their refutation is attempted through the scientific method, not the heavy hand of hierarchy. Scepticism and critical examination are important principles to be upheld on a university campus. Each researcher has the freedom to work on the problems of his interest. All decisions regarding academic matters (interpreted in the broadest sense) are taken by the community of scholars. Funding of research projects is on a competitive basis, subject only to peer review. Faculty build their reputations and are promoted for the quality of their research and ideas (as achieved very successfully by the US tenure

system), not for their seniority or proximity to the powers that be. Most Indian universities appear to be far away from this ideal.

Efforts at ranking universities so as to identify 'world class universities' have tended to look at their outputs rather than processes. A recent academic effort by the Shanghai Jiao Tong University has received considerable attention. The criteria they use are number of alumni of the university who have won Nobel prizes or Fields medals (weightage = 10 per cent), the number of staff of the university who have won Nobel prizes or Fields medals (20 per cent), highly cited researchers in 21 broad subject categories (20 per cent), articles published in *Nature* and *Science* (20 per cent), articles in science and social science citation indices (20 per cent) and a measure of academic performance relative to the size of the organisation (10 per cent).¹ On the basis of their evaluation, IISc, IIT Kharagpur and Calcutta University are the only three Indian universities to figure in the world's top 500 for the year 2004. Not surprisingly, US universities dominate this list.

What explains the dominance of American universities on these criteria (or, for that matter, rankings based on alternative criteria)? A first set of explanations is at the systemic level. The US has a diversity of universities that have different objectives. A top research university for example is very different from a community college that offers vocational degrees. This segmentation has helped different universities focus on what they can do best and avoids confusion of objectives. The research universities have definitely benefited from the competitive funding for research projects offered by the US National Science Foundation and the US National Institutes of Health, apart from the US departments of defence and energy. Even state-owned universities like the University of California system have been able to negotiate enough 'space' from the political system so as to pay their faculty well (though less than the top private schools) and remain focused on their primary mission. Other important elements of the American system are a political commitment to higher education, zealotry attempts to protect academic freedom, efforts by the universities to gain and protect legitimacy, the tenure system, competition for faculty and students, and charging high fees (mainly in private schools). American universities have been able to attract the

best faculty from all over the world thanks to the environment and resources they provide and their performance-based promotion systems. They have been helped by the fact that European universities have tended to be more bureaucratic, seniority-based, and had more state involvement.

What It Takes

Does India need world class universities of the type that would make the top 100 rankings in the Shanghai grading? It is difficult to quantify what the benefits of such universities would be. However, it is a fact that a number of other countries including Korea, Taiwan and China have launched formal programmes to create world class universities. Pride, prestige, and spin-offs to the wider economy (in this order) seem to be the driving forces of these endeavours.

It is estimated that the creation of a world class university would cost \$500 million.² At current exchange rates, that would mean an investment of Rs 2,200 crore in one university alone. Assuming that Indian manpower costs would be lower and that salaries comprise about half the cost, in India it would cost us about Rs 1,300 crore to create a world class university. However, though money is an important input for creating academic excellence, money cannot buy a world class university. As is evident from the American experience, internal governance systems are critical. A related issue is leadership. Academic institutions are notoriously difficult to shape according to the principles of management. Yet, there is little doubt that some of the best universities in the US benefited greatly from the leadership of individuals who shaped their future. Within India too we have had outstanding leaders such as P K Kelkar, the first director of the Indian Institute of Technology Kanpur. It is unfortunate that today we do not see much evidence of strong and inspired leadership in Indian universities.

It is also worth asking whether a university located in a developing country can claim to be world class in the true sense of the term if it is focused on science and engineering alone. If we look at the process of economic development, it is evident that technocratic solutions by themselves hardly ever solve problems. Technologies need to be rooted in the social, economic and political environment if they are to succeed. People who change the

developing world will need to understand this environment for which they would benefit from learning philosophy, history, and the social sciences. Unfortunately, many of the IITs that started off with some commitment to a liberal arts component in their curricula have over time diluted or decreased this component and the humanities and social sciences departments have been neglected. The IISc is one step further removed – it does not even have faculty in the social sciences and humanities (unless one counts the 10 memberfaculty in the management sciences and the few scholars at the National Institute of Advanced Studies on the IISc campus).

Another important question is whether one or two world class universities can survive and make an impact amidst a sea of mediocrity. Surely, India would benefit more from a diverse set of good institutions rather than one or two ‘world class’ ones.

Urgent Priorities

The government needs to clarify its role in higher education and create a policy frame that can guide the development of this crucial sector. The problems faced by the universities in this country are well known and the central government should work with the states to improve their funding, increase their autonomy and provide the governance structures that would help them move away from their present role as degree granting machines. If the government can work so intensively with the states on a value added tax to make the country competitive, why not work with them on an initiative to release the creative energies of our universities?

In addition, there is an urgent need to systematise the process of admissions to professional colleges across the country. Last year saw tremendous confusion as the court judgments appeared to have given the powers of admission to the colleges, yet the state governments refused to let go. Complicating this was the fact that many of the colleges are run by politicians themselves. We are on the threshold of the next admission season and there has been little evidence of the basic issues getting sorted out.

Given the resource constraints of the government, it is worth putting in place a proper legal framework for the creation of private universities. Private universities have been created either through the

backdoor – under the Vajpayee government, dozens of private engineering colleges became ‘deemed universities’ overnight – or through the ‘Chhattisgarh’ route, where one street in Raipur had, till a recent Supreme Court judgment, perhaps the highest concentration of universities in the world. The tragedy of our times is that there is no straightforward way for a group of qualified, well intentioned people to set up a private university. There only exist the dubious methods that are open to the people you wouldn’t want to start a university in the first place.

The government’s disinclination to engage with the issues that are really holding back higher education in the country raises the suspicion that the sudden interest in creating world class universities is a form

of tokenism. IISc, already India’s best institution for science and technology (and, by all reports, not short of money!), will be richer by Rs 100 crore, but the problems of the higher education sector will remain. It is up to the government to prove us wrong by taking some directed action to address the problems faced by higher education in India. 

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Notes

- 1 See <http://ed.sjtu.cn/rank/2004/Methodology.htm>
- 2 Philip G Altbach, ‘The Cost and Benefits of World-class Universities’, *Academe*, January-February 2004. Downloaded from <http://www.aaup.org/publications/Academe/2004/04jf/04jfaltb.htm> on March 3, 2005.