

BUILDING WORLD-CLASS EDUCATIONAL INSTITUTIONS

What makes great universities great? And what can India learn from established and upcoming universities as it sets out to build great universities of its own? Hari Pulakkat finds out

Rankings are often a subjective exercise, and many education experts consider university rankings as arbitrary. However, no matter what methodology you choose, the top 15 in the world end up being largely the same year after year. They have been on the list for a long time, with only marginal changes in the rankings every year, relative to the rest of the world. No one would be surprised by their names: Harvard, Yale, Cambridge, Oxford, University of Chicago, Princeton, Caltech. It is logical thus to start our analysis with a question: what makes these universities great?

Let us look at Harvard University, widely considered by academicians as the best university in the world. A clue to Harvard's greatness lies in the way it approaches its faculty hiring. Its administrators consider intellectual culture as a prerequisite for greatness. When Harvard decides to hire in any department, its management asks a simple question: who is the best in the world in this area? They make a small list of the names and offer the job to whoever tops the list. If she or he does not accept the offer, they go to the second best. And so on, till they get the best candidate for the job.

Harvard is flush with funds, and so it can attract the very best. If you look at the top 10 universities, one of the first things that strike you is their generous endowments. Harvard has an endowment of \$32 billion, but other universities are not badly endowed either. Even the University of Cambridge and Oxford, which are not as rich as Harvard, have endowments of \$10 billion and \$6.3 billion, re-

spectively. Large endowments let universities set up attractive campuses, buy sophisticated equipment, offer generous scholarships to deserving students, and they let them offer competitive salaries. Harvard also buys sophisticated equipment, provides generous scholarships to deserving students, and offers competitive salaries. Harvard also has a long history of attracting the best faculty in the world. Its National Research Council of Science and Technology (NRCST) chair, A. Mashekar, says: "They are particularly important for universities without a long history. Mashekar has also been a visiting professor at Harvard for the last six years."

Something to be remembered when you try to build world-class universities is that you must build first by great faculty and star faculty, and then high salaries. There are millions of universities that follow this rule and they are usually not world-class. Universities with a long history and a high reputation like Oxford or Cambridge. But even new universities operate with high standards together from different sources, outside the government. High budgets tend to have a concentration of top faculty and quality students, along with state-of-the-art equipment.

Vs Others

Concentration of talent is one of the most important facets of a great university, but they also have other attributes as well. They have a high degree of autonomy, even if they are funded by



What Makes a Great University?

- Great research: Through citations
- Major awards for faculty: Nobel Prizes, Fields Medals
- High reputation for teaching
- Ability to innovate: Patents and start-ups
- International orientation: Multicultural campus
- High employability of graduates

THE DECLINING RANKINGS of Indian Universities

THE TOP 10 WORLD UNIVERSITIES HAVE NOT SHOWN MUCH CHANGE. THE ASIAN ONES HAVE MOSTLY IMPROVED, BUT INDIAN ONES HAVE LOST GROUND

Top 5 Indian Universities	World Rank	
	2013	2009
IIT Delhi	222	181
IIT Bombay	233	163
IIT Kanpur	295	237
IIT Madras	313	284
IIT Kharagpur	346	335

Top 10 World Universities	World Rank		
	Country	2013	2009

the government. They are international, and have an exceptionally good governance system. They are located in good places to live as well.

Many Asian nations have realised the link between world-class universities and economic development and have been working hard to build a few such institutions in their countries. Singapore, South Korea, Taiwan and Hong Kong have been particularly successful in this regard, but countries like Thailand and Vietnam have also managed to raise the standards of their universities recently. Our neighbours, Bangladesh and Sri Lanka, have also made university-building as one of their priorities.

Although the number of quality institutions in India has been slowly increasing as the government builds new IITs and IISERs, top Indian institutions have been slipping in their international rankings. It may not be because they have been declining in absolute terms, but because other institutions have been raising their standards rapidly — some with the explicit intention of grabbing higher ranks (See graphic: *The Declining Rankings of Indian Universities*).

says Jamil Salmi, a former World Bank education advisor. "Money has been difficult to come by in many countries, but India has managed to attract a lot of investment."

Salmi, who had been studying Indian higher education for a long time, has co-authored a book that looks at how to build world-class universities. In his opinion, several things are necessary for a world-class university: big budgets, sound governance, an international outlook. Indian universities are weak on all three accounts.

Although money for education in India has increased in recent times, it has not been enough to establish new institutions. Budgets for individual institutions are small by international standards. Government interference is common even for elite institutions, and institutions in India are not international. IITs, especially new ones, are trying to change here.

IIT Gandhinagar is now over five years old. Although public-funded, its director, Ramesh Jain, has had a near-free run, enjoying a high degree of autonomy in building a new university. Jain began with an explicit goal: to be among the top 20 in the world within 50 years. In five years, he has been laying what are the foundations for a world-class university: absolute integrity, outstanding faculty, talented students and a multicultural environment.

Regardless of discipline, IIT Gandhinagar has been hiring the best possible faculty in the process some departments are stronger than others. Cognitive science is the strongest departments and it is a substantial social sciences and humanities departments. Jain has been hiring the best possible faculty, too, to the extent possible. IIT Gandhinagar has a budget of ₹200 crore and budgets; it has 24 professors and 24 faculty members. Indian, who spend varying amounts of time within campus. "We are trying to create a culture that stays with IIT Gandhinagar for a very long time," says Jain, adding that key features are utmost academic excellence, emphasis on research and scholarship, and merit-based discretion in decision-making.

Funding With Autonomy

An IIT has too many constraints imposed on it, some of it self-imposed and some imposed by the government. IITs can have autonomy in their operations, which has not been the case recently. They can raise money and create a multicultural campus, some IITs can hire abroad and get foreign students. It is hard to do this at large scale with limited money, they are raising money from philanthropists. IITs are not just about research. Recently, IISc received ₹220 crore from the co-founder Kris Gopalakrishnan. This money can be used to create an institution that can attract faculty and post-doctoral students from the narrow confines of government-run institutions.

Philanthropy in science is new to India. Great universities around the world have thrived on it, and often used donations to create special institutes and chairs for the best talent. The Koch Institute at MIT started with a \$100 million grant from oil billionaire David Koch. More public institutions in India could follow this route, their campuses could be filled with special institutes that attract the best talent.

Yet, in the university can become less if it enjoys substantial autonomy with complete autonomy. What other Asian countries have tried to do, and with varying degrees of success.

The best example is South Korea, which has tried to raise its standards through government programmes. During the last three years of its University programme, it recruited a few hundred faculty, of which nearly half are foreign. Salaries of South Korean professors are merit based, and universities there are not American style of promotion. It is no surprise that South Korean universities are rising in the rankings. What can India learn from this? Should the government let Indian institutions free? "The government does not rule but policy," says IIT Madras professor Bhaskar Ramamurti. "We have to let them do it."