IITs unfazed at not making it to global university rankings

Institutes say their focus is on providing quality education to Indian students

KALYANA PATHAK & M. SARASWATHY
Mumbai, 19 September

Indian universities, for the second time in a row, failed to make it to the top 200 institutions in the QS World University Rankings, but they are not losing sleep over it. The institutes say though they have not featured in the top 200, they certainly figure in the top 50 in their respective areas of specialisation. For instance, the Indian Institute of Science and the Indian Institutes of Technology (IITs) might have slipped several notches to rank below 200, but all of them figure in the top 50 engineering and technology institutes internationally.

Agrees Danny Byrne, editor of TopUniversities.com. "Despite not having a single university in the top 200 in the overall rankings, India's concerted focus on engineering and technology is reflected in the appearance of IIT Bombay in the top 50."

IITs Business Standard spoke to said they were not going to change any policies to improve their international rankings. "Ranking is not everything. No institution works merely to improve their ranking. We are doing things to give good experiences to our students and to do more research, and this is going on. Things other than these are only a byproduct," said Devang Khakkar, director, IIT Bombay.

IIT Bombay slipped two positions this year to rank at 237. Its peer, IIT Delhi, figures at 226th position, up six positions compared to the previous year. IIT Kanpur is at 278th position.

"When you look at criteria like academic reputation or employer reputation, the IITs are doing well. What the IITs can really look at improving is the citation and faculty-student ratio," said a professor at IIT Delhi.

Khakkar agrees: "One has to take everything in context. The budget that international institutions have, IITs do not have. Certainly, rankings will go up if there is more investment, but this is not the whole idea."

QS World University Rankings are based on data covering four key areas of concern for students, namely research, employability, teaching and internationalisation.

Internationalisation has been identified as a major issue with the institutes inIndia. "We see India once again underperforming, with only 11 universities in the ranking, the vast majority of which are various IITs. Internationalisation has been identified as a key issue," said the rankings.

IITs, however, say internationalisation is not high on their agenda. "Foreign faculty and foreign students will improve, but not much, as our resources are focused on providing good education to Indian students," said Professor Khakkar.

Besides, IITs says they are not a university but a sub-set, and if one looks at what is their forte, they are not doing badly, given the investments.

Industry experts believe lack of awareness is a major reason for Indian Institutes' poor performance. Narayanan Ramaswamy, head of education practice at consultancy major KPMG, said several universities did not even participate in this process due to lack of awareness and did not give adequate information when asked for it.

"The issue here is, we do not even have people to validate the necessary information when institutes are contacted by the authorities concerned," he added. Ramaswamy said there was still a long distance for Indian universities to cover in terms of rigour of research and publication. "I hope the rankings have a positive influence on the institutions here to improve their performance," he said.

Experts said Indian Institutes have to improve factors like internationalisation, emphasis on research faculty and incentivised research to be featured among the top institutes of the world.

"World rankings lay huge emphasis on research and research output. This is what Indian Institutes lack. Though Institutions like the IITs rank well in engineering disciplines, we do not have multi-disciplinary universities undertaking world-class research in the full range of disciplines. This is why they do not feature among the top universities in the world," said Nishul Sinha, vice-chancellor, Shiv Nadar University.

QS says several young universities — such as the Hong Kong University of Science and Technology (HKUST); Korea's KAIST and POSTECH, which are certainly younger than the IITs — are raising millions of funds to fuel their growth and help build state-of-the-art laboratories and facilities.

Nanyang Technological University (NTU) spent Singaporean $880 million in sustainability research. HKUST's budget for research in 2009-2010 was Hong Kong $426 million, and KAIST has set a goal to raise one trillion won by 2013 for various academic advancement programmes.

The research currently considers over 2,000 universities, and ranks over 700. The top 400 are ranked individually, whereas those placed 401 and over are ranked in groups.

Though some of the IITs have been around for about 50 years, they still need a lot to do in terms of research and to be financially independent.

The fact that international university NTU can break the world top 60, just 20 years after it was established, certainly means Indian institutions can and do the same.

Hope, the IITs are listening.
NICHE MARKET

Funding hurdles block technology to help the disabled, say experts

BY MALIA POLITZER
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NEW DELHI

India is quickly emerging as a design hub for assistive technology meant for people with disabilities and the elderly in developing countries. But, there’s a serious funding gap for final product design, production and distribution that is blocking potentially life-changing products from reaching users, designers said.

“We’re seeing the beginnings of a renaissance in design for assistive products here in India that are being showcased today,” said Abha Negi, director of Swyam, the organization hosting this year’s Transed conference in New Delhi this week.

The international conference brings together researchers, innovators and thinkers to discuss how to solve mobility challenges faced by growing numbers of elderly and people with disabilities.

Assistive technology devices help people with disabilities perform tasks that would otherwise be difficult or impossible. The field, quite evolved in developed markets such as the US and Europe, is relatively new in India and has only begun to emerge in the past five to eight years, Negi said.

Products showcased at the conference include cars and two-wheelers adapted for wheelchair users, braille tablets that help the visually impaired read online and motion-sensor canes.

Part of the challenge that has held India back is that designing appropriate technological solutions for people with disabilities in emerging economies such as India is more difficult than for designers in the developed world, said P.V.M. Rao, a professor of mechanical engineering at the Indian Institute of Technology (IIT), Delhi.

“Let’s say I want to take an international product and bring it to India—it doesn’t always work. It’s developed for very structured environments, so we might have to redo it completely. For example, a travel aid might work well if I use it on highly structured roads, but as soon as I get to a crowd in Delhi, it doesn’t work so well,” Rao said.

Other challenges, he said, related to finding ways to lower the cost of manufacturing so the devices are affordable to the average Indian. “For example, the refreshable braille tablet exists right now for $3,000-6,000 (around ₹1.6-3.2 lakh today). We are trying to make it for $300-400. We can’t use the same technology because in the commercial systems it would require $10 of investment, and we need to bring it down to $1.”

Recently, India has seen a surge of interest in innovation of products and devices that could potentially change lives for people with disabilities. Rao has been working with students at IIT-Delhi to design a host of products, including electronic braille tablets to help the visually impaired read websites and e-books, and solutions for public bus systems to help people with blindness identify and board buses at busy stops.

IIT students, in collaboration with global charity foundation Wellcome Trust and Delhi-based non-profit Saksham, have recently designed a walking stick for the visually impaired with electronic sensors that vibrate on encountering potential obstructions, both on ground and above.

While similar devices exist in the developed world, Rao said those were designed for unobstructed smooth roads and don’t often take into account obstacles such as tree branches obscuring walkways, which are more common in emerging economies.

Prasant Paramathmi, a mechanical engineering student at Nettur Technical Training Foundation in Bangalore, was inspired to design a two-wheeler that a wheelchair user could mount and use independently when one of his neighbours, an elderly man who was a paraplegic, lost his wife. “She used to help him get on the wheelchair when he needed to go out,” he said. “After she died, he had no one. I wanted to design products that could help such people.”

Funding constraints, though, have all but blocked designers from getting products to the user.

“The market for (these) products is not as large as mainstream products. So the number of products that need to be marketed is low, and due to lower scale of quantity the cost goes high, and so it is not always commercially viable to get into this,” said Dipendra Manocha, founder and managing trustee of Saksham, a charity that creates software to enable the visually impaired to read, write, work on computer and use phones and tablets.

Rao said the biggest challenge is in taking a prototype to the market. “A prototype that needs to be marketed; and that’s where no one is willing to back,” he said. “There is no government funding, and even industries that are into these products are not willing to take the risk. So there’s a big funding gap.”

While IIT-Delhi has managed to get its walking stick funded through Wellcome Trust, a UK-based foundation that funds medical devices, few assistive technologies qualify as medical devices.

“The private sector needs to be more proactive and open to funding such initiatives because, at the end of the day, these are all targeting niche users, and niche markets are being developed,” said Negi.
Committed to biometric system of attendance, says Delhi University

Staff Reporter

NEW DELHI: Delhi University on Wednesday informed the Delhi High Court that it was committed to implementing the biometric system for registering attendance by the teaching staff but support of teachers was needed for the same.

The University made this submission in an affidavit before a Division Bench of the Court comprising Justice A. K. Sikri and Justice Rajiv Sahai Endlaw in reply to a public interest litigation seeking a direction to it to introduce the biometric system to mark attendance by the teaching staff at its colleges.

The affidavit said: "The University while on the one hand is committed to implementation of the biometric system in order to obviate any chance of irregularity or mischief in maintaining correct record of attendance of each teacher, but the teachers have to cooperate in this regard."

"While the biometric system has been successfully implemented for the University's non-teaching staff, however, attempts to introduce the biometric system of attendance for its teachers have been unsuccessful," the affidavit noted.

However, the affidavit also expressed hope that the teachers would not stall the steps towards uplifting of standards and betterment of teaching facilities.

"The teachers are not expected to stall steps taken by the University towards uplifting of standards and betterment of teaching facilities," the affidavit said.

Later, the Bench disposed of the petition.

The petitioner, Indian Council of Legal Aid and Advice, a voluntary organisation engaged in providing legal aid, through its counsel R. K. Saini along with Sitab Ali Chaudhary had argued that the introduction of biometric system or the attendance register was necessary to ensure punctuality among the teaching staff.

The petitioner stated that the introduction of one of the two systems was also essential to ensure adherence to the teaching hours and days prescribed by the University Grants Commission and the university rules and regulations.
Biometric attendance on cards, DU tells HC

Abhinav Garg | TNN

New Delhi: The problem of teacher absenteeism in Delhi University may finally be tackled with the university planning to implement biometric system of attendance for them. DU made the disclosure in its affidavit to the Delhi high court saying it is “committed to adopt and implement measures such as the biometric system for its teachers” as it will improve punctuality.

DU, however, lamented that its teachers put up ‘stiff opposition’ when they try to introduce any reforms. The affidavit by DU’s registrar made the bench of acting Chief Justice A K Sikri and Justice Rajiv Sahai Endlaw put the assurance on record and dispose of a plea for introduction of the biometric system for marking the attendance of teachers so that they don’t miss classes. “On the assurance given by the university, the court hopes and expects that biometric system of attendance would be introduced expeditiously,” HC noted.

While DU acknowledged that the biometric system will ensure punctuality, it complained that the teachers have not been cooperative. “The teachers after the implementation of the 6th pay commission have lucrative pay package and are expected to fully justify the trust and confidence reposed by society...” DU told court.

The university added that biometric has been a success in recording attendance of non teaching staff in DU. HC was hearing a PIL that highlighted a UGC notification which seeks teachers’ availability for at least five hours daily in the college.

The PIL was filed by the Indian council of legal aid and advice, an organization which renders advice to poor litigants. The plea had alleged DU was not introducing the “biometric system or attendance register for lecturers to ensure they are regular and punctual in attending their duty...”

The plea said it seemed that the university was not implementing the biometric system under pressure from teacher unions.

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IIM-Bangalore offers course to make women ‘professional politicians’

Two-dozen, counting up from 5 per cent in 1991 to 18.56 per cent in 2012. The world’s largest democracy has only 60 women MPs in its 542-member LS and 261-member RS. The inquiry may be right if the women’s quota bill was a step in the right direction, but it is not the only way to make women MPs more visible. Padma Khadka, Congress leader and former mayor of Morzapur, wants to be ready for this challenge: “I am waiting for the Bill to be passed. I have been doing my duty as a member of the assembly.”

When she was elected to the Morzapur city corporation where she already attained the stage of a woman MP, she was advised by Padma Khadka to drop the name “Khatija” from her name and to differentiate herself from her father: “I was asked to drop any name that is related to my father, as it could make me look weak.”

In the coming elections, Khadka is likely to contest from the Thakurpukur-Katarghat in the coming elections. Making this a step that gives her Rs 13 lakh annually for the course, she added: “For us, politics is about power and money in the form of an influential family. It is about getting my life back, a sense of purpose by doing social good.”

Pratibha Sivakumar, 48, from Madurai who works as a software engineer said she needed “a full weapon to enter the battle” as she neither has a family background in politics nor the financial resources to contest on election. She wants to take up the BJP ticket in New Delhi, but she is a “planning politician.”

Rajput said that many of the women in the course would make “people looking for change, they no longer want the MLAs and the MP’s for the sake of their kids,” she said. “They are looking for honest, education, educated politicians to vote for.”
NIT to introduce BTech in mining

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JALANDHAR: The Dr BR Ambedkar National Institute of Technology (NIT) will introduce the job-oriented course of BTech (mining) from the next academic session (2013-14).

Talking to Hindustan Times here, NIT director SK Das said the Jalandhar NIT would become the fourth institute in the country to offer the course after the NITs in Rourkela, Nagpur and Raipur.

“The board of governors has approved the course from the 2013-14 session,” he said, adding that the department would be set up with proper infrastructure and laboratories.

Das, a renowned mining technology expert, said there was a shortage of mining graduates in the country and abroad, even as the mining industry was witnessing a boom.

“The oil and natural gas exploration, coal and mineral mining sectors are facing a shortage of qualified employees. States such as Jharkhand, Maharashtra, West Bengal, Chhattisgarh, Madhya Pradesh, Karnataka, Odisha and Andhra Pradesh are major mining areas offering major employment opportunities,” he said.

“There will be 50 seats in the first phase, including the subjects of mineralogy, open-cast mining, advanced coal and underground metalliferous mining, metal and coal mining, mining geology, development, surveying, methods, planning, machinery, legislation, mine environment engineering, mine dressing, mine economics, mine safety engineering, rock mechanics and ground control, besides an elective subject on environment pollution,” he said.

“A fresh mining technology graduate fetches a starting salary of Rs 8-10 lakh per annum. We would invite several companies, including Coal India Limited, Oil and Natural Gas Corporation (ONGC) and Indian Oil Corporation Limited (IOC),” he said.
The Aakash is back, and shines in sneak peeks

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WASHINGTON: The world’s cheapest tablet has finally come together as planned, perhaps even better. And priced at $35 (about ₹1,960), Aakash 2 appears ready to start a revolution. Wait for it.

Aakash 2 is likely to be launched early October, close to the first anniversary of its predecessor; but some US tech experts got a sneak peek. Needless to say, they loved it.

“I want this device,” wrote Christopher Peri, the highly influential writer for Venture Beat, a leading technology blog, in a review of Aakash 2 on Tuesday.

“World changing indeed,” is how Forbes magazine’s technology contributor Alice Truong ended her review of the device.

Sumeet Singh Tuli, CEO of DataWind, which makes Aakash 2, is thrilled with the reviews, especially after the pasting he got for the Aakash 1, which was panned as too slow, with too many rough edges far from the dream device India was waiting for. Only 8,000 of the originally contracted 100,000 units shipped.

Tuli said he didn’t want or arrange these pre-launch reviews. “That was done by Vivek Wadhwa, an Indian American technology entrepreneur and academic.

“Vivek jumped the gun,” Tuli said in a telephone interview.

Wadhwa had become an instant fan of the device the time he first tried it. “It has the potential of revolutionising India,” he gushed, “putting millions of Indians on the Net instantly.”

But he also feared for the future of Aakash 2. “Indians have an inferiority complex about their ability to produce anything of this standard and they would have finished off the device by rubbish,” he said.

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Aakash is back...

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So his strategy of getting it tested by leading experts in the US. If the reviews were good, Indian reviewers and critics would look silly going the other way.

The reviews have been outstanding so far. And Wadhwa might have indeed saved the device from a premature demise. For now, the real challenge lies ahead.

The WiFi-only version will cost the government $41, and will be sold to students at a subsidised $35.

A version with a SIM slot, called UbiSlate, will be available commercially for around $63. DataWind has already been able to line up 3.5 million bookings.

Aakash 2 was built in close technological cooperation with IIT Bombay - “really sharp people,” said Tuli - while Aakash 1 was made with IIT Rajasthan.

The current order-book is 100,000 units. Eventually, the government plans to buy 5 million units, which could drive prices down to sub-$20 levels, Tuli said.

“The world of cheap tablets is not coming, it’s here,” wrote Peri.

“Now we just need to sit back and watch the world change again — just as it did when cheap smartphones hit the market,” Peri added.