Visit India to teach at IIT, IIM in winter

Govt to invite English-speaking profs during vacation, to recruit award-winning retired teachers to tide over faculty crunch

DEEPAK KUMAR JHA
NEW DELHI

The Modi Government will rope in "award-winning retired school-teachers" in the secondary education sector and engage the services of "retired professors from English-speaking countries" during their winter break in the higher education sector.

The suggestions to the HRD Ministry have been made by Prime Minister Narendra Modi himself in view of the shortage of teaching manpower. There is a shortage of nearly 6 lakh teachers and institutions like IITs and IIMs have been facing a 20-40 per cent faculty crunch for years.

This apart, the HRD Ministry has also been asked by the PM to enhance the quality of secondary education in remote areas by initiating steps modelled on PURA (Providing Urban Amenities in Rural Areas), advocated by former President APJ Abdul Kalam; the special day schools set up in Gujarat; and the residential school in Dantewada, Chhattisgarh.

A special mission to prepare audio books in local tribal languages will also be launched. The PMO, last week, asked the Ministry to give due importance to access to education and directed it to set up national norms for the purpose.

Identifying the gaps within the national norms and creating a district-wise database by satellite mapping of the available primary and upper primary educational facilities have also been outlined as the focus areas by the PMO.

Engaging foreign faculty of retired professors, during the winter break abroad, is being seen as an innovative step by the PM in bringing the institutions on par with global standards. Besides the IITs and IIMs, there are other Central Government funded and aided higher educational institutions where the faculty scenario is not impressive. To overcome the crisis, the Centre has relaxed certain norms, including minimum salary threshold for issuing work visa for foreigners to help its top institutions to get foreign professors (regular employees) to work in Centrally Funded Government Technical Institutions (CFGTIs).

Top HRD Ministry officials said work in this regard has already been initiated as this requires involvement and coordination of Home and External Affairs Ministries as well. Further, upgradation of Centre of Excellence by focusing on areas of direct relevance for India such as Nano-technology, energy, genetic engineering, stem cell research, water resource management and urban planning have also been highlighted by Modi to enhance the higher education sector. The PM's suggestions followed the Ministry's presentation before him over a fortnight ago.

Continued on Page 4
IIT prof wants protection under Whistleblower’s Act

Vanita Srivastava
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NEW DELHI: A professor of the Indian Institute of Technology Kharagpur has demanded an immediate protection under the Whistleblower Protection Act 2011. Dr Rajeev Kumar, 55, a professor of computer science and engineering at IIT Kharagpur had been served a show cause notice last month seeking ‘compulsory retirement’.

A memo dated June 26, 2014 said that Kumar had violated the rules of the institute on several counts and that the board of governors had found him guilty of the charges and that a “penalty of compulsory retirement may be imposed”. Kumar was asked to furnish a reply within 15 days of the notice.

In his reply to the board, Kumar demanded protection on the grounds that he was a whistleblower. “I am being victimised due to my several disclosures about IIT Kharagpur administrators, who had conducted and/or are conducting disciplinary action against me,” he wrote.

Kumar was suspended from May 2011 to April 2013 by the IIT and debarred from teaching and research work and was debarred from teaching, research work and entering his office. The suspension order was revoked on instructions from the HRD ministry.

The professor had discovered inaccuracies in the merit lists of IIT-JEE for admissions in IITs. He had also uncovered many other issues — like unattended errors in question settings/evaluation, filling vacant seats through backdoors, administrator wards’ admissions, a high purchase rate of laptops, the running of a state institute on the IIT Kharagpur campus, tampering of Optical Response Sheet in undue haste, etc.

The Supreme Court had earlier termed Kumar as “one of the many unsung heroes who helped in improving the system.”
IIT prof seeks protection under Whistleblower’s Act

Vanita Srivastava

NEW DELHI: A professor of the Indian Institute of Technology has demanded immediate protection under the Whistleblower Protection Act. Dr Rajeev Kumar, a professor of computer science and engineering at IIT Kharagpur has alleged that he’s being victimised for making several disclosures in public interest.

He had been served a show cause notice last month seeking a ‘compulsory retirement’ by the institute.

A memo dated June 26, 2014 had said, “Prof Kumar violated the rules of the institute on several counts. Therefore the Board of Governors has provisionally come to the conclusion that Prof Kumar has been found guilty of the charges and penalty of compulsory retirement as set out under (V) of the statute 15(9) may be imposed”. However, the memo did not specify Kumar’s acts of violation.

“I, being a whistleblower due to several disclosures in public interest, should be protected from victimisation,” Dr Kumar has written in his reply to the Board, a copy of which is marked to the HRD minister.

Kumar had discovered inaccuracies in the merit lists of IIT-JEE for admissions in IITs that led to the disclosure of many other irregularities in the functioning of IIT Kharagpur.
UNITY IN DIVERSITY AT IIMs

REFRESH India's top B-school repackaging themselves for global and domestic market

Vanita Srivastava

Business China, an elective course at IIM Bangalore was introduced for 2013-15 class while keeping in mind the growing importance of China for the Indian managers. The course has drawn a good response from the students.

Among the new 23 elective courses that IIM Bangalore has offered are German language and the Rise of the Asian Economies. IIM Calcutta has recently introduced innovative courses on Marketing at the Bottom of the Pyramid and Corporate Irresponsibility. In addition to this, IIM Calcutta is going to roll out a unique programme in Health Care Management next month. The programme, designed with the help of Global Hospitals is a unique blend of classroom, learning (5 months), on-job training (5 months) and international experience (1 month).

As part of re-designing, IIM Lucknow has started a unique doctoral programme for Executives — EFPM, one of kind programme in India by any IIM. This programme caters to the senior level executives who are interested in the field of research but with the pressing work priorities and other commitments cannot opt for a regular doctoral programme.

Keeping in mind the new global and domestic market trends IIMs are re-inventing, re-packaging themselves — in terms of introducing new courses and bringing more cultural diversity in the classrooms.

Ashok Banerjee, Dean (New Initiatives & External Relations) IIM Calcutta said the new course on Marketing at the Bottom of the Pyramid caters to the surge in rural India. "The students need to know that there is a market that flourishes at the bottom of the pyramid. They need to build a different strategy for this market. The course on Corporate Irresponsibility allows the students to look at a contrary view how the corporates are acting in an irresponsible manner, be it pollution or misleading rural people. The to-be manager should analyse all this before he steps out to take on a role in the corporate sector," Banerjee said.

Acknowledging the need to re-design to keep pace with market trends, he adds, "Two clear trends are emerging globally in the field of management education — increasing global popularity of one year Masters programme in specialised areas and innovation in teaching, learning methods, called blended learning experiments."

Admitting that business schools need to re-design themselves to keep pace with global market, Dean Programme IIM Ahmedabad Dr Ajay Panjwani said, "Change is a dynamic process. We are in the process of re-designing our core programmes and a concrete design is likely to emerge in a month's time. The changes will however be introduced from next year."

NEW COURSES ON THE BLOCK

- The have drawn a good response from most students at IIMs

HT PHOTO

- 23 elective courses have been introduced at IIM Bangalore, which includes German language and the Rise of the Asian Economies
- Business China, an elective course at IIM Bangalore introduced while keeping in mind the growing importance of China for the Indian managers
- IIM Calcutta has joined with courses like Marketing at the Bottom of the Pyramid and Corporate Irresponsibility and Health Care Management
- IIM Lucknow has also started a unique doctoral programme for Executives — EFPM, a one of kind programme for ones who are interested in the field of research
Corporates and alumni to sponsor research & scholarships at IIMA

Nirwa Mehta

The premier business school of India, the Indian Institute of Management, Ahmedabad (IIMA), has partnered with corporates and alumni to sponsor research and scholarships. “We have reached out to friends of IIMA to support research and student activities at IIMA. This is in step with our efforts within the institute to raise quality of research and student activities,” said Prof. Ashish Nanda, director, IIMA. As its fundraising and development efforts gain traction, this is the first tranche of announcements relating to support that has been committed by and agreed to with the leaders in corporate and government institutions. Put together, these collaborations, where the agreements have already been signed and the contributions have started coming in, will pool in over ₹16 crore to fund research and award scholarships to meritorious students.

“Last few months, one of the focus areas has been to reach out to the alumni to get their support for the next stage of growth. Fundraising is a long-term activity and we have got substantial commitment and agreements are in place for the same. These funds will provide explicit support to faculties carrying out research activities in terms of getting resources, collecting data, hiring research assistants, among other things. A part of the funding will also go as salary supplement to the faculties and increase their income levels,” said Prof. Arvind Sahay, dean, Alumni and External Relations, IIMA.

In fact, this is not the first time the business school has reached out to the alumni network. In 2011, during the golden jubilee year of the institute’s existence, the alumni network had promised a consolidated sum to the tune of ₹40 crore to their alma mater. However, a major chunk of it has not come through. “There were verbal commitments, but we are in active conversation with them to fructify them,” added Sahay.

Of the total ₹16 crore raised, ₹14 crore will come directly or indirectly through alumni either in their individual capacity or as institutional donation, while the remaining ₹2 crore will come from corporates and individuals who have nothing to do with the institute. “The funds will be used to establish a centre for research and to provide support to students. Scholarships of ₹1 lakh each to 10 PGP students will be given. We hope more such support comes from the alumni,” added Sahay.

The current funding will contribute towards new areas of research. ICICI Bank has sponsored the Professional Chair in Strategic Management, RBI has sponsored the Chair in Finance & Economics, JSW has sponsored the Innovation and Public Policy Chair and NABARD has sponsored the Chair in Agri business. IIMA alumna Chandrika Tandon is supporting Faculty Fellows in Entrepreneurship and Leadership.

The institute is also looking at reaching out to corporates for restoration and conservation of the iconic Louis Kahn Plaza (LKP), which houses the main building of the institute. “There are extensive plans to conserve and restore the LKP and it is an expensive, multi-year plan. As per the clarification given by the Department of Corporate Affairs, the donation given for restoration and conservation will be eligible for compliance of companies with CSR. Hence, we are planning to reach out to corporates as it involves a significant sum of money,” added Nanda.
EVEN AS the Delhi University is struggling to come out of the mess created by the introduction and subsequent rollback of Four-Year Undergraduate Programme (FYUP), the new academic session is likely to be delayed by 7-10 days. Sources said that the restructuring of courses for the FYUP 2013 batch is still in process and colleges still don’t know how much time the process will take.

Following protests from students and teachers, the University on Thursday kick-started the process of restructuring the programme. DU wrote a letter to all university department heads, asking them to hold an emergent meeting of the committee of courses and send its recommendations to the University by July 12. Sources said that there are some departments which are yet to send their recommendations.

“The process of restructuring will take some days. Some departments are yet to send their recommendations. Now the faculties will hold meetings and subsequently the Academic Council (AC) meeting will happen after which the courses will be restructured. We are trying that classes begin as per schedule but all this will take some time and classes may start late,” sources said.

College principals said even if all the formalities are finished quickly starting the classes from July 21 will be difficult. “We are yet to receive any communication or direction from the university. Even if we are told the final decision in a day or two, starting the classes from July 21 will pose many difficulties,” said Vijay Sharmar, Ram Lai Anand Principal.

Delhi University Teachers Association expressed concern over the delay. “It took the VC two weeks to start the restructuring process after the FYUP rollback. There is no sign of an AC meeting. When they wanted to bring FYUP, they held quick meetings but now they are delaying everything,” said Nandita Narain, president DUTA.

The UGC had directed DU to make appropriate arrangements for students, already admitted in the academic year 2013-14 in the FYUP, to migrate to the three-year undergraduate structure so that they do not lose an academic year for obtaining undergraduate degrees. “For this purpose, ensure that students acquire necessary academic and other competence during the next two academic years,” UGC told DU in a letter.

12 elected members of the AC had requisitioned an emergency meeting of the Council to discuss the restructuring of courses for the batch of 2013 but they have not received any confirmation from the VC.

“Colleges are in a dilemma about how to make timetables and allocate teaching work in time for the start of the new session. DU wasted two weeks before starting the statutory processes for restructuring of courses including B.Tech and BMS,” said Abha Dev Habib, AC member.
The much-awaited maiden budget of the new government is in front of us now. It could have been an interim budget in that sense only an augmentation for the year—but it had all the hallmarks associated with a regular budget. Across the globe, education as a sector needs government patronage to flourish and so the budget is watched with keen interest by the sector.

There are many interesting and forward-looking aspects in this budget. I am glad that the government has taken notice of the huge deficit in the faculty-teacher availability. The Madan Mohan Malviya Scheme for Teacher Training is a welcome initiative. This would bring the much-needed attention to this important profession. The details of the scheme and the extent of its influence in the existing scheme is to be seen. Along the same lines is the allocation of 100 crores for setting up virtual classrooms. This is the age of MOOCs and Khan Academy and it is heartening to see something along the lines planned to leverage technology. This could be a good start at least, solve the faculty shortage issue—but more importantly, it breaks the geography barrier for education, provided it is done in the right fashion. Else, it will also become another investment along the lines of National Mission in Education through Information and Communication Technology (NMEICT).

The NITs has also stuck to its inclusive development agenda. The allocation of 500 crores for National Center for Himalayan Studies in Uttarakhand and 700 crores for Sports University in Manipur as well as an allocation of 500 crores for plans to set up IITs (Jammu, Chattisgarh, Goa, Andhra Pradesh and Kerala) and 5 IIMs (Gujarat, Odisha and Maharashtra)—all of them clearly underline the effort to spread out institutions of national importance far and wide. So is the announcement of four AIIMS-like institutions to be built in Bengal, AP, Purvanchal and Ranchi and 12 government medical colleges across India.

Similarly, on the development agenda, the budget has two announcements—the long-awaited proposal on up-grading Madarasas with an allocation of 100 crores and skill programme for youth to be trained in traditional trades with an allocation of 100 crores. In my view, this signifies the importance of continuing traditions and nurturing them. This also would mean some of the uniqueness of these institutions—which are not a part of the main stream development, is protected.

The allocation of 500 crores to State Skill Missions (SSMs) is also welcome beginning and one hopes the government will provide more resources to them. Given the critical role SSMs are expected to play to achieve India’s ambitious target of training 300 million youth by 2022.

This budget too has also signaled a strong emphasis towards primary and secondary education. A further allocation of 4,000 crores for Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and 1,005 crore allocation for Sarva Shiksha Abhiyan (SSA) clearly underlines this. It is good to see that strengthening the grass-roots continues as a big agenda for this government.

Interesting to note is the absolutely essential School Assessment Programme that is being initiated at a cost of 100 crores. There is also a mention of government initiative to provide toilet, drinking water in all girls schools—this is an important further as many reports have pointed this out as the key reason for girl child dropout.

On the other hand, some significant misses as well. Given the major quality and infrastructure issues in elementary schools a substantial increase was announced for SSA and RMSA, though the government could have driven quality reforms in primary education by providing necessary resources. A strong mechanism for evaluation and monitoring of these schemes is required so that their full potential could be realized. Besides infrastructure, what plagues the schools is quality and focus on curriculum development. A case in point is even though the enrollment at primary level is nearly 100% year after year, reports suggest that the students fail to do basic arithmetic or read a sentence. A high emphasis towards learning outcomes is critical and anything along that direction would have been a great move to building the next generation of school curriculum. So while a School Assessment Programme is being initiated at a cost of 100 crores, it is too little a sum to uplift the quality of schools in the country.

Larger skilling agenda has been ignored for any additional allocation. There is no mention on continuance/reforms on the popular Standard Training and Assessment Re-ward (STAR) scheme. With the formation of a unified ministry for skilling, a significant thrust to the skilling agenda was expected—it is unclear now as to what will be the budgetary allocations for the various skills programmes under different departments/ministries. This could be clarified outside the budget as well. It is an important and immediate agenda and given the importance that the government has given (rightly) to skilling, we should expect some clear direction in this area soon. Similarly, we could find no announcement to upgrade the Industrial Training Institutes (ITIs) whose one of the most important stakeholders when it comes to training students in vocational skills for manufacturing sector. Added to that is the lack of clarity on allocation of funds to National Skill Development Corporation given its critical role in the last few years in skill development initiatives and the demand for skilled workforce that India is expected to witness.

Apart from the Lok Nayak National Centre for Excellence in Humanities to be set up in Madhya Pradesh and a massive allocation in medical research, there is no larger agenda for research in this budget—be it institutes of higher learning or standalone research centers. The fact that many institutions of national importance—such as that in aviation, oil gas, mining—did not see any funding in the previous government is also unclear.

While it is true that higher education has got a huge boost with announcement of five IITs and IIMs each in some of the tier II cities which signals a positive change, a PPF mode to set up these institutions would have ensured greater leverage of the money spent through participation from private sector. Private sector participation in higher education becomes critically important given the fact that the amount allocated for the just announced IITs and IIMs is merely 500 crores whereas each of these institutions will cost over 1,000 crores which is a significant gap between the government’s goal and the resources allocated.

Besides this, no attempt has been made to enhance the quality of existing higher education institutions, be it in input parameters such as incentives for students or teachers to take up research or focus on faculty development or output parameters such as accreditation, rating and benchmarking.

It is easy to pass a judgment, but it seems to be a bit of an experimental Budget. There are some good, bold initiatives—but they seem to be a bit tentative and underallocated. Many initiatives seem to have the standard 100 crores allocations—almost to highlight the direction in which the government wants to look rather than a full-blown plan. It could be because of the interim nature of the budget. I see this more like a teaser of future initiatives (and allocations to come later). It seems like these teaser initiatives will be held back, fine-tuned and then put on track for the larger reform. I am positive and upbeat about these teasers; but actions in the next few months would solidify these teaser initiatives will really work.

The author is Partner and National Head of Education sector, KPMG in India.
JAITLEY'S BUDGET IN TUNE WITH POLL PLAN

Big Picture: The NDA plans to set up an IIT in poll-bound Jammu and Kashmir.

By Kumar Vikram
In New Delhi

It seems the Narendra Modi-led NDA government's maiden Budget has been finalised with an eye on upcoming polls in states like Haryana, Maharashtra, Jharkhand and Jammu and Kashmir as these states have been identified for the setting up of top technical institutes such as AIIMS and IIM.

The Budget unveiled last week by Union Finance Minister Arun Jaitley includes a proposal for setting up a premier medical institute like AIIMS in Maharashtra's Vidarbha region. The state is set to go to the polls later this year.

The other crucial state which is going to the polls later this year is Haryana, where the BJP has not been in power for 15 years. The BJP, which stormed into power at the Centre in May, is leaving no stone unturned to win the Haryana Assembly polls.

Haryana — a state of farmers — has been identified for the setting up of a horticulture university and the government has allocated an initial sum of ₹100 crore for it and three other institutes in other locations.

Jharkhand, which too is set to go to the polls to elect a new Assembly, will get a top agricultural institute. Two institutions of excellence on the pattern of the Indian Agricultural Research Institute at Pusa, which has been at the forefront of research in agriculture, will be established in the state and Assam. An initial sum of ₹100 crore has been allocated in the Budget.

Meanwhile, the BJP leadership in Jammu and Kashmir is working towards winning more than 44 of the state's 87 seats to form the next government. Jaitley's Budget includes a proposal for setting up a new IIT in Jammu, where the BJP enjoys considerable support. Noting that the sporting talent in J&K has not been finding expression due to inadequate sports facilities, Jaitley said a sum of ₹300 crore would be allocated for upgrading the state's sports stadia to international standards.

Moreover, the Budget includes an allocation of ₹50 crore for launching a Pashmina promotion programme and a scheme for developing other crafts.

Meanwhile, BJP leaders have claimed the party leadership in states like Maharashtra, Haryana and Jharkhand will see changes in the wake of Amit Shah's appointment as the new party chief.

Though the Modi wave helped the party storm into power with a thumping victory, party leaders believe that local factors play a key role in Assembly polls. "We can't ignore the local equations. The leadership in Maharashtra and Haryana is more crucial as the party has been out of power for 15 years in these states. A special strategy is required as the party has to struggle even though they have strong allies in these states," said a senior leader.
Good to see a Budget presenting solutions for unemployment

Merging the higher education sector and vocational training is a positive step as we really need to add credibility to such trainings, which currently fail to attract the youth.

SACHIN ADHIKARI

True to Narendra Modi’s announcement of changing the country from a “Scam India to Skill India”, FM Arun Jaitley made several announcements to encourage skilling and vocational training in the Union Budget 2014. By stepping up vocational training and bringing it at par with the higher education system, he announced the “Skill India” programme and allocated an amount of Rs 14,389 crore for job-creation, a huge part of which will be spent in training the youth. Focus on tourism and manufacturing industries will generate employment and is a good sign for launching courses in these domains.

The NSDC Star programme was initiated to encourage skill development for the youth by providing monetary rewards for successful completion of approved training programmes during the last year’s Budget and was focused on retail management and jewellery & gems training. The FM announced the continuation of the scheme and making them more demand-driven.

Apart from helping the youth in acquiring necessary skills, job-creation also remains the most challenging aspect for the government. Employability is a huge crisis in our country right now as only 34% of the graduates are employable. Vocational training needs to be made a part of the higher education system to bridge this gap effectively. The Apprentices Act and NSDC programmes can help in this respect.

Given the economic liberalisation that our government is initiating through FDI, etc., we expected the Budget to focus on MoUs and collaborations with international universities for Indian students to get international exposure. We need to understand that if we are opening our doors to foreign companies, our workforce needs to be prepared to deliver at par with international standards. It was shocking to see that none of our universities featured in the top 100 universities worldwide and hopefully, the additional IITs and IIMs the government is planning to set up will help tackle this gap to an extent.

Merging the higher education sector and vocational training is a positive step as we need to add credibility to such trainings, which currently fail to attract the youth. Proper accreditation can encourage them to train and be absorbed into the workforce. At Achievers Zone, our trainings take us across India and we witness a huge potential in the semi-urban and rural areas. This step will encourage the youth populace there to be skilled and be a part of the workforce.

The FM also announced spending of Rs 100 crore to start village entrepreneurship training schemes to encourage the rural youth to start their own ventures. Multi-skills focus and the need to integrate self-employment is a big departure from the current policy of insisting that all skill development should lead to employment. Indians are entrepreneurs at heart, and by encouraging this spirit we can ensure development at the grass-root level where the individuals and the community can benefit and which eventually will impact at a macro level.

It is encouraging to see our government recognising this entrepreneurial spirit and allocating an additional Rs 100 crore under Young Leaders’ programme and Aajeevika programme run by the ministry of rural development, which will provide concessional loans at 4% for funding local entrepreneurship. MSMEs account for huge portion of our revenue and revamping the apprenticeship programme can generate jobs. With a Rs 10,000 crore fund allotted to MSMEs, this scheme, if implemented properly, could be a game-changer for both the MSMEs and the fresh graduates and thereby the whole economy.

This Budget focused on skilling and on ramping up the manufacturing and infrastructure industry. The employment creation per crore of investment is many times bigger in service industry. However, the FM did not spell out how employment will be created in the economy. Skilling increases supply of manpower. If the demand is not there, this effort will be counterproductive. Excess supply will impact compensation, which is already happening.

Finally, we saw a Budget that can join all the dots; boost manufacturing and tourism sectors to create jobs; train the workforce to meet this demand; and provide loans and financial aid to allow the youth to train them. Though a few grey areas remain, overall it is good to see the government presenting more practical solutions to employability and unemployment. But what needs to be seen is how well these can be executed at a grass-root level.

The author is Chief Mentor, Achievers Zone
App Firm News in Shorts Raises Seed Fund from Times Internet

Investment will be used mainly to expand its content and tech teams

RADHIKA P NAIR
BANGALORE

News in Shorts, a mobile app firm that gives out top news stories in 60-word bite-sized portions, has raised seed investment from Times Internet and a group of entrepreneurs, including Flipkart cofounders Sachin Bansal and Binny Bansal.

The investment—the amount has not been disclosed—will be used mainly to expand its content and technology teams.

Launched last September, the Delhi-based company was part of the fourth batch of Times Internet's accelerator T Labs. Times Internet is part of the Times Group, which publishes The Economic Times. Aimed at time-starved users, News in Shorts curates top stories and provides a short summary of each news item. “We want to enable our users to consume top news quickly whenever they have time, maybe during a coffee break or a short metro ride,” said Azhar Iqubal, 21, cofounder of the company. Iqubal and his cofounders Deepit Purkayastha and Anunay Pandey, both 22, started work on the concept while in the eighth semester of their engineering programme. Iqubal and Pandey dropped out of IIT-Delhi and Purkayastha, a school friend of Iqubal, quit his course at IIT-Kharagpur to launch the firm.

The app has now clocked up over 30,000 users. One such user is Flipkart cofounder Sachin Bansal. “I am a user of the product and it saves a lot of my time everyday. News in Shorts has the opportunity to redefine the future of news consumption via mobile,” said Bansal. The Flipkart founders were joined by serial entrepreneurs—Ankush Nijhawan, Gaurav Bhatnagar and Manish Dhingra—and Times Internet.

It was the mobile opportunity that attracted Times Internet too. “We are very keen on mobile as a medium, along with that micro-content consumption has seen a rise,” said Abhishek Gupta, who leads the T Labs initiative at Times Internet.

Globally, a number of companies are banking on the consumer’s need for curated and personalised content. US-based provides top news in 300 characters through a mobile app. Flipboard, Paper and Digg are some of the other online and app-based news curators.

Bangalore-based Newshunt, a mobile app that allows users to read regional language newspapers on their mobile devices, has seen about 35 million downloads and receives over one billion page views a month. Like other app companies News in Shorts is also focusing on increasing its user base. “Once we have a strong user base we can focus on revenue generation streams like advertisements and paid content,” said News in Shorts cofounder Purkayastha.
भिलाई के दो बेस्ट फ्रेंड, साल के 5 बड़े एग्जाम में स्टेट टॉपर

उपलब्धि

शहर के दो शौर्य स्तर-दस्तर के पुलकित गोयल और सी. विश्वेन्द्र अब जा रहे आईआईटी मुंबई

पुलकित गोयल और सी. विश्वेन्द्र अब जा रहे आईआईटी मुंबई

इस साल नौ 5 एग्जाम, जिसमें दोनों का शामिल होगा.

दोनों के मुलभत्ता

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क्या कहते हैं पैरंट्स?

पैरंट्स के हिदायत के दिन अग्रणी प्रवृत्ति के लिए एग्जाम पर प्रभावशील रहने।
आई.आई.टी. के लिए हुआ फाइनल एललोटमेंट

नई दिल्ली, 13 जुलाई (ब्यूरो): नए सत्र के लिए सभी आई.आई.टी. के लिए एल्लोटमेंट का काम पूरा हो गया है। ज्वाइंट आई.आई.टी. बोर्ड ने तीसरे और आखिरी राउंड के एल्लोटमेंट के साथ कहा है कि कैंडिडेट 15 जुलाई तक फीस जमा करके एडमिशन ले सकते हैं।

अगर किसी कैंडिडेट ने पहले और दूसरे राउंड में सीट ले लिया है, उन्हें भी इस राउंड में अपग्रेडेशन का मौका दिया गया है। इसके लिए कैंडिडेट ऑनलाइन जेओसीएएपी पर यूजर आईडी और पासवर्ड के जरिए सीट देख सकते हैं।

इससे पहले आखिरी राउंड के कैंडिडेट को 14 जुलाई तक ही एडमिशन का समय दिया गया था। लेकिन बाद में उनकी सुविधा के लिए इसे बढ़ा दिया गया।
All’s not well at IITs & IIMs

Poor faculty & infrastructure mar recently built institutes

Finance

Faculty brain drain plagues IIT-Jodhpur

IIT-GANDHINAGAR YET TO MOVE INTO OWN CAMPUS

IIT & IIM Indore beat the odds

IIT-Mandi awaits the buzz

July 13
Palakkad all set to host IIT

K.A. Shaji

PALAKKAD: The budget declaration allocating an Indian Institute of Technology (IIT) for Kerala has brought cheer to Palakkad as the State government has already identified 600 acres of land at Pudussery on the outskirts of the town to establish the institute of higher learning.

Both the Central and State governments have already reached a consensus that the IIT must be established in Palakkad keeping in view of its strategic location in the middle of the State and its proximity to Tamil Nadu’s second largest city, Coimbatore.

While Palakkad and Shoranur junctions will ensure sufficient rail connectivity to the proposed institution, the Coimbatore Airport will provide the air link. Located close to the Coimbatore-Palakkad stretch of National Highway 47, the proposed campus can be easily accessible by road from Bangalore, Chennai, Thiruvananthapuram and Kochi.

The efforts to get an IIT for Palakkad began when V.S. Achuthanandan was the Chief Minister and there was a sustained campaign since then. Former Union Minister of State for Human Resources Sashi Tharoor and Palakkad MP M.B. Rajesh too took active interest in making it a reality and had initiated the ground works.

According to Revenue Department sources, while the State government has already acquired 237 acres for the institution, the process of acquiring the remaining land is fast progressing.

The State government has already informed the Centre that it will begin preliminary work for the institution once the decision was officially conveyed to the State authorities.

The proposed site was earlier identified by the Kerala Industrial Infrastructure Development Corporation (Kinfra) for the expansion of the Bharat Earth Movers Ltd. (BEML). Kinfra had allotted 375 acres of land close to Sathyanadham-pallam to establish a BEML plant.

The company demanded 600 more acres and the land was allotted. After BEML put its expansion plans on hold, the State reallocated it to the proposed IIT.
K’taka lost IIT over petty politics

NEW DELHI: Political leaders from Karnataka may now cry hoarse over the State not getting an Indian Institute of Technology (IIT) in the Union Budget. But officials in the Human Resources Development Ministry blame it on petty politics and rivalry among State leaders that thwarted the Centre’s move in this direction.

The Human Resources Ministry headed by Arjun Singh in 2006 had promised to sanction an IIT to many states, including Karnataka. Subsequently, the Centre had constituted a high-level panel to identify places.

The panel headed by eminent scientist and also Prime Minister’s Scientific Advisor C.N. R. Rao recommended Mysore for setting up the institution in the State. However, the then JD(S)-Congress coalition government headed by Dharam Singh failed to arrive at a consensus on the location. The Congress wanted it in North Karnataka, while the JD(S) favoured Hassan.

After the collapse of Dharam Singh government, H D Kumaraswamy headed JD(S)-BJP collation government pursued the matter and strongly pitched for Hassan again.

Kumaraswamy wrote to Arjun Singh promising to provide 1,000 acres of free land in Hassan. As the Human Resource Development (HRD) Ministry was preparing to sanction the institution, a senior Congress leader from Karnataka reportedly urged the Centre not to approve the project if the state government continued to stick to the choice of Hassan as its location. This was because Hassan was the home town of his political bete noire former prime minister H D Deve Gowda.

As the then state government refused to provide land elsewhere other than Hassan, the proposed institution was quietly shifted by HRD ministry to the Medak district in Andhra Pradesh in 2007.

“Had political leaders not meddled, Karnataka would have got the prestigious institution long back. However, people from Karnataka still hoped to get an IIT as the Centre wants to open more such institutions in each state during current plan period,” said an official from the HRD ministry.

DH News Service
Business in China features among new courses in IIMs

HT Correspondent
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NEW DELHI: Keeping in mind the new global and domestic market trends, Indian Institutes of Management (IIMs) across the country are reinventing themselves by introducing new courses, programmes and bringing in more cultural diversity in classrooms.

For instance, IIM Calcutta has introduced two new courses — Marketing at the Bottom of the Pyramid and Corporate Irresponsibility.

Ashok Banerjee, dean (new initiatives and external relations), IIM Calcutta, said that the Marketing at the Bottom of the Pyramid course focuses on rural markets.

"Students need to know there is a flourishing market right at the bottom of the pyramid, where new strategies are required."

The other course on Corporate Irresponsibility allows students to take a contrary view of corporates," he said.

As a part of the redesign process, IIM Lucknow has started a unique doctoral programme for executives, where they can conduct research in any field of study. This caters especially to those who, due to work commitments, have not been able to opt for a regular doctoral programme.

"Keeping in mind the global trends and needs of the corporate world, we have introduced new courses," said Devi Singh, director, IIM Lucknow.

Other IIMs too have started restructuring the course programmes to suit the global market. Many of them are taking their cues from internationally-renowned institutions.

"Change is a dynamic process. We are in the process of redesigning our core programmes and a concrete design is likely to emerge soon. The changes will however be introduced from next year," said the dean of IIM Ahmedabad, Dr Ajay Pandey.
Obtain a degree online from a foreign university for free

GROWING TAKERS
A variety of subjects are available to anyone from anywhere

Neha Pushkarna
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NEW DELHI: When Manish Saxena set up a studio at home with a hope to produce music, his childhood dream, he was short of just one thing. After installing the software and machines, what he needed was the know-how.

While continuing to be a businessman during the day, 32-year-old Saxena decided to pursue a course in music production in the night.

For the next six weeks, he studied from a university in the US from his cozy music room at home.

“This course helped me through the basics and I had ‘classmates’ from around the world who often engaged in long discussions,” said Saxena. He is one of the many Indians taking up online courses offered for free by universities across the world.

“I will do a more advanced course at my own pace and then start making jingles,” Saxena said.

Called Massive Open Online Course (MOOCs), these short-term courses can be accessed by anyone from anywhere in the world. Be it a businessman like Saxena or a housewife, student or a senior citizen, they can use their time and resources to learn more and better their career.

Archna Mehta, a mother of two, had to quit her job three years ago after the birth of her second child. She has already done two nutrition-related courses in the last one year and is now planning to register for another course.

“I hope to learn ways to deal with my elder son who is in his pre-teens and my three-year-old who is naughtier than him. But this time, I also plan to earn a certificate by taking exams. Though the course is free, I will have to pay a fee of $49 for a certificate from the University of Edinburgh,” said Mehta.

A number of platforms like Coursera, edX, Udacity have come up in last five years which are associated with hundreds of universities for providing MOOCs.

Though a large number of subscribers on these platforms are Indians, not many Indian MOOCs are available still. “While IIT Bombay has launched three MOOCs, DU was planning to start one in English language too. But since all the changes have come to halt, it will be long before we have a local MOOC,” said a senior DU official.
Business Class

Why the private sector, including the likes of Mukesh Ambani, Baba Kalyani and the Munjals, are drawn towards setting up universities

:: Suman Layak & Malini Goyal

Circa 2006. A year after businessman, steelmaker and politician Om Prakash Jindal passed away in a helicopter accident, his business empire is now well divided among his four sons. The youngest, Naveen Jindal, chairman of Jindal Steel & Power, is busy coming up to scratch with the business when one day he gets a call from Congress leader HR Bhardwaj, a friend of his late father.

Bharadwaj is keen Jindal meet Hong Kong-based academician C Raj Kumar who he had bumped into at a conference. Raj Kumar has a dream of setting up a world-class university in India. "I did not know the minister. It was a chance meeting at a conference where we got talking," recalled Raj Kumar in an interview with ET Magazine last week.

"What would you need," Bharadwaj casually enquires.

"Three things," Raj Kumar says in all seriousness: a corpus of Rs 500 crore, with no strings attached; the liberty to be a not-for-profit in the real sense of the term; and complete autonomy and functional freedom to run the university.

After some gentle cajoling by Bharadwaj, Jindal finds time to catch up with Raj Kumar. The first meeting ends quickly. "Keep up the good work. But this is not my core business. Best wishes," is how Jindal signs off.

Bharadwaj, however, doesn't give up. And Kumar is still holding on to his dream. Their collective persistence and powers of persuasion eventually do leave a mark on Jindal's philanthropic instincts. By end-2007 a plan to set up a world-class university takes shape with Jindal pitching in with the Rs 500 crore corpus that was a gleam in the eye of Raj Kumar, who relocates from Hong Kong to Delhi to live his dream.

"We haven't looked back since," Raj Kumar adds. By 2009, the OP Jindal Global University -- spread over 100 acres was up and running; today it has 1,800 students, 120 faculty members, and huge expansion plans.

If, at first blush, Jindal was circumspect it was with good reason. There were few examples of success of large companies in education. The Tatas and Birlas did it half a century earlier. The rest didn't inspire (see Early Movers).

When Jindal flagged off the OP Jindal Global University, with Raj Kumar as vice-chancellor, he was amongst a handful of big guns of India Inc taking the plunge. Soon to follow suit were Shiv Nadar of HCL and Azim Premji of Wipro with their eponymous universities.

A few more are set to go down the same road. The BML Munjal University from the promoters of the Hero group will open next month. Ready with their blueprints for a university are Baba Kalyani of Bharat Forge and what could be the big daddy of all, Mukesh Ambani's Reliance university.

Mukesh Ambani has done it once before. The Dhirubhai Ambani Institute of Communication & Technology in Gujarat is a private university set up when Reliance Communications was managed by him (at that time it was Reliance Infocomm). Today brother Anil Ambani presides...
Early movers

Tatas and Birlas showed the way...

IISC Bangalore
also known as the Tata Institute
Founded in 1909
Deemed University
Status in 1958

Tata Institute of Social Sciences
TISS
Founded in 1938
Deemed University
Status in 1964

Tata Institute of Fundamental Research
TIFR
Founded in 1945
Deemed University
Status in 2002

Birla Institute of Technology and Science
BITS, Mesra
Founded in 1956
Deemed University
Status in 1964

BITS Pilani
Founded in 1929
Deemed University
Status in 1964

Putting the family name means we are not only setting high standards but also shows our personal commitment to strive for excellence.

We have built schools in the past but we realized that the time has come to build a world-class university in India.

Naveen Jindal, chairman, Jindal Steel & Power

Over it. Mukesh Ambani’s interest to set up a world-class, multidisciplinary university in Maharashtra is declared on the website of Reliance Foundation (it promises an “enabling learning environment” and “cutting-edge research facilities”). Professionals in the education arena who are aware of the Ambani plans let on that the group is actively scouting for alliances and people. Dilip Jain, the current dean of INSEAD of France, sits on the Reliance board, and that is a good place for Ambani to start. Ambani himself is also president of the Pandit Deendayal Petroleum University, Gandhinagar, a private university started by GEML, a Gujarat government trust. A Reliance spokesperson did not comment on the group’s plans for a university.

Ambani also has land, another key element of a university project. Often 60-80% of the cost of setting up a university is the land cost. Mukesh Ambani has personal capacity along with long-time friend Anand Jain had invested in land in Maharashtra with plans to set up two special economic zones (SEZs), the SEZs ran into popular resistance and have not come up. The smaller of the two, the Navi Mumbai SEZ, could well be the location for the Ambani University. The new industrial policy of the Maharashtra government allows the use of up to 40% of land in an SEZ for non-industrial purposes.

Ambitious plans in India have often come unstuck on land acquisition. Anil Agarwal Foundation’s ₹15,000-crore Vedanta University planned somewhere between Puri and Konark in Odisha got stuck as it was not able to acquire land. The plan was homogenous—the project wanted 6,800 acres. In contrast, the Reliance Foundation will probably work with 400 acres, a benchmark for many global campuses. Again, the Kalyani International University planned in Kheda City SEZ near Pune will work with 50 acres, according to Anit Kalyani, director at Bharat Forge. This is also the minimum benchmark set by the Maharashtra government.

Skin in the Game

More than land or money, India’s top corporate honchos have also put their top brands or their own names on the line. Prime examples are Shriram Nadar University and Azim Premji University. The Subhash Chandra-promoted Himgriti Vishaalalayaya started in 2003 and then changed its name to introduce the brand, in the process becoming Himgriti Zee University in 2011. The Jindals and Munjalas have named the universities after their fathers. Many of the top shots have also taken on the role of chief counselor, something usually reserved for state governors or state government universities.

Naveen Jindal, Sanjil Munjal, Jairajesh Gaur of Jaypee Group as well as Premji and Nadar are all chancellors of their universities. As is Sajjan Khattar, although he is a bit of an exception as he decided to call his project Ahmedabad University. Roshni Nadar Malhotra, daughter of Shiv Nadar and trustee of the Shiv Nadar Foundation, says: “Putting the family name means not only setting high standards but also putting our personal commitment of time.”

The Mahindras are equally possessive about their brand which is being used for setting up one engineering college in Hyderabad in collaboration with Ecole Centrale de France. The college will be called Mahindra Ecole Centrale. Two more are planned, in Chandigarh and Jaipur. Rajeev Dubey, group HR head at Mahindra, says: “The brand is being used, and if anything there should be some positive rub-off from it. We will monitor quality very strictly and run the college like any other group entity.” Will Mahindra eventually set up a university? Dubey says: “There was some discussion but right now I do not know.”

Of course, the companies have to put their money where their mouth is. Naveen Jindal told ET Magazine
...the surge intensified in the past five years...

2009
Ahmedabad University
Arvind Mills/ Sanjay Lahrai

2010
Apeejay Stya University
Apeejay Stya Paul group/Sushma Berlia

2011
JK Lakshmipat University
Bharat Hari Singhania/ JK Organisation

2013
Ansul University
Sushil Ansul/Ansul Properties

2014
BML Munjal University
Hero Group/ Sunil Munjal

...and the two lined up
Kalyani International University
Bharat Forge/ Baba Kalyani

Top five states with private universities

38
RAJASTHAN

22
UTTAR PRADESH

17
GUJARAT

16
HIMACHAL PRADESH

16
HARYANA

not including deemed universities

that "corporate philanthropy and social commitment should be central pillars of business and industry and this vision motivated me". While philanthropy is a constant theme with large companies, what helps now is the mandatory 2% of profit before tax spending on corporate social responsibility (CSR) mandated by the new Companies Act, Aromaj Ram, director of Indian Institute of Human Settlements (IIHS), feels that the CSR rule can generate 95,000 crore every year from the central public sector undertakings alone. IIHS aims to become an independently-funded national university. Aromaj Ram adds: "A university takes around 3700-8000 crores to set up and an IIT takes 10000 crores. Now imagine what the CSR money can achieve."

Dubey of Mahindra also feels the new CSR guidelines are a reason education is getting a big thrust from the companies, but he feels at some point all such efforts must become sustainable. Jindal points out that there is a clear vision of the university becoming independent, gathering grants and funds from other sources.

There are two more reasons why large Indian companies have moved in now. One, many of them already run schools and colleges and have gained the expertise; a university would seem the logical next step. For instance, Shiv Nadar Foundation had earlier started SSN College in Chennai. Roshni Nadar Malhotra says: "The success of SSN in south India inspired us to create an institution in north India."

Similarly, the Reliance Foundation along with its associate institutions has a network of UGC schools. And the Azim Premji Foundation was developing and providing free pedagogy to government schools before its university came up. The Jindals always ran schools close to their steel plants. The Munjals run 11 schools and also have medical colleges.

Reliance Foundation has plans to set up a world-class, multidisciplinary university in Maharashtra
By then, the number of students in colleges will go up to 7 crores. He adds that in the past 10 years, the GER has gone up at the rate of 7.5% a year. The entire growth has been driven by private sector institutes. "Today, 60% of the higher education is provided by the private sector. By 2030, 80-85% of the higher education will be provided by the private sector."

Whilst Manipal is an established education brand, there are others who have carved out a niche as an extension of their business—like NITI in JK education and the upcoming Team-Lease Skills University, an offshoot of the recruitment firm of that name.

However, there are many other players in the arena who are relatively little known or even unknown, among the 160 odd private universities that have been set up in India. This is where the big corporate brands have an advantage; and a role to provide assurance of quality that comes along with their brand equity to the large numbers of prospective students.

Indeed quality is key, points out Pramath Sinha, a co-founder of Ashoka University and a serial entrepreneur who was also a dean of the Indian School of Business (ISB). "The moment you compromise and you say 'you will improve quality slowly with time', it does not work. Then it pegs you at a level from where resetting becomes very difficult."

Quality can come in different hues. Amit Kalyani says Kalyani International University will be a comprehensive offering with a sharp technical focus. "Roughly 60% of the Khed City SEZ is reserved for manufacturing units. An industry-academia relationship is important for any university and the location within Khed City is a big advantage."

The imperative of being in tune with industry's needs is also not lost on Akshay Murji, executive director at the BML Munjal University. "We are opening centres of excellence. We are setting up a model factory with Siemens in the campus. The courses here are being designed ground up," says the MBA from Pepperdine University, US.

Of course, the corporate sector is not the end game for all universities. Azim Premji Foundation, says its CEO Dikpal Reddy, would ideally want its students to go back and work in the education and development space. "The selection process is designed to admit people who would join government organizations or private schools or CSR initiatives. We look for students who are inclined to go to the trenches and contribute to social change," he adds.

Their inclination notwithstanding, the universities have to keep their end of the bargain and provide
the world-class education students are looking for. And the shortage of faculty is one of the biggest obstacles in that quest for quality. Nikhil Sinha, the founding vice-chancellor of Shiv Nadar University, points out that today there are 8 lakh faculty in India. "With the expected growth in GER we will have to double our faculty in 8-9 years. This is particularly true in engineering and MBA streams." Adds Mohandas Pai. "Faculty shortage is the biggest issue. There are only 35,000 PhDs every year; only 6,000 of them enter teaching."

Beyond their Lifetimes
One would expect the funds-flushed corporates to find a way to get past this hurdle, although Amit Kalyani is at pains to make the point that "corporate funding neither causes nor influences success or failure of a university". What will make a difference, he asserts, is "management in a corporate way". To be sure, along with funds, pedigree and a track record too matter, and even more over the long term. After all, good universities outlive their benefactors by centuries. The contributions of John Harvard to the setting up of Harvard University or Eliza Yale to Yale University may today seem minuscule, but what has sustained these institutions are their own standards along with their ability to fund themselves.

Most universities are set up as not-for-profit ventures under Section 25. Ramaswamy of KPMG says: "A good higher education institute can make money, but without factoring in the capital expenditure and the real estate costs. [Only] an operating profit is possible." But even that may take 7-10 years or even longer if there is a research thrust.

Jindal is clear that the institution must find ways to become financially independent. "Great universities around the world become empowered by a range of initiatives including income from fees, research grants, donations and other philanthropic contributions. The OP Jindal Global University is financially secure not least because of my support but also because of the innovations in institution building." Akashy Munjal of BML Munjal adds that the Hero group will provide the capital expenditure for the university for 4-5 years and then provide operational expenses for a few more.

If the likes of the Ambanis, Munjals and Kalyans are setting up universities, clearly the profit motive is not the biggest—they have their core businesses to add to the bottom line. In fact, a university is an ideal place for India Inc to reinvest the wealth created over the years—to now create wealth of a different kind. As Raj Kumar of OP Jindal Global University points out: "Almost all of them are deploying their family wealth and claim to be building world-class institutes. They need to sustain this over decades, not years. It might be early to judge how they are faring but the pedigree of entrepreneurs who are getting in this time is a lot better."

The students emerging from these universities will have the last word.
Class Action

A new breed of private universities is complementing elite public institutions and establishing international standards

Ashish Dhawan

Private universities in India are often treated with suspicion for providing poor quality education and being most focused on making money. While this may be true in some cases, they are playing a significant role in fulfilling our country's growing demand for quality higher education. Sixty per cent of college-going students in the country today are enrolled in private institutions.

Rapidly increasing demand for higher education in India is part of a global trend with worldwide enrollment expected to rise from 100 million in 2000 to 260 million in 2025. Many countries are encouraging private institutions as a viable way to ensure that students are offered this opportunity. For example, Brazil recognized that the public sector cannot meet its youth's demand and therefore encouraged and supported private education. Currently, over 75% of Brazilian students go to private institutions and the largest higher education firm, Kroton, has over a million students.

Similarly, developed countries such as Japan and Korea have over 70% students enrolled in private universities, while developing countries such as Malaysia have over 50%. China invested in top private universities through Project 985 to build a few world-class universities, but is struggling to provide education for students at the base of the pyramid. Recognizing this gap, China has also enacted a Law for Facilitation of Private Education in 2002. This led to the number of higher education institutions doubling and enrolment increasing five-fold over the past decade.

New Chapter

The Indian higher education system consists of three tiers: elite public institutions, second-tier public and private institutions, and finally private institutions providing mass education. In most developing countries, elite institutions are publicly owned and heavily subsidized. In India too, the government spends a significant amount per student for IITs and IIMs. Commercial private players often do not have the same motivation to incentivize education, and have therefore not pursued quality higher education actively.

However, with rapid economic growth, the private sector has reacted to the needs of our workforce and set up a large number of professional colleges, especially in engineering and management. The Indian School of Business, for example, created an innovative one-year MBA programme for students with work experience, relative to the traditional model at the IIMs. Recently, we have seen an emergence of philanthropic universities such as Azim Premji University and Shiv Nadar University that are offering quality education.

Private universities in higher education are also breaking conventional paradigms in education. Ashoka University offers a liberal education to students, allowing them to break down barriers of arts and sciences, theory and practice, and take courses across to craft their own interdisciplinary major. Such institutions can serve as models for other institutions that focus on developing 21st century skills, critical thinking, communication and leadership.

These initiatives point to the emergence of a new breed of private institutions in India that can complement elite public institutions and establish international standards of excellence in Indian higher education. While it is encouraging that the Union Budget 2014 committed resources to replicating apex institutions such as IITs, IIMs and AIIMS across the country, our government should look at the higher education system more holistically to increase the gross enrolment ratio (GER) and uplift quality.

Hard Taskmaster

The government should move beyond being the primary service provider in education and play a catalytic role in improving quality of higher education in India. It can do so by tightening licensing standards and improving quality assurance, without impinging on the autonomy of private institutes.

The government must invest in a regulatory architecture that can improve the standards of all institutions, public and private, dramatically. The National Assessment and Accreditation Council should be strengthened and the rating framework of institutes should shift focus from infrastructure and inputs to student learning outcomes.

Given the fiscal deficit our country faces and the need to rapidly increase higher education institutions to meet demand, our government should recognize that private institutions are a large part of the ecosystem and play a significant role in achieving a high GER. We need the best of public and private efforts to make Indian higher education globally competitive.
मानसिक क्षमता की जांच के लिए टेक्नोथ्लॉन आज
आईआईटी गुवाहाती के वार्षिक तकनीकी महोत्सव में जाने का निलेगा नौका
उदयपुर
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आईआईटी गुवाहाती के छात्रों की ओर से टेक्नोथ्लॉन परीक्षा रविवार सुबह 10.30 बजे यूनिवर्सिटी रोड स्थित ए-वन सीनियर सैक्सियर स्कूल में होगी। इसमें नौरंग्ज से बारहवीं के छात्र-छात्राएं शामिल होंगे। परीक्षा के लिए पंजीयन दो घंटे पूर्व परीक्षा केंद्र पर भी कराया जा सकेगा।
आईआईटी गुवाहाती के छात्र हुन जैन व करण नाहर ने बताया कि परीक्षा छात्रों की मानसिक क्षमता की जांच के लिए हो रही है। इस लिखित परीक्षा के लिए पूर्व तैयारी की आवश्यकता नहीं है। इसमें दोस्त के साथ बैठक कर चर्चा कर सवाल हल किए जा सकेंगे। सफल 50 टीमों के छात्रों को आईआईटी गुवाहाती में 4 से 7 सितंबर तक होने वाले वार्षिक तकनीकी महोत्सव में हिस्सा लेने का मौका मिलेगा। वहां वे रोबोटिक्स, एरो-मोडलिंग आदि प्रतियोगिताओं में भाग ले सकेंगे। साथ ही नोबेल पुरस्कार विजेताओं से मिल सकेंगे।
कंप्यूटर से अनुवाद करने का आरोप

बदहाल हिंदी-1

लाई दिली | काव्यालेक्ष "तंत्रज्ञ"

संघ लोक सेवा आयोग और सी-सी परीक्षा के खिलाफ छात्रों ने किया विरोध प्रदर्शन।

हिंदुस्तान

संघ लोक सेवा आयोग (सी-सी) पर सी-सी परीक्षा के खिलाफ अनुवाद करने का आरोप लगाया है। सी-सी परीक्षा के खिलाफ मुख्यालय में भड़ास कर रहे छात्रों ने यह आरोप लगाया है। छात्रों का आरोप है कि परीक्षा में पूरे नाम चले अंग्रेजी के प्रयोग का हिंदी अनुवाद कंप्यूटर से किया जाता है।

इसके प्रस्ताव से बाहर भाव रहा है। शिक्षिका को पूर्वी हिंदी और अंग्रेजी शिक्षकों के खिलाफ प्रदर्शन कर रहे छात्रों के द्वारा अंग्रेजी भाषा में वाचन किया जाता है।

इस प्रदर्शन का नाम वाचन करने के योग्य भाषा को प्रमाणित करता है।

ग्राज्युट और बैंकिंग के छात्रों के साथ कर्मकार

सी-सी की परीक्षा देने वाले हिंदी भाषा छात्रों का कहना है कि सी-सी परीक्षा में सुविधा सुविधा दिखाया गया है। उनके द्वारा छात्रों को प्रदर्शन की भाषा में पूरा करने का आरोप लगाया गया है।

कंप्यूटर से अनुवाद

2013 के प्रदर्शन में एक खास की समस्या पर छात्रों से अंग्रेजी में पूरा किया गया था। इसे "discuss the impact of FDI entry into multi-trade retail supply on supply chain management in commodity trade pattern of the economy." हिंदी में इसका अनुवाद करना है।

प्रदर्शन में अंग्रेजी का अनुवाद भी सी-सी की परीक्षा के भाषा में आयोजित किया गया था।

हिंदी छात्रों के लिए आयोजित परीक्षा में इन्फोग्राफिक

सारांश के तहत पहुँच जांच

युवतीसनी परीक्षा से सी-सी का हमेशा अनुसंधान की जाती है।

प्रदर्शन करने के पश्चात, नीला सिंह, बैंकिंग और बैंकिंग से संबंधित वित्तीय विषय के समक्ष देश के कार्य का जवाब देती है।
Indian American made interim president of US varsity


Nagi Naganathan, an alumnus of the National Institute of Technology at Tiruchirappalli in Tamil Nadu, has been appointed interim president of the University of Toledo, a public research university in Ohio.

A member of the Toledo faculty since 1986, Naganathan who had led the College of Engineering as dean since May 2003 assumed his new position on July 1.

Naganathan’s work with industry includes conducting vibration analysis and control studies on heavy-duty truck powertrains for Dana Corporation and as a design engineer with Ashok Leyland Motors.

Joining a small but growing list of Indian Americans heading US academic institutions, he is the author and co-author of more than 100 publications in peer-reviewed journals.

He also has been awarded a US patent on the use of piezoelectric devices in active suspension systems.

Naganathan has received a number of prestigious awards, including the Distinguished Alumnus Award from his alma mater, the NIT, Tiruchiappalli, formerly known as Regional Engineering College, Tiruchirappalli.

Other awards include Fellow of the American Society of Mechanical Engineers, UT Outstanding Teacher Award, UT Outstanding Researcher Award, SAE Ralph R. Teetor Educational Award, ASME Outstanding Regional Faculty Advisor Award, and TST/TSPE Engineer of the Year.

Naganathan earned his bachelor’s degree with honours in mechanical engineering from the NIT, a master’s degree in mechanical and industrial engineering from Clarkson University, New York and a PhD in mechanical engineering from Oklahoma State University.

He is a tenured professor of mechanical, industrial and manufacturing engineering with expertise in the areas of smart material systems and structures, robotics, vibrations and control, and microcomputer applications in electromechanical systems.

Under his leadership, the College of Engineering has achieved record high student enrollments, registering an increase in the undergraduate enrolment every fall semester for the last eight academic years, a university announcement said.

Naganathan also has worked to elevate the college’s mandatory co-operative experience programme— one of only eight in the US — exceeding 15,000 placements in partnership with more than 1,600 employers in more than 40 states in the US and in more than 30 foreign countries.

He created the Engineering Leadership Institute with philanthropic support from Roy and Marcia Armes, CEO of Cooper Tire & Rubber Company and a 1975 UT mechanical engineering graduate, to provide leadership opportunities for students.

Naganathan’s interest in collaborations lead to new joint degree programmes with the College of Business and Innovation and College of Medicine and Life Sciences in the areas of information technology and biomedical engineering.
The college has grown under Naganathan’s tenure with the addition of the Nitschke Technology Commercialization Complex and the Thomas and Elizabeth Brady Engineering Innovation Centre.

It also has grown in prestige nationally. In October 2006, the engineering graduate programme was listed for the first time in the Princeton Review’s the top 20 graduate programme and US News and World Report has ranked the practice oriented masters programme among the top 50 in the US for the last three years.

Naganathan’s research projects have been funded with $6.5 million in grants and contracts from external sponsors, including the National Science Foundation and automotive manufacturers.

**Indian mathematician Nikhil Srivastava named joint winner of 2014 George Polya Prize**


WASHINGTON: Nikhil Srivastava, a young Indian mathematician, today became the first joint winner of the prestigious [2014 George Polya Prize](http://articles.economictimes.indiatimes.com/2014-07-10/news/51300982_1_theory-conjecture-spielman) for finding a solution to a problem that had eluded mathematicians for more than half a century.

Srivastava, who has a PhD from [Yale University](http://articles.economictimes.indiatimes.com/2014-07-10/news/51300982_1_theory-conjecture-spielman) and is presently based in Bangalore, is part of a three member team which found a solution to the [Kadison-Singer conjecture](http://articles.economictimes.indiatimes.com/2014-07-10/news/51300982_1_theory-conjecture-spielman) that pertains to the mathematical foundations of quantum mechanics.

"It is definitely inspiring and motivating to be put on a list with so many great mathematicians," said the Indian mathematician from [Microsoft Research India](http://articles.economictimes.indiatimes.com/2014-07-10/news/51300982_1_theory-conjecture-spielman).

Experts are of the opinion that the implications of this breakthrough could be significant.

"Not only have Marcus, Spielman, and Srivastava proved an important conjecture, which has consequences in various areas of mathematics, but their elegant methods promise to be applicable to a broad range of other problems as well," the citation said.


The Kadison-Singer conjecture was first proposed by Richard Kadison and Isadore Singer in 1959.

Established in 1969, George Polya Prize is given every two years alternately in two categories: for a notable application of combinatorial theory; and for a notable contribution in another area of interest like as approximation theory, complex analysis, number theory, orthogonal polynomials, probability theory, mathematical discovery and learning.

Polya (1887-1985), a Hungarian mathematician, is credited with fundamental advances in combinatorics, numerical analysis, number theory and probability theory.

Srivastava is interested in theoretical computer science, linear algebra, random matrices and convex geometry.
Indian, two others win Polya Prize for solving complex maths puzzle

**Washington:** A young Indian mathematician, Nikhil Srivastava, has been named a joint winner of the prestigious George Polya Prize for finding proof of a riddle that had eluded mathematicians for more than half a century.

Srivastava of Microsoft Research India and Adam W Marcus and Daniel A Spielman from Yale University will be presented the 2014 George Pólya Prize at the July 7-11 annual meeting of the Society for Industrial and Applied Mathematics (SIAM), in Chicago.

The trio had announced the proof of what is known as the Kadison-Singer conjecture, first proposed by Richard Kadison and Isadore Singer in 1959, pertaining to the mathematical foundations of quantum mechanics about a year ago.

The Pólya Prize named after a Hungarian mathematician credited with fundamental advances in combinatorics, numerical analysis, number theory, and probability theory, is presented by SIAM every two years.

From left to right: Nikhil Srivastava, Adam W Marcus and Daniel A Spielman. Image from Microsoft Research blog.

Citing an email received by Srivastava, Inside Microsoft Research blog said the selection committee wanted to recognize him and his colleagues "for the solution to the Kadison-Singer problem."

"Not only have Marcus, Spielman, and Srivastava proved an important conjecture, which has consequences in various areas of mathematics, but their elegant methods promise to be applicable to a broad range of other problems, as well," the citation continued.

In a post written by Srivastava on the Windows on Theory blog shortly after the conjecture was proved, he emphasised the discrepancy-theoretic nature of the new result and explained its application for partitioning graphs into expanders. "It is definitely inspiring and motivating to be put on a list with so many great mathematicians," Srivastava was quoted as saying.
Winning awards is rewarding, but for Srivastava, the true reward for his research is in extending its relevance, "My focus is mainly to better understand the techniques that went into this proof," he said. "I suspect it is an instance of much more general phenomena, rather than a one-off."

The Kadison-Singer problem asks, at its core, if unique information can be extrapolated from a scenario in which not all features can be observed or measured, according to Yale News. The idea is particularly relevant to abstract fields, including quantum physics, operator theory, complex analysis, graph theory, signal processing, and finite-dimensional geometry, it said.

**Recently-constructed IITs and IIMs are plagued with infrastructure and staffing problems**


The NDA government's announcement about the setting up of five new IITs and IIMs each has largely been welcomed by experts considering the need for quality technical educational facilities.

The experts, however, have pointed out that several of the eight new IITs set up in 2008-09 are struggling for lack of faculty and infrastructure.

Years after their establishment, the new IITs at Gandhinagar, Ropar, Jodhpur, Hyderabad, Indore, Mandi, Bhubaneswar and Patna are functioning on temporary campuses because either land or funds is not available to them.
IIT-Jodhpur was established in 2008 but failed to retain faculty. Several of the eight new IITs set up in 2008-09 are struggling with problems such as this or issues with infrastructure.

Besides, teaching vacancies at some of the new IITs are as high as 50 per cent.

**Finance**

Also, there is the issue of finances - establishing one IIT costs Rs 1,750 crore while it is Rs 1,000 crore in case of an IIM.

**SINGLE STOREY FOR IIM-UDAIPUR**

By Sudhanshu Mishra

Established as an autonomous body in 2011, the IIM-Udaipur continues to function from its 'temporary campus' which is nothing but a single storey building of the Mohan Lal Sukhadia University in Udaipur.

This institute took two years to come into existence after 2009 when the Centre decided to start seven new IIMs. It started its Post Graduate Programme (PGP) with 57 students as also the PGPX programme (for executives) with 16 students.

It is likely to shift to its own campus in 2016.
Though of the sanctioned faculty strength of 22 it has 20 members but Shah maintained it did not pose any problem as the institute was able to keep the teacher-student ratio as 1:12.

The institute has 240 students.

Although Finance Minister Arun Jaitley allocated a total of Rs 7,138.97 crore for technical education, only an initial allocation of Rs 500 crore was made for the five new IITs in Jammu and Kashmir, Chhattisgarh, Goa, Andhra Pradesh and Kerala and the five new IIMs in Himachal Pradesh, Punjab, Bihar, Orissa and Maharashtra.

Of the seven new IIMs established between 2007 and 2011, authorities recently found that those at Rohtak, Ranchi and Udaipur were facing infrastructure-related problems.

Experts say there is an urgent need to allocate more funds for the eight IITs set up during 2008-09 as well as the five new IITs proposed by the Finance Minister if they are to perform to their full potential and maintain high standards of quality.

**Faculty brain drain plagues IIT-Jodhpur**

*By Sudhanshu Mishra*

IIT-Jodhpur that has already been grappling with the problems due to absence of its own campus and other disadvantages of a new IIT like lack of infrastructure and poor faculty strength seems to have miserably failed to retain its faculty.

During the past four years it has lost around 30 faculty members, including half a dozen during the past six months.

Against the sanctioned faculty strength of 90 it has only 55.

The institute has failed to identify the reasons for exodus of the faculty despite its Board of Governors sought a detailed report.

A senior faculty member told Mail Today that of late the management's attitude towards the faculty had become rude and insensitive forcing the teachers to look for alternatives.

"In fact it (management) has started taking the faculty members for granted", he added.

Initially though it had guest faculty, but with the passage of time it has been discontinued.

The visiting faculty too is limited to two or three.

IIT Jodhpur that began its first academic session six years ago still operates from its transit campus of 10 classrooms in a portion of city's Mugneeram Bangur Memorial (MBM) Engineering College.
IIT-Patna still in transit

By Giridhar Jha

IIT-Patna was set up in 2008, but it continues to run from its transit campus located at Patliputra Colony in Patna.

Though the Bihar government had allocated 536 acres for establishing its permanent campus at Bihta, about 30 kilometres from the state capital, the institution is still waiting for its own premises to be completed.

As a result, the institution remains plagued with problems such as lack of proper infrastructure, faculty crunch and average placement records.

IIT-Patna was established in 2008 but is facing infrastructure issues, as it continues to run from its transit campus located at Patliputra Colony.

The institute does not have enough space for classrooms, laboratories, libraries, sporting facilities and even hostels on the makeshift campus.

The institute at present has three schools – School of Engineering, School of Basic Sciences and the School of Humanities.
Notwithstanding limitations, the institute has developed modern facilities to run the B.Tech and M.Tech courses apart from the Ph.D programmes.

The IIT-Patna has at present 533 students enrolled in its B.Tech programmes, 85 in M.Tech and 140 Ph.D students.

Currently, it has 81 faculty members.

**IIT and IIM Indore beat the odds**

By Anup Dutta

Indore boasts of two premiere higher education institutions - IIM and IIT. The two institutes are doing fairly well in meeting the challenges to equip and nurture the bright talents.

After its inception in 2009, IIT-Indore celebrated its first graduation ceremony last month with 101 students passing out with B.Tech degree.

President Pranab Mukherjee had attended the landmark event of the institute. But IIM Indore has lately been in news for wrong reasons.

IIT-Indore was established in 2009 and IIM-Indore was established in 1997. The two institutes are doing fairly well in meeting the challenges to equip and nurture bright talents.
In January, M.N. Buch - a close associate of former director of IIM Indore Prof N. Ravichandran - resigned from Board of Governors of the institute after Rishikesha T. Krishnan was appointed as new director.

**IIT-Gandhinagar yet to move into own campus**

By Darshan Desai

On August 2, the third batch of students of Indian Institute of Technology- Gandhinagar (IIT-G) would acquire the tag of the prestigious temple of learning at the convocation but when they walk out they might have the regret of not being able to study at a real time IIT campus.

It has been six years since it was launched in 2008, but IIT-G does not have its own home though it has been operating from a proper engineering and technology college on the Ahmedabad- Gandhinagar route with all the necessary facilities and faculty.

The new batch of students of IIT-G would walk into a sprawling campus of the institute's own by the first week of December this year.

Six years since it was launched, IIT-G does not have its own home though it has been operating from a proper engineering and technology college on the Ahmedabad-Gandhinagar route

The setting up of the campus got delayed because the land that the state government offered was not acceptable to the IIT authorities since it was quite far and there were connectivity issues. This initially delayed the process by four years.
"But once we got the land just over a year ago, we initiated construction on a war-footing.,” an IIT-G spokesperson told Mail Today.

IIT-MANDI AWAITS THE BUZZ

Even four years after its establishment, IIT Mandi still lacks the buzz which IIT Delhi and IIT Bombay boast

By Manjeet Sehgal

When an IIT was announced for Himachal Pradesh in 2009, the people were overjoyed as this was more than an achievement for them.

Parents wanted to send their children to an IIT in their own state.

But even after four years of establishment, IIT Mandi still lacks the buzz which IIT Delhi and IIT Bombay boast of.

The then BJP government got a three-storey building of Vallabh Government College vacated to 'accommodate' IIT newcomers.

The PWD rest house and Mandav Hotel were converted into administrative office and hostel, respectively.

On March 9 last year, the then HRD Minister M. M. Pallam Raju had inaugurated the incomplete campus.
Though IIT authorities claim that most of the classes are now being run from the IIT's under construction campus, but the principal of Vallabh Government College told Mail Today that one class is still being held at the degree college campus.

He said the IIT authorities have occupied the state degree college campus for last four years.

Read more: http://www.dailymail.co.uk/indiahome/indianews/article-2690109/New-IITs-IIMs-plagued-infrastructure-problems-teaching-vacancies-50-cent.html#ixzz37Qd5uEID
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Centre to accord priority for research in S&T

http://www.thehindu.com/news/national/other-states/centre-to-accord-priority-for-research-in-st/article6205051.ece

Union Minister of State for Science and Technology and Earth Sciences (Independent Charge) Jitendra Singh said on Saturday that the government will prioritise correcting the deficiencies in funding of scientific institutions through budgetary provisions as well as through private sector initiatives.

Mr. Singh was talking to journalists after dedicating to the nation R.V. Sindhu Sadhana, the first indigenously built research vessel, acquired recently by the CSIR-National Institute of Oceanography (CSIR-NIO) at a function held on board the vessel at Mormugao harbour.

P.S. Ahuja, Director-General, Council of Scientific and Industrial Research (CSIR), and S.W.A. Naqvi, Director, NIO were present.

Expressing concern over the inadequate priority ocean research had received in the country and also lamenting that “very few youngsters have been taking to science research,” Mr. Singh vowed to give adequate attention to these issues as part of the seven-week-old government’s overall policy initiative to encourage science and technology and research.

To a question over autonomy to research institutions, the Minister said the government’s thrust of “minimum government and maximum governance” would be applicable even to research institutions as regards their functioning and independence.

The Minister said the government was seriously considering giving priority to science and technology and the recent budget allocation for this field was the first step in that direction.

In a bid to attract more and more youth into the field of science and technology the government has recently selected 20 students across the country on all India merit basis and were sent abroad to work with Nobel laureates. Even several NRI scientists had shown interest to come back and work for the motherland, he said.

Mr. Ahuja earlier said that the first-ever big project of Rs.20 crore was given to the NIO by the ONGC for research in Krishna and Godavari basin.

For NIO, the premier ocean research institute under CSIR involved in multi-disciplinary studies of marine processes and resources in sea and around India, the vessel was expected to serve as a platform to launch
oceanographic research programmes of global importance and translate this knowledge to the benefit of the nation, Mr. Naqvi said.

State-of-the-art vessel

A multi-disciplinary research vessel, which is 80 metres long and 17.6 m wide, Sindhu Sadhana can accommodate 57 personnel, including 29 scientists. It is designed for a cruising speed of 13.5 knots and an endurance of 45 days. It has 10 laboratories that are fitted with state-of-the art equipment, facilitating high precision data and sample acquisition. The ship is equipped with a number of laboratories for online data collection and data processing.
New Delhi: After the FYUP rollback, the Delhi University registrar could become the first wicket to fall from Dinesh Singh's team. The human resource ministry has written to the department of personnel and training (DoPT) for recalling registrar Alka Sharma.

The ministry has cited her role in “bulldozing” FYUP, saying teachers and students are unhappy with her, and her conduct has affected DU’s image. Sharma has been on deputation for around seven years and nine months without any break, out of which four and a half years have been in DU itself. She joined the university as finance officer in 2006.

In a strongly worded letter, the ministry said: “Extension of her deputation should be withdrawn immediately.” The ministry is said to be unhappy with her role in FYUP.

Sharma got an extension in January. “The irony is that education secretary Ashok Thakur pushed her case and now the ministry finds fault with her stay,” said a source.

DU Teachers’ Association had demanded her removal, while National Democratic Teachers’ Front made a representation to DoPT regarding her deputation from her parent organization, Indian Defence Accounting Service, in June. “According to the DoPT rules, no government officer is allowed more than seven years of deputation. Sharma, who is at a director-level post, is entitled to five years. She completed seven years on January 21, 2014, with an understanding that there will be no further extension. But, on January 24, her stay was extended till June 2015,” said DUTA president Nandita Narain. A notification from the HRD deputy secretary was marked to Thakur, saying her extension had been approved by DoPT.
The drunken screw’s fantastic voyage

BY SAMAR HALANKAR
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BANGALORE

mission into the body of a fabulous adventure into the last frontier of man! In 1966, these breathless bluffs promulgated a novel called Fantastic Voyage, written by master of science fiction Isaac Asimov. It was based on the screenplay of a movie with the same name, released that same year. The story was fantastic enough: four men and a woman—the voluptuous Rachel Welch—are miniaturised along with an atomic submarine and released into the bloodstream of a man whose death could mean the destruction of the earth itself. So, they journey through his carotid artery, destroy a blood clot and blast it away and, obviously, save him and the world.

The idea of tiny people in a tiny submarine barrelling through the bloodstream re-imagines a fantasy. Here’s something to consider, though. Just under half a century has passed since Fantastic Voyage. It took more than a century after Jules Verne’s From the Earth to the Moon for man to land on our lifelong companion in the sky.

The human body is indeed the last, great frontier, a workplace incredibly more difficult than Asimov could ever imagine, to design as the farthest reaches of space.

Only last month, a diverse group of scientists from the Indian Institute of Science (IISC), Bangalore, announced in the journal Nano Letters that they had completed the first successful voyage of a super tiny propeller or screw—in scientific terms, a nanomotor—through blood. This comes on the heels of an effort, reported in February by a team at the University of Pennsylvania in the US, of nanomotors propelled by ultrasonic waves through live human animals and steered, as in Bangalore, with magnets.

The IISC team’s hope for the near future is to use the screws to deliver medicines that can kill cancer cells, a scenario many say will hopefully be far less harmful and indiscrimi-

nately than typical chemotherapy that destroys both good cells and bad.

Moving a nanomotor through blood or any living tissue is much more difficult than it sounds. In a cool, sterile laboratory at IISC’s Centre for Nano Science and Engineering, Ph.D student Arjit Khosla works under a microscope to move one of these screws—pulled along by a ring of magnets—propelled through water, straight, true and fast. His teacher and the man responsible for this project, physicist Anusheesh Ghosh, 40, shows IISC’s movie of the same screw in blood. It moves, bumps and spins slowly and even stops in other word for this—drunkenly through a thickly packed ocean of blood.

When asked about the drunken trajectory, Anusheesh Ghosh, a clean-shaven, good-humoured man, smiles and says: ‘Someone asked me, ‘Was it a weekend when you guys did this experiment?’

The problem with running anything through blood is that it is five times thicker than water, highly viscous and the screws in question are invisible to the naked eye. The largest of the screws, made of glass and manufactured at Ambarish Ghosh’s laboratory, is 5-micron long. It would take 12 screws, laid end to

end, to bridge the width of a human hair.

The difficulties of steering anything through blood is explained in a 2013 paper by the team at Nanyang Technological University in Lab on a Chip, a journal of the Royal Society of Chemistry. ‘Blood is a high complex environment that needs to be seen more as a tissue than a liquid due to its special properties, which fulfill a wide range of important functions in living systems.’

The paper details the group’s difficulties as they attempted to manoeuvre through highly diluted blood a tiny engine propelled by bubbles. The significance of the IISC screw is apparent because it was propelled through undiluted human blood (donated by a student), which requires up to 10 times more force than driving through water.

Such are the invisible and difficult barriers in the arcane but rapidly advancing world of nanotechnology; the science of very, very small things, a vision first laid out in a 1959 lecture. “It is a staggeringingly small world that is below us,” physicist and Nobel laureate Richard Feynman said in a seminal lecture, ignored for many years, titled There’s Plenty of Room at the Bottom. He predicted that by the year 2000, science would advance enough to put the Encyclopedia Britannica on the head of a pin and send minia-

ture robots to operate inside a body. Feynman called it ‘swallowing the surgeon.

Nanotechnology has reached the crossroads of multiple disciplines, and so Ambarish Ghosh has on his team experts in biotechnology, electrical engineering and physics. They realised just how difficult their task would be when the first screw passed through a water test simply got stuck in blood. “I am a physicist, all I see are to me,” says Ambarish Ghosh, only half-joking.

Their first successful voyage through blood was only last year, the end result of many failures and trying up to 20 ma-

terials as coating for the screws. Each screw is a sandwich of three ingredients, each no more than a few hundred atoms thick. The layers must be thin; too thick and the screw starts to become round.

The first layer is the glass of the screw. Second, a magnetic coat of cobalt, iron or nickel, important because external magnets are its propulsion system. Third, the protective layer evolved after much experimentation, a ferrite spread of zinc, iron and oxygen.

The critical third layer—it had to withstand blood’s corrosiveness yet be harmless to the body—was a product of seren-

dity. After many failures, Ambarish was riding a campus bus when a senior colleague referred to a material a student had baked in a microwave oven for another project. It worked. In late 2013, four years after the first journey through water, Ambarish’s group—the lead author of the paper is Ph.D student Purvay Lekshmy Venugopalan—delightfully watched their screw struggle through blood.

“The next step would be to give the screws intelligence,” says Ambarish Ghosh. By intelligence, he means they should be able to carry and shed cancer-killing medicines when they sense the chemicals that characterize cancer cells. Another way of identifying cancer cells is to discern their distinct colours. Work on the next step has started, but given the long, hard regulatory path, it could take anything from five years to a decade to come up with a product.

The advances come as 20th Century Fox works on a re-
make of Fantastic Voyage. There are likely to be plot twists this time—as there now are in the novel. As Ambarish Ghosh puts it: “I’d like to see what vehicle they use this time.”

Mint ND Weekend 12.07.2014 P-07

Harnessing people power

An IT graduate is helping villagers build and operate their own micro-hydro power stations,

Sajeevan Krishna

The way they take tiny drops of water to effortlessly fill an ocean. At a time when the world is grappling with the consequences of huge dam projects in the earth-scape- and ecologically sensitive Himalayas, Sajeevan Kumar’s micro hydro power project has the potential to do exactly that, in the last line decades. Kumar, an alumnus of Indian Institute of Technology (IIT) Roorkee, has engaged with local communities to build over 50 hydro-power plants. Constructed by villagers using bamboo and scrap, these projects are operated and maintained by them. “Every stream flowing downhill has the potential of providing a product— and every village community has it in its hands to tap. In my estimate, every village in the Himalayas can harness nearby streams and waterfalls to become self-sufficient in power,” says Kumar.

Indeed, the idea seems too easy. The first such microhydro pro-
gect in India was launched back in 1976. But while some Kumar’s initiative has seen his enthusiasm met with much consternation and the threat of electricity from the grid. “The idea is to enable rural communities to become self-sufficient,” he says.

Although it was hatch of the notion to train the villagers, who are mostly illiter-

ate, in power generation, the results have been great,” says Kumar. Today, all the power he has harnessed in places as diverse as Kargil (Ladakh), Agum beda (Karnataka), and Karakodi (Orissa) are being maintained by locals.

Some of these grassroots engineers are now teaching other villages. So much so that last year’s consolidation of the project under the Agenda project, the villagers ingeniously power two power plants in a nearby small village through an electric motor, which can be fitted into a pipeline and made for the village.

None of this would have been possible for the villagers to start a micro-hydro plant. In Pirala, where Kumar and his wife used to find women to do field work, the response has been good. “People have kept sheep but there are no more, by getting a micro-hydro engine, it can be fitted into a waterwheel and make power runs,” says Kumar. He notes that micro hydro power can be a significant contributor to the main grid and the example of Germany, where individual houses generate electricity and sell the surplus to the grid. “Some younger (in Germany) where we expect the entire region to be powered by micro-hydro engines,” says Kumar.

These mini hydro power plants would have an output of at least 5kW. "We will see some villages and individuals contribute the grid, around 2kW or even the whole of village," he adds. Getting collabora-
tions isn’t easy. Thus the agencies like United Nations Development Program and Swiss Development Organization, Swiss Infrastructure and Development Organization, International Union for Conservation of Nature, Centre for Environment Education and more recently, HelpAge India have pitched in.

After his last disbursement, the Agenda project requires expensive inputs. “My NGO, Himalkla, has donated material and provided the vessels to a zero-carbon village indigenous to the main grid,” says Kumar. “The turbines were supplied free—Kumar is preparing to launch an agenda to get funds aggregated. He says, ‘hopefully, someday policy makers will understand the significance of micro-hydro power needs and the power of the river.’ Life itself embodies renewable power to the people so are an agent, but have the potential to revolu-
tionise rural lives. As he says, “It’s easy, electricity is only one thing. It’s the begin-
ning of development of the rural world.”

To learn more, contact Kumar on yogakumar@gmail.com

Villagers setting up a micro hydro plant at Kangla (right). Kumar guides a technician in installing a power house component.

The Right Side is accordingly cut-out from the left side of the image.
High-5 for edu: New IITs, IIMs on paper

TEAM TOI

Finance minister Arun Jaitley straddled the two worlds of higher and school education to bridge the basic requirements of access and quality. He announced setting up of five new IITs and IIMs as the flagship Sarva Shiksha Abhiyan bagged an increased allocation of Rs 28,635 crore.

The budget allocation to education has been increased by 12% to Rs 83,771 crore.

The new IITs will come up in Jammu, Chhattisgarh, Goa, Andhra Pradesh and Kerala. The five new IIMs will be in Himachal Pradesh, Punjab, Bihar, Odisha and Maharashtra. It's part of the Modi government's larger plan to have an IIT/IIM in each state.

However, allocation of Rs 500 crore for new IITs/IIMs shows a mismatch between intent and action. Setting up one IIT costs Rs 1,750 crore and an IIM nearly Rs 1,000 crore. While IIT-Roorkee director Pradipto Banerjee thinks new IITs will correct the historical wrong, the new government should also address the problems of eight IITs that were set up during the UPA regime. From bad infrastructure to more than 40% vacancy in teaching faculty, the new institutes are yet to stand on their feet.

While democratization of IITs/IIMs is a laudable idea, the fear of dilution of quality is also not misplaced. The HRD ministry, as one official says, needs to start new institutions in 'mission mode' with inflexible deadlines.

Madan Mohan Malaviya Teachers' Training Programme with an allocation of Rs 500 crore comes as a good initiative to bolster quality of school education. The move to take IT to children through virtual classrooms will increase access.

Former UGC chairperson Arun Nigvekar called it a balanced Budget.
With focus on higher learning, India to get five new IITs, IIMs

NEW DELHI: The government will set up five more Indian Institutes of Technology (IIT) and Indian Institutes of Management (IIM) and has allocated ₹500 crore for it in the Union Budget.

While Jammu & Kashmir, Chattisgrah, Goa, Andhra Pradesh and Kerala will get the new IITs, the IIMs will come up in Himachal Pradesh, Punjab, Bihar, Odisha and Maharashatra.

The country presently has 16 IITs and 13 IIM.

"The country needs a large number of centres of higher learning which are world class," finance minister Arun Jaitley said while presenting his maiden budget in Parliament. He also announced the setting up of Jai Prakash Narayan National Centre for Excellence in humanities in Madhya Pradesh.

Overall, the budget of the HRD ministry (plan and non-plan) — of both the departments of higher education and department of school education and literacy taken together — will witness a rise of 12.3 per cent from ₹74,621 crore in 2013-14 to ₹83,771 crore.

Announcing the "Pandit Madan Mohan Malviya New Teachers Training Programme" to infuse new training tools and motivate teachers with an initial corpus of ₹500 crore, Jaitley made a provision of ₹28,635 crore for Sarva Shiksha Abhiyan while the Rashtriya Madhyamik Shiksha Abhiyan has got ₹4,966 crore.

"The government will also strive to provide toilets and drinking water in all girls' school in first phase," he added.

To take advantage of the reach of IT, Jaitley has allocated a sum of ₹100 crore for setting up virtual classrooms as Communication Linked Interface for Cultivating Knowledge (CLICK) and online courses.

Lauding the initiatives for education in the Budget, HRD minister Smriti Irani said: “The budget has specially focused on the education of the girl child which is one of the major priorities of this government. The budgetary announcements reflected the development strategy of the government and its mandate of Sabka Saath Sabka Vikas.”

The education industry too seemed happy with the Budget. “It is heartening to see the priority accorded to the education sector, especially the focus on primary education. The government has also committed to promote research and higher education in a big way through budgetary allocation and setting up of more IITs and IIMs. This will provide a much-needed impetus to the twin areas that have remained largely stagnant over the past couple of years,” said Ranjan Kaul, Managing Director, Oxford University Press India.
Indian Express ND 11/07/2014 P-23

Five new IITs and five more IIMs

KEEPING the promise made in its election manifesto, the BJP-led government Thursday announced five new IITs and IIMs, allocating Rs 500 crore for the move.

While there is an over 12 per cent increase in the overall allocation for education, HRD Ministry allocation (Plan & non-Plan) for both the departments of Higher Education and School Education & Literacy has risen from Rs 74,621 crore in 2013-14 to Rs 83,771 crore.

The five new IITs will come up in Jammu, Chhattisgarh, Goa, Andhra Pradesh and Kerala. Five new IIMs are proposed to be set up in Himachal Pradesh, Punjab, Bihar, Orissa and Rajasthan, the sates already have an IIT each.

The HRD Minister is soon expected to write to chief ministers of all states concerned asking them to indicate at which location they would prefer the new institute to come up.

Andhra Pradesh is learnt to have already indicated that they would want the IIT in Tirupati while Kerala is said to have even managed to get over 200 acres of land around Thiruvananthapuram for its long awaited IIT.

The 10 new institutes apart, an IIT, an IIM and an NIT each will also come up in Seemandhra.

Among other new institutes proposed to be set up will be Jai Prakash Narayan National Centre for Excellence in Humanities proposed to be set up in Madhya Pradesh.
Long On Words, But Short On Radical Reform

Jagadeesh Anand

The Union budget for the year 2014-15 is a mixed bag of new tax measures and fiscal consolidation. It comes close to delivering what the government asked for in the pre-budget consultation process. However, the implementation of these measures is likely to see delays.

The budget measures can be broadly categorized into three groups. The first group consists of measures that are likely to increase the fiscal deficit. These include the introduction of a new tax on agricultural produce, increased excise duties on tobacco, and higher corporate taxes. The second group consists of measures that are likely to decrease the fiscal deficit. These include new taxes on foreign transactions, higher tax rates for higher-income taxpayers, and a clarification of the tax rules for foreign companies. The third group consists of measures that are likely to have little impact on the fiscal deficit. These include measures to improve the tax administration, such as the introduction of a new tax on foreign accounts, and measures to improve the tax structure, such as the introduction of a new tax on foreign companies.

The budget measures are likely to have a mixed impact on the economy. Some measures are likely to boost growth, while others are likely to slow it down. The new tax on agricultural produce is likely to boost growth, as it will encourage farmers to invest in new technology and infrastructure. The increased excise duties on tobacco are likely to slow down growth, as they will increase the cost of living for consumers. The higher corporate taxes are likely to have a mixed impact on growth, as they will boost government revenue, but they may also slow down investment.

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Cash galore for education: Five IITs, IIMs in Budget

NEW DELHI: It's well said that education is the backbone of a developing nation. It so that betterment of education stands among the top priorities of the Narendra Modi-led NDA government at the centre. To give a boost to education sector, the Modi government has proposed to set up five IITs and as many IIMs in the country. The government has allocated a fund of Rs 68,728 crore in the 2014-15 general budget for the purpose, a hike of 11 per cent over the last fiscal.

The Indian Institute of Technology (IIT) will be set in Jammu, Chhattisgarh, Goa, Andhra Pradesh and Kerala while the Indian Institute of Management (IIM) in Himachal Pradesh, Punjab, Bihar, Odisha and Maharashtra, finance minister Arun Jaitley said in his budget speech, proposing Rs 500 crore for the purpose.

The move would end a long standing demand of these states but ensure that most of them would have one of these prestigious institutes.

Setting up of an IIT entails an investment of roughly Rs 1,800 crore while an IIM requires around Rs 1,200 crore.

HRD minister Smriti Irani

To infuse new training tools and motivate teachers, Jaitley also proposed to launch Pandit Madan Mohan Malviya New Teachers Training Programme.

He also proposed to set up a Jai Prakash Narayan National Centre for Excellence in Humanities in Madhya Pradesh.

The education sector this year got a plan outlay of Rs 68,728 crore, an 11.10 per cent jump as compared to the revised plan outlay of Rs 61,857 crore in the last fiscal.

The hike is 12.3 per cent when both plan and non-plan expenditure is taken into account.

Out of the total plan outlay this year, department of school education and literacy has got Rs 51,828 crore and higher education has been allocated Rs 16,900 crore.

Stating that elementary education was one of the major priorities of the government, Jaitley said, 'His government would strive to provide toilets and drinking water in all the girls school in first phase.'

He proposed Rs 28,635 crore for Sarva Shiksha Abhiyan (SSA) and Rs 4,966 crore for Rashtriya Madhyamik Shiksha Abhiyan (RMSA).

Besides, he announced launching of a School Assessment Programme which would be initiated at a cost of Rs 30 crore.

Hailing the allocation for the education sector, Union HRD minister Smriti Irani said the emphasis on girl child education in the budget in particular was noteworthy.

'The Budget highlights the resolve to construct one lakh toilets and drinking water facilities in schools for girls. This would enable girls to not only enrol in schools but also stay in schools. When girls get the needed sanitation facilities in schools, they would demand similar facilities at home, leading to a cleaner India,' she said.

The Budget has emphasised on gender mainstreaming. The school curriculum will have a separate chapter on gender mainstreaming.
Education gets a push with new IITs, IIMs

The education sector received an allocation of ₹68,728 cr, out of which the school sector got ₹51,028 cr

By Prashant K. Nanda
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From elementary schools to elite business schools, Arun Jaitley's maiden budget covered the whole education sector from end to end. Overall, the sector received an allocation of ₹68,728 crore for 2014-15, up from a revised budget estimate of ₹61,857 crore in 2013-14. That amounts to an increase of 11.1%.

Of this year's total allocation, the school sector got ₹51,028 crore, or 9.9% more than the revised budget estimate of 2013-14. For higher education, the minister allocated ₹16,900 crore against ₹14,608 crore the previous year—a 14.8% increase. Of the total higher education budget, technical education, which comprises, among others, the Indian Institutes of Technology (IITs) and the Indian Institutes of Management (IIMs), got the lion's share of ₹7,139.97 crore.

"The country needs a large number of centres of higher learning which are world class," the minister said, a view which conflicts with the 12th Five-Year Plan document that had advocated a halt to government-funded higher education.

Jaitley proposed setting up five more IITs in Jamu and Kashmir, Chhattisgarh, Goa, Andhra Pradesh, and Kerala and five IIMs in Himachal Pradesh, Punjab, Bihar, Odisha and Maharashtra. The 10 institutes were allocated an initial sum of ₹500 crore for the current fiscal year.

Once completed, India will have a total of 18 IIMs and 21 IITs. The previous government had set up seven new IIMs and eight new IITs between 2008 and 2011, but most of these are operating from makeshift campuses and face challenges in terms of their quality of teaching and research.

The government also proposed to set up a Jai Prakash Narayan National Centre for Excellence in Humanities in Madhya Pradesh and five new All India Institutes of Medical Sciences and a sports university.

The finance minister described elementary education as "one of the major priorities of the government" and set apart ₹28,635 crore for the Sarva Shiksha Abhiyan (SSA) programme. This is part of the total school education allocations. In the 2013-14 budget estimate, the previous government had allocated ₹27,258 crore for the SSA.

The budget also advocated starting a school assessment programme and aimed to infuse new training tools and motivate teachers through another scheme called the Pandit Madan Mohan Malviya New Teachers Training Programme. Jaitley allocated ₹500 crore toward this initiative. The lack of trained teachers is considered a hurdle in improving schools and education outcomes.

The budget allocated ₹4,986 crore for the Rashtriya Madhyamik Shiksha Abhiyan, a programme to universalize secondary education.

The finance minister pointed to deficient school infrastructure facilities, and proposed to provide toilets and drinking water in all girls' schools to begin with. The budget also sought to give a push to technology integration in education and virtual classrooms.

While higher budget allocation for education is welcome, the budget lacked clarity on the question of private investment in education and did not outline a path of reform for education, said K.R. Sekar, who oversees the education practice at Deloitte Haskins & Sells LLP, a consulting company.

The budget had failed to provide fiscal incentives to attract private sector investment in education, he said, adding that it should also have given education the status of an infrastructure sector to enable it to access inexpensive domestic and foreign funds.
MORE AIIMS, IIMs PROPOSED

STATESMAN NEWS SERVICE
New Delhi, 10 July

The government proposes to set up four AIIMS and as many IIMs and IITs, Finance Minister Arun Jaitley announced in his Budget speech today.

"A plan to set up four more AIIMS like institutions at Andhra Pradesh, West Bengal, Vidarbha in Maharashtra and Poorvanchal in Uttar Pradesh is under consideration," he said, adding that all the six new AIIMS at Jodhpur, Bhopal, Patna, Rishikesh, Bhubaneswar and Raipur have become functional.

"I propose to set aside a sum of Rs 500 crore for this," he said. The idea to have AIIMS-like institutes was approved by the Manmohan Singh government in 2006. It was proposed in 2003 by the BJP-led government.

Mr Jaitley also proposed to set up the Jayaprakash Narayan National Centre for Excellence in Humanities in Madhya Pradesh and five more Indian Institutes of Technology (IITs) in Jammu, Chhattisgarh, Goa, Andhra Pradesh and Kerala.

Five IIMs (Indian Institutes of Management) would be set up in Himachal Pradesh, Punjab, Bihar, Odisha and Maharashtra, he said at a cost of Rs 500 crore.

At present there are 16 IITs: one each in Bhubaneswar, Mumbai, Mandi, Delhi, Indore, Kharagpur, Jodhpur, Kanpur, Chennai, Gandhinagar, Patna, Roorkee, Ropar, Varanasi, Hyderabad and Guwahati.

The 13 IIMs are located in Ahmedabad, Bangalore, Cuttack, Lucknow, Indore, Kozhikode, Shillong, Rohtak, Raipur, Ranchi, Tiruchirappalli, Kashipur (Uttarakhand) and Udaipur.

Education loans: Mr Jaitley said the government proposed to ease and simplify norms to facilitate educational loans for higher studies.

Stressing the importance of elementary education, the minister said there was a residual gap in providing minimal school infrastructure facilities.

"The government would strive to provide toilets and drinking water in all girls schools in the first phase," he said.

Mr Jaitley added that a school assessment programme was being initiated at a cost of Rs 30 crore.

"To infuse new training tools and motivate teachers, Pandit Madan Mohan Malaviya New Teachers Training Programme is being launched. I am setting aside an initial sum of Rs 500 crore for this," he said.

He proposed Rs 100 crore to set up virtual classrooms as communication linked interface for cultivating knowledge and online courses to take advantage of the reach of IT.

Overall, the budget of the Ministry of HRD (Plan & Non-Plan), of both the Departments of Higher Education and Department of School Education & Literacy taken together, will witness an increase of 12.3 per cent from Rs 74,621 crores in revised estimate (RE) 2013-14 to Rs 83,771 crore.

Madarsa modernisation: An additional amount of Rs 100 crore has been provided for madarsa modernisation that would enable 10 lakh Muslim children to get education of national standards which is certified through the National Institute of Open Schooling (NIOS).

The Budget has announced support to states to set up 15 Braille presses. This would allow publishing of Braille books that would help visually challenged students.
Funds assured to professional institutions

S Shyamala
Chennai

TO provide impetus to higher and professional education, the finance minister on Thursday proposed to set up IITs, IIMs and AI-IMS in all states. The government will set up five IITs, five IIMs and four AI-IMS-like institutions as part of this year's budget plan.

"It is a matter of great satisfaction that AIIMSs at Jodhpur, Bhopal, Rishikesh, Patna, Bhubaneswar and Raipur, which are part of the Pradhan Mantri Swasthya Suraksha Yojana, have become functional. A plan to set up four more AIIMS-like institutions in AP West Bengal, Vidarbha in Maharashtra and Poorvanchal in UP is under consideration. I propose to set aside Rs 500 crore for this. Presently, 58 government medical colleges have been approved. It is also proposed to add 12 more government medical colleges. Dental facilities would also be provided in all these hospitals," he said.

ITIs in Jammu, Chhattisgarh, Goa, Andhra Pradesh and Kerala, and IIMs in Himachal Pradesh, Punjab, Bihar, Odisha and Rajasthan are also in the offing. The government has set aside Rs 500 crore for the plan.

Industry experts' opinion has been mixed about the announcement. While some applauded, others were openly critical.

"No mention of more vocational institutions and community colleges across the country disappointed me. Average Indian children need formal vocational training to make livelihood rather than more of the elitist IIMs and IITs, which fewer can get into. Farm to non-farm transition can't happen through IIMs and IITs," said Rituparna Chakraborty, president of Indian Staffing Federation.

On the elementary education front, the government has also committed to a school assessment programme at a cost of Rs 30 crore and teacher training programme at Rs 500 crore. Rs 100 crore is being provided for setting up virtual classrooms as communication-linked interface for cultivating knowledge and online courses.

Moreover, a national multi-skill programme called 'Skill India' is proposed to be launched. It would impart skill to youth with an emphasis on employability and entrepreneurship. It will also provide training and support for traditional professions including welding and weaving. Convergence of various schemes to attain this objective is also proposed.

"The government has started with a strong commitment to develop a robust and sustainable skill ecosystem. The finance minister has provided full support to build the Skill India Mission and the National Multi-skill Mission. How this unfolds in the coming months is something we need to wait and watch," said Dilip Chenoy, MD and CEO of NSDC.

(With inputs from Trushna Udgirkar in Hyderabad)

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Do we need more IITs and IIMs, ask academics

Quality concerns abound

NAVDHA PANDEY
New Delhi, July 10

The announcement of five new IITs and five IIMs has drawn mixed reactions from the academic community which believes that there are bigger issues, such as quality and faculty shortage, which need to be addressed.

Rohan Shukla, a student at IIT Bombay, said, “If big brands are also diluted, students will have all the more reason to go abroad and pursue higher studies. There is already a dearth of good quality teachers and this would be further aggravated with more IITs and IIMs being announced.”

Foolproof plan
While this means that more aspirants can now avail themselves of quality education, Aakash Chaudhry, Director, Aakash Educational Services Ltd, which runs Aakash coaching institutes for engineering and medicine, said, “A foolproof plan bearing the right kind of faculty, infrastructure, jobs and market ready curriculum is vital for expansion of these centres of excellence. A great amount of mentorship is also important from the existing centres to facilitate the same level of excellence for new institutes.”

Existing institutes also need revision in curriculum, besides infrastructure upgrade. Sanjay Dhande, former Director, IIT Kanpur, said, “While this definitely means more opportunities for the middle class which is increasingly demanding high-quality education, just making provisions of money is not enough. For IITs, innovation in the curriculum in needed, besides strong academic leadership.”

Long run
New IITs and IIMs were a poll promise of the BJP in its manifesto for the general election. Shukla said the decision could have been stalled for a while, adding that “in the long run it might add value, with more focus on quality than quantity”.
Marginal increase in allocation for education sector

Anita Joshi

NEW DELHI: Given the perennial competition to get into the Indian Institute of Technology (IIT) and the Indian Institute of Management (IIM), the Finance Minister's promise to set up five new IITs and an equal number of IIMs was widely welcomed.

The only catch is that the eight IITs set up in the Eleventh Plan Period continue to function out of temporary premises and the IIT system as a whole faces a faculty shortage of 35 to 38 per cent.

The five new IITs proposed in this year's Budget will be set up in Jammu & Kashmir, Chhattisgarh, Goa, Andhra Pradesh and Kerala. The five States identified for setting up the new IIMs are Himachal Pradesh, Punjab, Bihar, Odisha and Madhya Pradesh. A sum of Rs. 450 crore has been set aside from the total allocation of Rs. 27,656 crore given to the Higher Education Department in the Union Human Resource Development Ministry for setting up the new IITs and IIMs.

The current cost of setting up one IIT is close to Rs. 1,800 crore over five years and the government is already staring at a bill of Rs. 15,565 crore, which is the revised cost estimate for constructing the eight new IITs set up in the Eleventh Plan. In fact, the Planning Commission had taken the position that no new IITs and IIMs should be set up in the 12th Plan Period as this phase should be used for consolidating the expansion that took place in higher education during the 11th Plan.

On the whole, the allocation for education has gone up only marginally. From Rs. 6.5,155.30 crore in the last fiscal to Rs. 6.8,155.10 crore in the Department of School Education and Literacy, and from Rs. 24,488 crore to Rs. 27,656 crore in Higher Education.

In elementary education, the priority will be to plug the gaps in ensuring minimal school infrastructure facilities with particular focus on providing toilets and drinking water in all the girls' schools in the first phase. Teacher training gets a new scheme christened after Pandit Madan Mohan Malviya with an allocation of Rs. 500 crore and school curriculum will have a separate chapter on gender mainstreaming to sensitise people towards the concerns of the girl child and women.

While the ongoing Madrasa Modernisation Programme of the government has got an additional Rs. 100 crore, the BJP's manifesto promise of augmenting the traditional artisanship of minorities has found its way into the budget through a programme for the upgradation of the skills and training in ancestral arts for development of the minorities.

In elementary education, the priority will be to plug the gaps in ensuring minimal school infrastructure facilities. — FILE PHOTO: R. RAVINDRAN
NO IIT FOR KARNATAKA

Hindustan Times (Lucknow)

BENGALURU: It is not often that the BJP and the Congress agree on an issue in Karnataka. In a rare show of bipartisanship, leaders from both parties said they were disappointed with the union budget because Karnataka has not been chosen for the establishment of an IIT. “We are very disappointed. We will take up the issue with D V Sadananda Gowda,” said senior BJP leader and former Home Minister R Ashoka. He, however, said, “But overall the budget is great. There is a lot of thrust on industrial growth.”

A prominent BJP MP, who requested anonymity said, “Our party managed to win back the support of people of Karnataka with a lot of difficulty. Allocating an IIT would have gone a long way in consolidating our support.” Trade bodies like the Karnataka Small Scale Industries Association, Federation of Karnataka Chambers of Commerce and Industry and CII-Karnataka hailed it as a growth oriented budget.

‘Clean Ganga’ plan by IITs gathering dust

Hindustan Times (Lucknow)

A major thrust of the NDA government is on cleaning the Ganga, as was evident from finance minister Arun Jaitley’s budget, in which he allocated a substantial amount for the purpose.

RAJESH

The UPA government had in 2010 formed a consortium of seven IITs, including the IIT-Kanpur, for preparing a plan for a clean Ganga. It signed a memorandum of understanding with the environment ministry and also received an allocation of ` 15 crore for the plan.
It is still not clear which agency would implement the scheme, but the announcement has revived memories of the ambitious Ganga River Basin Management Plan (GRBMP), which has been lying unimplemented for the past two years. The UPA government had in 2010 formed a consortium of seven IITs, including the IIT-Kanpur, for preparing a plan for a clean Ganga. It signed a memorandum of understanding with the environment ministry and also received an allocation of ` 15 crore for the plan. Senior professor of IIT-K, Dr Vinod Tare, was appointed coordinator.

The GRBMP was supposed to suggest comprehensive measures for restoring the health of the Ganga system and improvement of its ecology and make provisions for water and energy to accommodate the pressures of increased population, urbanisation, industrialisation and agriculture. It also had to ensure continuous flow and longitudinal and lateral connectivity.

According to Rama Rauta, a member of the National Ganga River Basin Authority (NGRBA), the previous government did not implement any of its recommendations.

In fact, though the consortium submitted its report in 2012, the river basin authority was not even given a copy for two years. “In April this year, I received a copy of the report. The consortium has made several recommendations to keep the river pollution free, but has not made any effective study about issues pertaining to ensuring continuous flow, longitudinal and lateral connectivity,” Rauta said.

The consortium had also not done any study about safeguard settlements situated near dams and barrages on the river safe. Unless this aspect was studied, clean Ganga would remain a dream, she said.

Professor Tare, meanwhile, said so far it was not clear if there would be any role for the IIT-K or the other IITs in Ganga cleaning this time, but the institution would offer its expertise, if asked to do so.