**IIT Madras to soon create professors-by-practice**

**DC | N. Arun Kumar | October 25, 2014, 06.10 am IST**


**Chennai:** With an aim to make all students employable and bridge the industry-institute gap, the Indian Institute of Technology, Madras (IIT-M) plans to create the post of “professors by practice” and recruit industry experts to teach students.

Director of IIT-Madras Professor Bhaskar Ramamurthi said that there were several industry professionals with a lot of expertise and passion to teach in education institutions but who did not have PhD degrees.

“They have a lot of knowledge in product design, technology, market, design, cost effectiveness and manufacturability. These experts can play a useful role in academic institutions by teaching some electives, which normal faculty cannot teach as the professionals have lot more insight in practical aspects,” Prof Ramamurthi said.

Explaining further about the concept of “professors of practice”, the director said that these professors could co-supervise PhD and research students with their expertise gained in the industry they worked in.

“They can also help define new research projects which are pitched in such a way that the output is useful for the industry. The professors of practice will be selected through a rigorous selection process. Only professionals with 20 years of experience and who have achieved a lot in the industry will be recruited, that too by a selection committee,” he added.

The IIT-M director said that he would soon write to the HRD ministry seeking permission for the proposal. “We will have a cap on the number of professors to be recruited in this category, maximum of five per cent (35) of the sanctioned faculty strength (700),” he said.

It may be pointed out that several universities in USA recruit professors of practice to keep in pace with latest technology.
Faculty crunch
Higher education has much else to worry about

The idea of academic pursuit has lost its sheen. It’s not just the poor pupil-teacher ratio in higher education, which has come to 23 students per teacher, that should be worrying the planners and educationists. The more worrisome part is academics no more attract talent. Despite salaries being comparable with the best in the employment market, not many would like to work as faculty in colleges and universities mushrooming across India. Lack of research facilities, grants and opportunities to excel in one’s area of research — often due to nepotism and favouritism — is a major factor that pushes bright academicians to seek offshore jobs.

Even after the University Grants Commission (UGC) made it mandatory for all aspiring faculty members to clear the National Eligibility Test or the State-Level Eligibility Test to ensure quality, not much has changed in terms of either the number of teachers available or the quality of teaching. In fact, till as late as 2011, the UGC was flip-flopping on the decision to honour or reject PhD degrees recognised and awarded by its own universities for a faculty position. All this is symptomatic of the malaise that prevails across our much esteemed institutions of knowledge, from the top to bottom.

As a result, 75 per cent of our technical graduates and more than 85 per cent general graduates produced by our universities are unemployable by India’s high-growth global industries, according to the results of assessment tests administered by the National Association of Software and Services Companies. There have been suggestions to abolish the UGC, which has failed to respond to the changing requirements of education at multiple levels. In a rush to ‘produce’ more degree holders, we ignored quality. Now, just to get more faculty members, the same should not be repeated. Wipro, an Indian MNC, started a programme called ‘Mission 10 X’ to train teachers in appropriate pedagogy techniques for teaching engineering students to meet its quality requirements in education. Why can’t the UGC take a leaf out of the Wipro book?
Why Isro succeeds

It's not that hard, other government departments must exploit its ABCD formula

Kiran Karnik

The outstanding success of Isro's mission to Mars has deservedly won wide acclaim, both in the country and abroad. Those with deeper knowledge of the challenges and complexities of the effort are even more appreciative of the achievement. The success of programmes like MoM and Chandrayaan (Isro's Moon mission) generates national pride and widespread praise. However, there are ongoing activities (launch of a navigation satellite a few days ago) in technology development and applications which form the bedrock of the organisation's achievements.

It is in this context that it is worth reflecting on the basic factors that make Isro so successful. There are certainly lessons here not only for government organisations, but also the private sector.

Success has no guaranteed magic formula but one can seek to glean some major contributory factors. Along these lines, a summarised and simplified Isro recipe can be codified in the acronym ABCD. First, A is for autonomy. While operating within the framework of government rules (Isro is part of department of space similar to any other in government), the Space Commission is a fully empowered body. It has the authority to make all financial and administrative decisions, barring those that are exceptional or of very high financial value. These go to the prime minister. This autonomy coupled with the fact that the PM is the minister of space, ensures there is no interference from politicians or other vested interests.

This structure also helps in keeping out the bureaucracy (the B of the mantra). Isro is managed by professionals, with all functional decisions being made by them. The few bureaucrats within Isro and department of space play an important, but supportive and service role, as opposed to a control function. The fact that the secretary is a space professional is an important element of this.

C is for capital: not of the financial kind, but of the country. It can hardly be a coincidence that the only two government departments which are not headquartered in Delhi (space and atomic energy) are probably the best performing ones by almost any criteria. Arguably, this may also account for the enviable reputation of RBI and SEBI. Being far from politicking, bureaucratic turf battles and power-and-money culture of Delhi clearly helps.

Collaboration is another key element of Isro's success. Obviously, internal collaboration among various groups and centres within Isro is essential in developing any complex system or programme. The culture of collaboration is nurtured and ensured by structural arrangements, including a matrix management structure. This deepens domain expertise by ensuring that individuals work in and are guided by senior experts in their specialised area.

At the same time, individuals are also accountable to a project manager/director who integrates work across different domains to deliver a project. Equally special is the external collaboration with other government entities (especially for programmes of applications of space technology) and with industry. The long-standing and extremely fruitful interface with corporates—many of which are partners, rather than mere vendors—bodes well for commercial exploitation of India's space capabilities.

The last alphabet of the acronym is for democracy. Its most valuable form in ISRO's context is the openness and freedom of speech that is particularly manifest during design reviews, where everyone is equal and young junior engineers are free (and actually encouraged) to argue with their seniors and pick holes in their work.

In a field where there are so many unknowns, with high risk and failure rates globally, the comparatively more successful Isro programme undoubtedly owes a great deal to its rigorous and frank design reviews. They demonstrate the value of scientific temper, where knowledge trumps hierarchy; where not all questions have answers, but all answers can be questioned.

D is also for discussion, dialogue and dedication: all elements of Isro's work culture.

This somewhat simplistic explanation of Isro's success could be elaborated, contextualised and added to. For example, vision, motivation and cutting-edge work which provide intellectual challenge can be cited as other key factors. Yet, ABCD may be a formula that other government departments and corporates may well want to emulate.

The writer is a senior fellow at Centre for Public Awareness and Critical Theory, Shree Nader University. He spent over two decades at Isro.
8-mth Mars mission simulation is on

Washington: Six people have sealed themselves inside a white vinyl dome in Hawaii to embark on an eight-month test of how their mental health might fare during a mission to Mars. The Nasa-funded project, the longest US Mars simulation yet, involves three men and three women who have no access to fresh food and limited access to internet that requires 20-minute intervals between click and response, as it might be in deep space. They are allowed to venture outside their igloo-like enclosure — which measures 36 feet in diameter and 20 feet tall — only if wearing a spacesuit.

“We are surrounded by basaltic lava and living in isolation on the slopes of Mauna Loa where there is little evidence of plant or animal life,” wrote crew member Jocelyn Dunn, a doctoral candidate at Purdue University’s School of Industrial Engineering, after her first day in the dome.

Nasa is spending $1.2 million on a series of three such projects known as Hawaii Space Exploration Analog and Simulation (HI-SEAS) to determine the potential pitfalls of sending people together to spend long periods in close quarters on a distant planet. Nasa is aiming for a human mission to Mars mission by the 2030s. It could take eight months to reach the Red Planet. Nasa deems it just as important to study whether people’s mental states could hold up under the pressure of a Mars journey, said principal investigator Kim Binsted.

As time wears on, experts relate to mission control. One potential problem may come late in the game, when a depression known as “third-quarter syndrome” kicks in. The simulation is no longer as fun as it was at the start, and the end is not quite near. There is also the issue of communication breakdown between the crew and ground control, which happens often in these kinds of missions, Binsted said. AFP
Super 30 students offered Tokyo scholarship

Amarnath Tewary

PATNA: Students of Super 30, the Patna-based coaching institute for IIT-JEE, celebrated Diwali on Thursday with a team of professors from Tokyo University. The visiting team also announced that one student of the Super 30 would be given a scholarship for pursuing higher education in Japan.

“We’d heard a lot about Super 30 and wanted to be with the talented students to share their experience. Diwali is a special occasion to share joy with the students,” said Yashino Harisho, senior faculty member from Tokyo University. The coaching institute is run by Anand Kumar for underprivileged students to crack the engineering entrance examination for the Indian Institutes of Technology [IIT]. Since its inception in 2002, over 300 students from the institute have already cracked the IIT-JEE.

Japan’s industrial group GGC has also sent gift packs and sweets for the poor students. Mr. Kumar visited Tokyo University for a lecture last year. Earlier, NHK, a television news channel in Japan had made a documentary film on Super 30 following which several other Japanese channels such as Amazon TV, Kansai Telecasting Corporation and TV Man Union also documented the work of the institute.

Mumbai University has 12 billionaires

New Delhi, Oct. 24: The University of Mumbai has been ranked among the top 10 schools that produce the world’s billionaires and has more number of such undergraduate alumni than London School of Economics.

According to this year’s Wealth-X and UBS Billionaire Census, 12 billionaires obtained their bachelor’s degrees from the University of Mumbai, making it one of the top 10 schools in terms of number of billionaire undergraduate alumni.

“With 12 billionaire alumni, India’s University of Mumbai has the most billionaire graduates of any university based outside the US,” the report said.

The University of Mumbai was ranked 9th on the list which was topped by the University of Pennsylvania as the school had 25 billionaire undergraduate alumni. It has more billionaire alumni than MIT, NTU, University of Columbia and Duke University.

Besides, University of Mumbai, the London School of Economics and Political Science in the United Kingdom, Lomonosov Moscow State University and ETH Zurich in Switzerland are other schools that made it to the top 20 billionaire schools list.

Interestingly, higher education has not been a prerequisite to achieving billionaire status as 35 per cent of the 2,325 billionaires in the world do not have a tertiary-level degree.

Among those billionaires who hold a degree, 42 per cent graduated with a bachelor's, 36 per cent have masters, 21 per cent finished their MBA, and 11 per cent attained a PhD, the report added.

— PTI
Mumbai Univ beats LSE in billionaire alumni list

By Mail Today Bureau
in New Delhi

The University of Mumbai now number
of undergraduate billionaire
alumni is more than the London School of
Economics (LSE) and is among the top
10 schools that produce the world’s
billionaires, according to this year’s
Wealth-X and LBS Billionaire Census.

Twelve billionaires obtained their
bachelor’s degrees from the Univer-
sity of Mumbai making it one of the
top 10 schools in terms of number of
billionaire undergraduate alumni.

"With 12 billionaire alumni, India’s Uni-
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are undergraduate alumni. The Uni-
versity of Mumbai has more number of
billionaire alumni than MIT, NYU, University
of Columbia and Duke University.

Harvard University was ranked sec-
ond on the list with 22 billionaire
undergraduate alumni followed by
Yale University (20) in the third posi-
tion. The University of Southern Cal-
ifornia, with 16 billionaire under-
graduate alumni, and Princeton
University, with 14, make the top five.
Sixteen out of the top 20 billionaire
schools are in the United States.

Besides, the University of Mumbai,
LSE, Lomonosov Moscow State
University and ETH Zurich, Switzerland, are
other schools outside the US that made
it to the top 20 billionaire schools list.

Cornell University was ranked 6th on
the list with 14 billionaire undergraduate
alumni, Stanford University (7th, 14),
University of California Berkeley (8th, 12)
and LSE (10th, 11).

Interestingly, higher education has
not been a prerequisite to achieving
billionaire status as 35 per cent of the
2,323 billionaires in the world have
not obtained a tertiary-level degree.

Notable university dropouts include
Microsoft co-founder Bill Gates and
Facebook co-founder Mark Zuckerberg.
Among those billionaires who
hold a tertiary-level degree, 42 per
cent graduated with a bachelor’s
degree, 28 per cent have a master’s
degree, 21 per cent finished their
MBA, and 11 per cent attained a PhD.

IIM-K completes placements in 10 days

Press Trust of India

IIM Kozhikode has completed
summer placements for the 14th batch of its
flagship Post Graduate programme in a record
10 days’ time.

The season saw offers made by 107 recruit-
ers, which included more than 50 new compa-
ieries. The average monthly stipend
witnessed a rise of 14 per cent over last year’s
figure, and the number of offers per recruiter
increased by 19 per cent, the IIM said in a
statement.

Top recruiters included Deutsche Bank,
Goldman Sachs, HUL, and TAS, which
together made 30 offers.

New recruiters included Apollo Hospitals,
Axis Bank, CommonFloor, Crisil, Dabur,
DBS Mudra, eBay, Hector Beverages, Idea,
INRAI, Maersk, Microsoft, Muthoot Group,
Snapdeal, Titan and Zee Media.

Prof Kulbhushan Balooni, Director (In-Charge)
IIM Kozhikode, said, “We are
glad to note the recruiters’ faith in our stu-
dents’ varied skill-sets, as seen by the new
brands and roles on campus this season.
We hope to continue catering to the industry’s
needs during the final placements season
as well.”

Prof AP Mathew Chairperson, Placements
at IIM Kozhikode, said, “It is heartening to
see IIM Kozhikode’s strong performance
across diverse sectors such as media and
advertising, education, e-commerce and
telecom. We remain thankful for the unwav-
ering support of our alumni base in
helping us towards this period of
sustained growth.”

Finance firms made offers to 19 per cent
of the batch offering roles in
corporate finance, investment
banking, capital markets,
asset management, risk
analysis, and global
investment research.

Goldman Sachs picked 11 students for vari-
ous divisions, while Deutsche Bank and
JPMorgan selected five students each.

The Marketing & Sales domain saw 43 per
cent of the batch securing offers in compa-
nies such as Airtel, Arvind Lifestyle, Asian
Paints, Britannia, Dabur and Godrej.

More than 15 per cent of the batch secured
internships in consulting and general mana-
germent roles offered by Aditya Birla Group,
Cognizant Business Consulting, Deloitte,
L&T, Mahindra, Muthoot Group, Reliance
Industries, RPG Group, and TAS, among
others.

TAS selected 9 students from IIM
Kozhikode, the highest number across IIMs.
The Muthoot Group hired three students
for corporate finance, and one student was
picked for an exclusive project entailing lay-
ing down the strategy roadmap for potential
new businesses.

Roles in logistics and operations were
offered by Amazon, Apollo Hospitals,
Asian Paints, Bosch, Flipkart, eBay, HCCB,
Hero Motors Corp, Maersk, and Snapdeal.
Companies including Capgemini, INRAI,
Microsoft, TCS, and Wipro participated from
the technology sector.

In terms of international internships,
Paramount Computer Systems continu-
ed hiring from IIM Kozhikode for roles
based out of the Middle East. Tolaram
Group offered sales and marketing
roles based out of Nigeria.

The average monthly stipend witnessed a
rise of 14 per cent over last year.

Representative Photo
Why We Aren't Convinced With Mumbai University's World Ranking


The University of Mumbai produces more billionaires than MIT, New York University and Columbia University! In fact, in terms of producing billionaires it's ranked 9th in the world according to Wealth-X and UBS Billionaire Census 2014.

tripomatic.com

Of course, the U.S universities grabbed all the top spots, but with 12 billionaire alumni University of Mumbai has the most billionaire graduates of any university based outside the U.S. Here are the top 10 from that list and you can find the complete list here.
Wealthx

So it is good na? What’s the catch? While we are super proud of the university’s achievement, the case of the missing IITs in the list does seem a bit odd. Yup, our very own IITs- birthplaces of genius entrepreneurs and boasting of the tough JEE entrance test. Also, we googled around to find out, that when it came to the rankings for the best universities in the world, Mumbai was nowhere to be seen and if it was, it ranked down so low, it was difficult to even scroll so much.

The IITs and Punjab University are there, but no Mumbai.

Exhibit B: [QS World University Rankings 2014/15](http://timeshighereducation.co.uk)
Mumbai is ranked between 551-600 in the world, with IIT Bombay grabbing the top spot in India with a ranking of 222 and Mumbai behind every major IIT and University of Delhi.

Exhibit C: [Academic Ranking of World Universities 2014](#)
It just had one Indian university - Indian Institute of Science at a world rank between 301-400.

So do we have a mystery on our hands? Nah. Not really. And we have some reasons. First, the university is really big, with more than 700 hundred colleges under it, and nearly 200,000 students. Compare this with the IITs, which are represented as 16 different colleges in any world rankings, not a cluster and give entry to only about 10,000 students, that too after a grueling nation-wide exam.

Second, it is MUMBAI - the financial capital of the country, the city that pays the highest taxes and has plenty of rich kids around. Ofcourse, merit does play the most important role in getting admissions, but there's no
denying that rich kids are over-represented here. The Universities’ jaw-dropping alumni list boasts the likes of business leaders such as Mukesh Ambani, Anil Ambani, Kumar Mangalam Birla, Ajay Piramal and politicians like Praful Patel, Vasundhara Raje and LK Advani. Add to this Bollywood superstars and it’s not hard imagine how Mumbai achieved that top ranking.

PTI

And if we compare this with the list of billionaires in India, the collective wealth of the Ambani brothers, the Birla scion and Mr Piramal is enough to send us into a tizzy. Although these businessmen worked hard, one cannot deny that they were born into wealth. Contrast this with the IITs, whose billionaires enrolled as aam aadmi, say someone like a Narayan Murthy. While the debate on whether a ranking based on the number of billionaires you churn out is relevant or not, will continue, there is no denying the fact that Mumbai University boasts of a rich history and heritage that has given India many stars. Ranking or no ranking, it deserves our respect.

GOOGLE, OXFORD TO RESEARCH TOGETHER

Hindustan Times (Delhi)

Technology giant Google is teaming up with Oxford University to advance research on artificial intelligence to ultimately enable machines to better understand human users. The partnership will focus specifically on the fields of image recognition and natural language, Demis Hassabis, vice president of engineering at Google, wrote on the Google Europe Blog. Hassabis is also the co-founder of DeepMind, a UK-based company that Google acquired in January. Google DeepMind will be working with two of Oxford’s cutting edge artificial intelligence research teams. Google has also hired seven co-founders of the two artificial-intelligence groups.
Game changer:
Docs transplant ‘dead’ hearts

New Way Can Help Save More Lives

**Sydney:** Australian surgeons said on Friday they have used hearts which had stopped beating in successful transplants, in a world first they said could change the way organs are donated. Until now, doctors have relied on using the still-beating hearts of donors who have been declared brain dead, often placing the recovered organs on ice and rushing them to their recipients.

But Sydney’s St Vincent’s Hospital and the Victor Chang Cardiac Research Institute have developed a technique which means hearts which had been still for 20 minutes can be resuscitated and transplanted into a patient. So far three people have received hearts in this way, with two recovering well and the third and most recent recipient still requiring intensive care.

“They are the only three in the world,” surgeon Kumud Dhital, who is an associate professor at the University of New South Wales in Sydney, said.

“We know that within a certain period of time the heart, like other organs, can be reanimated, restarted, and only now have we been able to do it in a fashion whereby a heart that has stopped somewhere can be retrieved by the transplant team, put on the machine... and then (surgeons can) transplant it.”

The technique involves donor hearts being transferred to a portable machine known as a “heart in a box” in which they were placed in a preservation solution, resuscitated and kept warm. Professor Peter MacDonald, medical director of the St Vincent’s Heart Transplant Unit, said the use of hearts “donated after circulatory death” would make far more available for transplant.

“This breakthrough represents a major inroad to reducing the shortage of donor organs,” he said.

Michelle Gribilas, the first patient to receive one of the three hearts, said she was very sick before her operation. “Now I’m a different person altogether,” the 57-year-old said. “I feel like I’m 40 years old. I’m very lucky.”

The second recipient, Jan Damen, who had the surgery about two weeks ago, said he felt “amazing”. “I’m not religious or spiritual but it’s a wild thing to get your head around,” he said. Dhital said reanimating hearts using the machine could increase safety for patients because it gave surgeons confidence that the organ was functioning.

“I would suggest that in the next five years or so we will be shifting more and more towards machine preservation of hearts,” he said. **AFP**