### Newspaper Clips Sept. 22, 2015

# Half of IIT-Bombay students skip lectures as they are boring: survey

http://www.hindustantimes.com/higherstudies/half-of-iit-bombay-students-skip-lectures-as-they-are-boring/article1-1392256.aspx

More than half (56.7%) final year students of Indian Institute of Technology, Bombay, (IIT-B) said the primary reason for not attending classes regularly was that lectures were monotonous.

Around 50.8% said they didn't feel like they learnt anything from classes.

The survey found that entrepreneurship was popular among students with nearly one in four (23.2%) saying that they would be working in an entrepreneurial field five years down the line -- the highest among all categories.

However, only 4.6% said they will take to entrepreneurship immediately after leaving the campus. Nine out of 10 (92.8%) admitted using unfair practices for assignments, the least cheating happened during semester examinations.

The survey was conducted by the institute's students' media body, Insight.

A total of 259 students of graduating batch of 2014 were sent questionnaires to assess their academics, beliefs and career plans.

Mihir Kulkarni, chief editor, Insight, said: "There are many students who lose interest in academics after a few years in IIT, forcing them to be dishonest in assignments and exams. Like the survey shows, sometimes professors are not able to connect with students to maintain their interest," said Kulkarni.

More than 45% of the students said the quality of teachers was poorer than expected.

The results of the survey have been submitted to the students' affairs department, which will take up some key issues, Kulkarni added.

Around 71% students wish to settle in India while 8.5% said they'd want to settle in the US.

IIT-B, which has a dedicated LGBT resource group, also surveyed the gender and sexual identity of students -- 97.7% students identified themselves as straight in their freshman year, 0.4% as gay, 1.2% as bisexual and 0.8% as 'unsure.

By the end of their graduation, those identifying themselves as gay went up to 0.8% and the number of students who were 'unsure' about their sexuality peaked at 3.5%.

## **Worried About Quality Of Engineers, AIC**

http://www.indiatimes.com/news/india/to-improve-quality-of-indian-engineers-aicte-to-reduce-number-of-engineering-college-seats-by-600000\_-245436.html

Even with the huge number of private engineering colleges in the country, many students find it hard to get a seat into their favourite engineering trade in the country.

In a state like Kerala, where there are more than 100 engineering colleges, kids drop studying for an year to just prepare for getting better seats in private institutes; forget those who are aiming for IITs and NITs.

But on the flip-side is case of quality. As an engineer, I am sure that many will agree that our engineering curriculum needs a major revamp. 'Innovation' needs to come to forefront and not being a bookworm.

Even then, many students fail to reach the quality standard and now All India Council for Technical Education (AICTE) has decided to address the situation with immediate measures.

To curb the growing rate of empty seats in some colleges (and courses) along with the below par output of many colleges, AICTE has decided to decrease the number of seats available in engineering course by close to 40%. In pure numbers that would mean a loss of 6,00,000 seats.

As a engineer, student or aspirant, we do know that unless an engineering college, course and seats are certified by AICTE, they are not valid.

"We would like to bring it down to between 10 lakh and 11 lakh (one million and 1.1 million) from a little over 16.7 lakh now. The capacity should come down for the betterment of all—students, education providers and employers," chairman of AICTE Anil Sahasrabudhe was quoted by Live Mint.

"We would like to bring it down to between 10 lakh and 11 lakh (one million and 1.1 million) from a little over 16.7 lakh now," he added.

Livemint also mentioned a report by Aspiring Minds, an education assessment firm, which said that employability of engineering graduates in various states ranges between 12% and 42%. the situation is worse in core fields like mechanical, electronics/electrical and civil engineering where a mere 7.49% are employable.

In such drastic scenarios, we should welcome the move from AICTE, though the response from aspiring students and colleges will surely be negative. Will it make engineering studies even more expensive, remains to be seen.

# IIT Roorkee to implement SAP enterprise resource planning solution to connect campuses

http://economictimes.indiatimes.com/industry/services/education/iit-roorkee-to-implement-sap-enterprise-resource-planning-solution-to-connect-campuses/articleshow/49047405.cms

NEW DELHI: Indian Institute of Technology (IIT) Roorkee will implement SAP enterprise resource planning (ERP) solution to connect all its campuses.

The project will be implemented in multiple phases and would cover the end-to-end life cycle management of the operations, the institute said in a statement issued on Monday.

"It has been a constant endeavor at IIT Roorkee to manage change in our processes and systems and to ensure that they are user friendly and transparent," said IIT Roorkee director Pradipta Banerji. "The digital ERP solution provided from Atos India would benefit in integrating our campuses at Roorkee, Saharanpur and Greater Noida."

The ERP solution will also help track a student from the time of admission to graduation and beyond, the institute said. It would help integrate hostel functions and academics of every student. It will also track a faculty member from the time of application till after retirement. "This will ensure a seamless integration of all entities across IITR and its campuses," Banerjee said.

The comprehensive solution will help in mapping of assets, their life cycles, data analytics of budgeting and resourceful financial forecasting techniques, augmentation of organizational scalability for future growth plans, data uniformity and integrity across various IITR units. It will enable a paperless work culture, assistance with real time decision support mechanism, automation for management controls and approval systems, which in turn will improve the efficiency of existing processes with seamless integration of student information across IITR.

# Step towards 'Digital India': IIT-Bombay unit to offer tech solutions for national security

The government-funded project will focus on handling modern warfare techniques, enhancing intelligence services and improving internal security.

http://indianexpress.com/article/cities/mumbai/step-towards-digital-india-iit-bombay-unit-to-offer-tech-solutions-for-national-security/

The Indian Institute of Technology, Bombay Monday launched a dedicated National Center of Excellence in Technology for Internal Security (NCETIS) to provide a research and development platform for technologies concerning India's security forces.

The government-funded project will focus on handling modern warfare techniques, enhancing intelligence services and improving internal security, in the face of rising terror threats. It is initially working on detectors for land mines, cyber security, cryptology, video surveillance, image processing, monitoring of unmanned vehicles and biometric security.

IIT Bombay professors are currently working on certain projects that can help security agencies in surveillance. According to IIT Bombay Professor Soumyo Mukherjee, work on unmanned aerial vehicles for surveillance and live reportage without a person required to control it had reached its final stages.

The NCETIS has been in the planning stage for three years now, and will take forward the 'Digital India' campaign, floated by Prime Minister Narendra Modi.

Funded by the Department of Electronics and Information Technology (DeitY), its budget estimate is Rs 83 crore for next five years. According to Professor Abhay Karandikar, the NCETIS coordinator, it will discuss security gaps with various agencies — such as Mumbai police, CRPF, CISF — and conduct research to provide the required technology. "The technology developed will result in tangible products. It will be developed by the concerned industry and can be directly used by security forces," said Karandikar.

He said the CRPF has discussed issues of hidden land mines in Naxal hit areas for which advanced ground penetrating devices are required.

Professor Girish Kumar said, "We have developed such devices that work by assessing frequencies. Through this center, security forces can get in touch and use the technology." Alok Joshi, chairman, National Technical Research Organisation (NTRO) said the current objective is to "prevent online space for terror activities".

"In cyber space, we need more work. Currently our knowledge on it is very limited," he added.

The centre will focus on cyber espionage, data security and digital weapons. J S Deepak, secretary of DeitY, admitted these are core challenges for the government.

Atul Kulkarni, JCP (Crime), who was present at the launch, told <u>The Indian Express</u>, "Our existing cyber forensics is very poor. We need technology upgradation. Focus in Mumbai is to improve cyber security which is not only localised but had crossed international borders." He added the center will be helpful in increasing data analytics and data mining capacity in the police force.

According to IIT Bombay Director Devang Khakhar, regular discussions will be held to tackle technologyrequirements. Working on the lines of Digital India, a 'flexible technology' project has been launched at IIT Kanpur, and another in Bangalore for technology development. The Bombay IIT centre will be the third center that will focus on digital India.

## 1 in four IIT-B grads wants to be entrepreneur 5 yrs: Survey

http://timesofindia.indiatimes.com/city/mumbai/1-in-four-IIT-B-grads-wants-to-be-entrepreneur-5-yrs-Survey/articleshow/49051521.cms

**MUMBAI:** One in four students from IIT-Bombay's graduating batch of 2014 sees himself as an entrepreneur five years down the line, says a survey. While that may be on expected lines, 10% of the respondents said they want to work in the government or even join politics, in perhaps an indication that the perception among IITians about these fields—traditionally considered not very attractive—may be changing for the better.

In another surprise, considering the general perception that IITians are a highly focused lot, 15% of the students surveyed said that they were clueless about what they want to do five years after graduation. The survey, conducted by the students' media body for their in-house publication, Insight, also found that about a fifth of the students want to get into research.

The survey revealed that 40% of the students wished to move to the US after graduating, while 35% wanted to work in India. While the US was their top destination to work after graduation, only 8.5% actually want to settle there. On the contrary, 71% want to settle down in India.

But only 21% of the students managed to get opportunities in the US. Mumbai is the preferred work city of choice in India, followed by Bangalore and Delhi.

When the batch graduated last year—the time the survey was done—less than 5% had their own entrepreneurial venture; 25% was into higher education/research and an equal number was employed in technology firms. The findings showed that while not many students who initially chose research, finance and consultancy wish to continue in the same line, the number of those looking to set up their own businesses or wanting to join government sector rose. More than half (60%) of the graduates surveyed said that they would have picked jobs in core sectors, or the traditional engineering fields of civic and mechanical, if there had been enough opportunities.

Mohak Mehta, who graduated this year and was the placement manager last year, said entrepreneurship is the current flavour, which is why it is at the top of everybody's mind. "When you look at the resumes of IIT-B

students and, to some extent, even IIT-Delhi, you will notice that at least one in five or one in six have either worked on their own start-up ideas or have worked in a start-up during their stay on the campus. The students are well-connected with their seniors and alumni and their ideas influence the current students to a great extent."

While around 35% students said that they just wanted to get a decent CPI (cumulative performance index) in their academics, 45% said they were disappointed about their expectations from the department while entering IIT-B. "The conducted survey of the outgoing seniors has yielded a lot of information. The results have given us an insight into various aspects of their lives during their stay here, including academics, beliefs, habits, relationships and internships, not to mention their hopes for the future," said Niranjan Thakurdesai, one of the chief editors of the media body. Mihir Kulkarni, also from Insight, said, "Some common beliefs were validated, and some misconceptions were dispelled in the findings."

# Chinese, Japanese and Korean Universities ahead of IISc in QS rankings

http://economictimes.indiatimes.com/industry/services/education/chinese-japanese-and-korean-universities-ahead-of-iisc-in-gs-rankings/articleshow/49041599.cms

BENGALURU: Even as the Indian Institute of Science celebrates its entry into the top 150 in the world university rankings, a jarring note came from closer home: It is far behind Chinese, Japanese and Korean universities in the Asia rankings.

While the 106-year-old city-based institution is placed 147th in the world, it is ranked 34th in Asia in the latest rankings brought out by UK based Quacquarelli Symonds (QS).

This has apparently prompted the institute to work towards im proving its global visi bility. "The Chinese, Japanese and Koreans have been in the game for a long time. They are ten years ahead of us," IISc Director Anurag Kumar said. "It is important for us to do brand building and let people know about us."

As part of the efforts to improve its visibility, the IISc will launch a new magazine-style annual report next week that will be publicised, along with the ramping up of its new alumni affairs office.

"IISc needs to invest more in this space. I feel the sky is the limit for the kind of things the IISc can do," said Vinayaka R Prasad, an IISc product who is professor at Albert Einstein College of Medicine in New York.

The QS rankings, one of the most widely-read annual publications, rates universities on four parameters -faculty student ratio, citations-per-faculty, academic reputation and employer reputation. As Kumar pointed out, IISc scores low on academic and employer reputation. "These are difficult to change because it depends on perception. We have to raise the level of international exposure," Kumar said.

IISc's closest Asian competitor is Japan's University of Tsukuba, ranked 33rd. Tsukuba boasts of 1,761 international students and 156 international faculty. IISc has only 34 international students with no international faculty.

"In the 80s, both China and South Korea were behind us. Today, they attract foreign faculty . But foreigners will not come here for our salaries," scientist Roddam Narasimha said. "We don't know how to manage talent and there's no system where talent can be harvested for economic growth."

## Indian Express ND 22/09/2015 P-01

#### VISVA-BHARATI

## In report to President, HRD lays ground for V-C sacking

#### RITIKA CHOPRA & ABANTIKA GHOSH

NEW DELHI, SEPTEMBER 21

VISVA-BHARATI Vice-Chancellor Sushanta Dattagupta could become the first central university head to be sacked by the NDA government if the President accepts the HRD Ministry's report finding him guilty of gross misconduct and dereliction of duty.

The ministry submitted a final report to President Pranab Mukherjee Monday.

Dattagupta, appointed to the post in 2011 by the UPA government, still has a year left in his tenure

If Mukherjee, who is the Visitor of all central universities, accepts the ministry's indictment, he can invoke Section 16 of the General Clauses Act, 1987, to order the removal of the V-C. While current central university laws do not have any provision for the dismissal of the institution's head, Section 16 empowers the appointing authority under a central act or regulation—to "suspend or dismiss any

person appointed".

The ministry's final report, sources said, follows the scrutiny of Dattagupta's reply to a show-cause notice served on June 29 this year. The notice sought his response regarding five specific accusations and the government eventually found him guilty on four charges:

■ The V-C allegedly continued to draw salary from Visva-Bharati along with pension from Jawaharlal Nehru University without getting his pension de-

ducted from his pay, in gross vi-

olation of the university laws.

The V-C allegedly made 25 irregular/illegal appointments. In most cases, the candidates appointed did not meet the eligibility criteria prescribed by

University Grants Commission.

Dattagupta allegedly approved payment of Rs 5 lakh as honorarium to an inquiry officer, even though the government has fixed a maximum amount of Rs 75,000 for conducting departmental inquiry.

■ The V-C allegedly got personal bills for alcoholic beverages CONTINUED ON PAGE 2

# HRD lays ground for V-C sacking

reimbursed by the university.

When contacted, Dattagupta said he had no knowledge of the HRD Ministry's latest move. "This is news to me. As far as I am concerned, I have given my response to the (showcause) notice and the allegations are baseless," he said.

HRD Ministry spokesperson Chanshyam Goel refused to comment on the matter. The President's press secretary Venu Rajamony said he had "no idea" about the latest development.

The Visva-Bharati University, founded by Rabindranath Tagore, has several notable alumni, including Nobel Laureate Amartya Sen and filmmaker Satyajit Ray. It is the one of the four central universities whose V-Cs have come under HRD Minister Smriti Irani's scanner for alleged misconduct and irregularities.

Earlier this year, the President had also issued a showcause notice to Delhi University V-C Dinesh Singh. Though the government has scrutinised Singh's reply, it is yet to take a final decision in his case. There is also an ongoing inquiry against the heads of Puducherry University and IGNOU.

The HRD Ministry had set up a probe against Dattagupta after Congress MP from Bengal P Bhattacharya raised the issue of alleged irregularities in Rajya Sabha during the winter session last year. The inquiry was conducted by former judge of

Allahabad high court Justice Sakharam Singh Yadav, chairman of Sri Aurobindo Institute of Indian Culture in Shillong B B Data, and Dilip K Chakrabarti, a professor of South Asian Archaeology at the University of Cambridge and a member of the Indian Council of Historical Research. The panel submitted its report to the ministry on March 27 this year.

Dattagupta challenged the legality of the fact-finding committee in June, but was shot down by the Calcutta High Court. He, however, managed to get two extensions — of 21 days each — on the deadline for replying to the ministry's showcause notice. The HRD Ministry eventually found him guilty on four charges.

## उच्च शिक्षा और राष्ट्रपति!

कभी-कभी ऐसी बड़ी घटनाएं हो जाती हैं जो अखबारों या मीडिया की गला काट व्यावसायिक प्रतियोगिता की विवशता की वजह से अनदेखी रह जाती हैं, मगर वे सचमुच में समकालीन परिस्थितियों में बदलाव का संकेत देती हैं। ऐसी ही घटना भारत के शिक्षा क्षेत्र में पिछले दिनों घटी जिसकी तरफ हमने ज्यादा ध्यान निहिंदिया मगर भारत की सत्ता के सर्वींच्य प्रतिष्ठान की क्षोभा बढ़ा रहे राष्ट्रपति प्रणव मुखर्जी की निगाहों में आये बिना यह नहीं रह सकी। यह घटना थी दुनिया के दो सौ श्रेष्ठतम शिक्षा संस्थानों में भारत के दो शिक्षा संस्थानों 'भारतीय विज्ञान संस्थान' वेंगलुरू (आईआईएससी) और दिख्नी स्थित 'भारतीय प्रौद्योगिकी संस्थान' वेंगलुरू (आईआईटी) का इन श्रेष्ठतम संस्थानों में क्रमशः 147वां और 179वां स्थान पाना इस सूचना के अन्तर्राष्ट्रीय स्तर पर प्रसारित होते ही श्री मुखर्जी ने इन दोनों संस्थानों के प्रमुखों को बधाई दी। गौर से देखा जाये तो यह कोई साधारण घटना नहीं है। भारत के परिप्रेक्ष्य में यदि हम इसका विश्लेषण करें तो एक तथ्य स्पष्ट होता है कि लगभग 1200 वर्ष पहले तक विश्व गुरू कहलाने वाले भारत की स्थित लगभग एक हजार वर्षों तक विदेशी गुलामी में रहने की वजह से हुई। सातवीं सदी कह हमारे नालन्दा, विक्रमशिला, तक्षशिला आदि विश्वविद्यालयों में दुनिया भर से छात्र पढ़ने आते थे और अपनी ज्ञान पिपासा शान्त करते थे परन्तु दुर्भाग्यवश मुस्लिम आक्रान्ताओं के आगमन के बाद से भारत में विध्यंस का जो दौर चला उसने हमारी महान विरासत को नष्ट करना शुरू किया और भारत आर्थिक लूटमार का अखाड़ा बनता चला गया।

मुझे यह कहने में जरा भी हिचक नहीं है कि लगातार आठ सौ साल तक भारत की प्रत्येक स्थापत्य कला से लेकर विविध साहित्यिक और बौद्धिक विरासत को नष्ट-भ्रष्ट करके ही हम पर विदेशी शासन थोंपा जाता रहा। पूरे भारत में आज हमारी ऐतिहासिक इमारतों के खंडहर हमें अपनी कहानी अपनी जुबानी आज तक बता रहे हैं। बाद के दो सौ वधों में अंग्रेजों को गुलामी में आने के बाद इसमें क्रान्तिकार परिवर्तन हुआ और अंग्रेजों ने भारत की कुछ धरीहर को संरक्षित करने के प्रयास किये। भारतीय पुरातत्व विभाग अंग्रेजों शासनकाल में ही स्थापित हो गया था परन्तु भारत की शिक्षा पद्धति को आधुनिकतम बनाने का लक्ष्य रख कर अंग्रेज अपने

लिये खाई स्वयं ही नहीं खोद सकते थे। इसीलिए भारत से जिसे भी विद्वता का प्रमाणपत्र लेना होता था उसका ठिकाना ब्रिटेन ही होता था परन्तु आजादी के बाद हमने शिक्षा संस्थानों की नींव डाली और इस प्रकार डाली कि शिक्षा के किसी भी क्षेत्र में विशेषज्ञता हम अपने ही देश में दे सकें। हालांकि अंग्रेजों के समय में ही प्रख्यात वैज्ञानिक डा. सी.वी. रमन ने भौतिकी शास्त्र (फिजिक्स) में वैज्ञानिक अनुसन्धान भारतीय विश्वविद्यालयों मदास व कोलकाता विश्वविद्यालयों में ही किये और उन्हें इस विधा में नोबेल पुरस्कार प्राप्त हुआ। इसके बाद भारत के संस्थानों में ही कार्यरत किसी भी वैज्ञानिक को हम इस पुरस्कार के योग्य नहीं बना पाये (

हमने उच्च शिक्षा के नये-नये संस्थान खोले हैं मगर इसके रतर को हमें उठाने के लिए वैश्विक मानदंडों पर काम करना होगा निससे भारत आर्थिक रूप से उभरती हुई अर्थव्यवस्था के सभी लाभों को पूर्णतः उठा सके। मुझे लगता है कि वैश्वीकरण के इस दौर में जब कुछ देश अपनी अर्थव्यवस्था का प्रमुख हिस्सा शिक्षा क्षेत्र तक को बना रहे हैं तो भारत को इस क्षेत्र में गुणवत्ता के कीर्तिमानों पर स्वरा उतरना ही होगा तभी जाकर हम फिर से तरवकी के रास्ते पर चल

पुरस्कार के चान्य नहां जाता निय यहां डा. जगदीशचन्द्र बसु का जिक्क करना जरूरी है जिन्हें अंग्रेजों ने ही नीबेल पुरस्कार उनके जीव विज्ञान में की गई खोज पर नहीं लेने दिया था) हमारे आज के राष्ट्रपति 40 से अधिक विश्वविद्यालयों के कुलाधिपति हैं। उनके राष्ट्रपति बनने पर यह सोचा जा रहा था कि सिक्कय राजनीति में आधुनिक चाणक्य समझे जाने वाले प्रणव दा राष्ट्रपति भवन में जाकर क्या करेंगे? मगर अपने राष्ट्रपति बनते ही उन्होंने सन्देश दे दिया कि राष्ट्रपति के लिए भी इस देश में बहुत काम है। 2012 में राष्ट्रपति पद की शपथ लेने के बाद सितम्बर महीने में श्री मुखर्जी जब आईआईटी, खड़गपुर के दीक्षान समारोह को सम्बोधित करने गये तो उन्होंने अपने सम्बोधन से सभी को चौंका दिया। उन्होंने कहा कि 'भी अपनी निराशा को भी आपके साथ बांटना चाहता हूं। आज हमारे देश का एक भी ऐसा शिक्षा संस्थान या विश्वविद्यालय नहीं है जिसकी गणना विश्व के दो सौ सर्वप्रथम संस्थानों में होती हो। जिस सर्वेक्षण में यह कहा गया है आप उसकी विश्वसनीयता पर सवाल खड़ा कर सकते हैं मगर मेरे विचार से असली सवाल यह है कि ऐसा क्यों है? हम एक उदीयमान और तेजी से उभरती आर्थिक ताकत होने के बावजूद अपने उच्च शिक्षण संस्थानों का स्तर दुनिया के प्रथम दस या बीस अथवा पचास या एक सौ प्रमुख संस्थानों में नहीं ला सकते हैं। मैं आईआईटी खड़गपुर हारा निर्धारित उस लक्ष्य की सराहना करता हूं जो उसने आने वाले 2020 तक अपनी गिनती दुनिया के प्रथम 20 संस्थानों में कराने का रखा है।'' इसके बाद श्री मुखर्जी जिस भी विश्वविद्यालय या शिक्षण संस्थान में गये वहीं उन्होंने अपनी इस चिन्ता को दोहराया। 2013 में जब मार्च महीने में उन्होंने दिल्ली विश्वविद्यालय के दीक्षान समारोह को सन्बोधित किया तो पुरी तरह मुखर होकर कहा कि दुनिया के पुरार देश से स्विवद्यालयों के बेहतर पद्धतियों को भारत की परिस्थितियों के अनुरूप लागू करना होगा मगर राष्ट्रपति ने हमर पद्धतियों को भारत की परिस्थितियों के अनुरूप लागू करना होगा मगर राष्ट्रपति ने इसके साथ यह भी अपने 50 से अधिक शिक्षा सम्बन्धी उद्बोधनों में स्पष्ट किया कि भारत में शिक्षा का प्रसार समृचित रूप से इंडाने के लिए वैक्षिक मानदंडों पर काम करना होगा जिससे भारत आधिक रूप से उत्तरी हुं अर्थव्यक्था के सभी लाभों को पूर्यव्यवस्था का प्रमुख हिस्सा शिक्षा क्वेत के लिए व

**८**-अश्वनी कुम

# **Course correction**

IIMs extending CAT registration window worrying

iven the prestige associated with the Indian Institutes of Management (IIMs), it is surprising there aren't as many students taking the Common Admission Test (CAT) this time around as in past years. According to media reports, for the second year in a row now, applicants are being given more time to sign up for the examination with the 46-day window having been extended by five days. Registrations, which are understood to have peaked in 2009 at about 2,90,000, were down to 1,96,000 last year even though students were given extra time to register.

While the IIMs still attract the cream of India's student population, there are a lot more options today, possibly explaining the lower interest. There are more post-graduate options, including in colleges/institutions that have affiliations with well-known global names. Also, the jobs market is changing and youngsters now have much more choice when it comes to career options, including joining/heading a startup. In addition, while the IIMs may still be the first port of call for most firms, they are a lot more willing to recruit graduates from the lesser-known management colleges since they are both willing to accept lower salaries and are also more likely to stay on in certain kinds of jobs for longer. A crisis in India's management and engineering colleges has been brewing for several years and, at the lower end of the market, very high vacancies existwhich is why, as Mint reported on Monday, the AICTE plans to cut the number of undergraduate engineering seats by as much as 40% over the next few years. Of course, given that the number of applicants per seat at the IIMs would still be many times those in most top management colleges abroad, the IIMs would appear to have nothing to worry about. Even so, a bit of introspection may not be out of order, on whether management education is becoming less attractive or whether shorter-duration courses - and far more specialised - with work experience are the way to go.

#### Business Line ND 22/09/2015 P-20

#### **FUTURAMA**

# NASA building space shotgun to blast asteroids

#### INDO-ASIAN NEWS SERVICE

New York, September 21

NASA is developing world's first space shotgun that can blast asteroids into small pieces for collection as samples when a robotic spacecraft reaches near one such space rock in the near future.

Along with a Brooklyn-based company Honeybee Robotics, the US space agency is working on a shotgun - as part of its Asteroid Redirect Mission (ARM) - that will test the strength of an asteroid to determine if it is sturdy enough for sampling, New York Post reported on Sunday. The ARM aims to chop off a massive chunk of an asteroid and shift it into the Moon's orbit. Then, a manned spacecraft will collect samples and send these back to the Earth for further examination.

"Collecting and characterising samples from asteroids is an important science goal in itself, and NASA has identified it as a key step toward human exploration of Mars," Kris Zacny, director of exploration technology at Honeybee Robotics, was quoted as saying.

The US space agency plans to launch the unmanned ARM in early 2020s. As part of it, the scientists will use a robotic spacecraft to capture a large boulder from the surface of a near-Earth asteroid and move it into a stable orbit around the moon for exploration by astronauts.

Following its rendezvous and touchdown with the target asteroid, the unmanned ARM spacecraft will deploy robotic arms to capture a large boulder from its surface.

With the shotgun, firing a bullet at an asteroid's surface will enable physicists to work out the solidity of the rock by measuring its rebound speed.

### Business Line ND 22/09/2015 P-07

# Indian IT cos among world's worst paymasters

Bulgaria tops the list with average salary of only \$25,680: survey

#### PRESS TRUST OF INDIA

New Delhi, September 21

Indian IT companies are among the 10 worst paymasters in the world, says a survey — a mid-level IT manager draws an average salary of \$41,213, while his Swiss counterpart gets over four times more.

According to recruitment platform MyHiringClub.com's Worldwide IT Salary 2015 survey, India was ranked 7th on the list of lowest paymasters for information technology (IT) managers, down by one position from last year's.

While Indian IT managers drew an average salary of \$41,213, Bulgaria topped the list with a meagre \$25,680, followed by Vietnam and Thailand averaging at \$30,938 and \$34,423, respectively.

"The impact of outsourcing and off-shoring on IT roles in North America and Western Europe helps explain the pattern of global pay," MyHiringClub.com & FlikJobs.com CEO Rajesh Kumar said.

The list includes Indonesia at the fourth spot with average wages of \$34,780, followed by the Philippines (\$37,534), India (\$41,213), China (\$42,689), Czech Republic (\$43,219), and Argentina (\$51,380).

"Lower-level roles are being moved to regions where

talent is cheaper. The jobs that remain in Western Europe and the United States may be fewer in number, but are more demanding and complex.

However, there is an increasing evidence of India's growing stature and presence in the high-end value chain, where cost advantages may not be the only drivers of future growth," Kumar added.

#### **Best salaries**

At the other end of the spectrum, when it comes to countries that pay out the best IT salaries, Switzerland again topped the list with an average annual remuneration of \$1,71,465.

The same job if taken in Belgium, second on the list, would fetch \$1,52,430, the

survey said. Denmark came in at third on the best-paying list, with salary in the IT sector averaging at \$1,38,920. The US and the UK were ranked fourth and fifth, respectively, with average packages of \$1,32,877 and \$1,29,324, respectively.

"India remains one of the most favourite outsourcing destinations due to this low-cost factor, but the future might bring with itself a completely different scenario," the survey predicted.

The survey compared the total annual cash compensation and total remuneration information of the mid-career level for IT staff at 9,413 companies across 40 different countries between August 1 and August 31, 2015.

## Financial Express ND 22/09/2015 P-03

# Indian IT companies support over 400,000 jobs in US: Nasscom report

#### fe Bureau

Bengaluru, Sept 21: Indian IT companies are providing for more than four lakh jobs in the US of which around three lakh are held by either US citizens or permanent residents, according to a latest report by the National Association of Software and Services Companies (Nasscom).

The report was released on the sidelines of the ongoing US-India strategic and commercial dialogue in Washington DC, ahead of Primi Minister Narendra Modi's visit to the United States later this week.

The report titled "Contributions of India's Tech Industry to the US Economy" said the Indian IT companies creation 411,000 jobs include both direct and indirect. The jobs supported by

# 'Among world's worst paymasters'

■ New Delhi, June 5: Indian IT companies are among the 10 worst paymasters in the world, says a survey — a mid-level IT manager draws an average salary of \$41,213 while his Swiss counterpart gets over four times more. According to recruitment platform MyHiringClub.com's Worldwide IT Salary 2015 survey, India was ranked 7th on the list of lowest paymasters for information technology (IT) managers, down by one position from last year's. While Indian IT managers drew an average salary of \$41,213, Bulgaria topped the list with a meagre \$25,680, followed by Vietnam and Thailand averaging at \$30,938 and \$34,423, respectively. "The impact of outsourcing and off-shoring on IT roles in North America and Western Europe helps explain the pattern of global pay," MyHiringClub.com & FlikJobs.com CEO Raiesh Kumar said.

India's IT sector in the US grew at an annual rate of 10% in 2011 to 2014, or about six times higher than the average jobs growth rate of 1.7% during that same period

The report further noted that states leading the number of direct jobs created by India IT sector operations and investments are California, Texas, Illinois, New Jersey, New York, Georgia, Ohio, Washington, Michigan, and Pennsylvania. Texas, Michigan, Illinois, California and Georgia had the fastest rate of job growth in 2011-2013. The Indian IT

companies have also have invested more than \$2 billion in 2011-2013 and paid \$22.5 billion in taxes to the US Treasury in those years, the report said.

Commenting on the report Union Minister of State for Commerce and Industry Nirmala Sitharaman said, "Indian IT organisations benefit from access to the US market, just as American IT organisations benefit from their investments and operations in India. This momentum is surely going to increase manifold with new partnership opportunities emerging in the areas of Digital India and Smart Cities for American technology firms."

# For an inclusive humanities pedagogy



Hemachandran Karah

At the heart of humanities education lies empathy, a capacity to understand others in their own terms and contexts. To this end, disciplines in humanities — including history, literature, philosophy, and psychology — rely on the art of interpretation. An interpretative mind can not only take cognisance of life situations, near and far, but also instil thought processes that can transform one's ideas about them from within.

So the 'impact factor' of humanities, so to speak, is categorised in terms of capacity to transform imagination, reasoning, and thought itself, albeit through somewhat intangible means. Influences on the mind are difficult to quantify, so are their outcomes. This renders humanities scholarship vulnerable to ridicule, neglect, and outright discrimination. This is not all: a conflicting relationship with the science establishment and a confusion concerning the appropriate medium of learning burden Indian system of education in humanities.

#### Science-humanities divide

Thinking about humanities's discordant relationship with the science establishment, cannot resist a bit of a flashback. As it happens now, we high school students herded ourselves into first, second, third, and fourth groups just after our high school board exams. With a shocking sense of artificially created hierarchy among us on the of our choice of groups, we began branching out, pursuing courses in material sciences, biological sciences, commerce, and, last of the lot, humanities. Trapped in our shells by a rigid sense of specialisation, we started on our individual journeys from where we were expected to speak in mutually unintelligible languages, chase divergent job markets and organise our inner lives and rate our knowledge systems in sync with the realities inherent in our disciplines. This mentality persists till date, bewitching technologists and humanities experts alike. Consequently, both fail to appreciate the idea that the efforts of a social scientist and a scientist can actually complement each

Scientists and technologists work on problems using mathematical and experi-

An academic ambience that privileges sciences over the humanities, English as the medium of instruction and one identity marker over the other will create humans rich in knowledge but short on empathy. A more integrated approach needs to be devised where diverse interests can interact

mental methods. Their vocation is based on the premise that all problems are amenable to scientific solutions. Scientists even aspire to devise grand frameworks — like the M-Theory — that can potentially explain everything about the universe and the humanity's evanescent place in it.

In pursuing such grand chases and technological feats, scientists work closely with the industrial and military complexes as much as the ruling dispensation. Naturally, they approach existing power structures and controversial debates surrounding them

other's assumptions and predilections. This is unlikely to happen if both the domains merely coexist in our centres of higher learning as two disparate groups.

Is English the most appropriate medium

Is English the most appropriate medium of learning when it comes to social science-s?Yes indeed, say most social scientists. As a global language, English comes with a plethora of means to access knowledge which is not normally available through an Indian language. Millions of Indians, including those from the lower castes, now have a chance to gain entry into elite Indian in-

Humanities and sciences need to interrogate each other's assumptions and predilections. This is unlikely to happen if both the domains merely coexist in our centres of higher learning as two disparate groups

with caution. Also, they tend to stay away from politics, often reasoning that it does not come within the ambit of their vocation.

Social scientists brand such a withdrawal as 'Rightist leaning'. This is clearly incorrect since a typical Indian scientist's formative period is anything but politically inclined. If humanities scholars desire a more imaginative learning world for scientists, they should, by all means, push for the same. After all, it is disciplines such as Medical Humanities that have prompted Western medical science establishment into thinking about the patients' inner worlds, looking beyond their illnesses. Similar feats can be replicated in India too where humanities are gaining visibility in institutions devoted to engineering and technology such as the Indian Institute of Technology (IIT).

Of course, mere visibility cannot provide humanities with the capacity it needs to become a transformative endeavour. Perhaps, change will arrive when humanities and sciences are in a position to interrogate each stitutions that were earlier the preserve of a handful of those who had embraced English education much earlier. Humanities scholars, though sympathetic to such liberating shifts, do rightfully mourn the fatal neglect of non-English knowledge systems. They apprehend a wipeout of local linguistic heritage because of English.

Education in English certainly has the capability to instil a sense of complacency, an assumption that that critical opinion in English is an end in itself. For example, Indian social scientists and humanities scholars tend to have a slavish devotion to Western thinkers such as Michel Foucault and Jacques Derrida. For the most part, they invoke these philosophers as a shortcut and to compensate for their lack of grounding in knowledge systems of regional languages. However, those who favour a pedagogy in humanities that is based on Indian languages naturally brand English education as an attractive pact with the devil.

That said, privileging English over the re-

gional languages, and vice versa, is not going to work any longer. We need both modes of dissemination to handle the students' capacity to absorb all modalities of learning. To cite an example, as a teacher in an English classroom, I find it hard to talk of romantic love without invoking Shakespeare, Kamban as well as Kalidasa. Though my audience primarily comprises students of English Studies, they inhabit a world where they get to learn about love, and other such fine expressions, through different media. It is impossible to get to the heart of such a diverse learning environment without seeking as much recourse to classics in English as much as those in the regional languages.

In a globalised context like ours, ideas

In a globalised context like ours, ideas commingle in complex ways irrespective of their linguistic roots. To disentangle such knowledge admixtures, we need humanities education that is rooted both in the regional and the global. With firm roots both in English and the regional languages, humanities education in India will cease to be a field where Western frameworks are merely recycled. Having one foot here, and another there, in fact can enable humanities to have a firmly rooted empowering agenda.

#### Reinforcing uniqueness of identities

Finally, politics, which sciences ignore and social sciences espouse, is not all that a burden-free exercise. In pursuing identity politics, for example, communities develop a tendency to reassert their uniqueness at all expense. Earlier, the discipline was open to only an elite few with upper-caste affinities. Some of them outside did manage to hook on, but only from the peripheries. With an expansion in identity politics, humanities began opening up to different identities, inadvertently creating exclusive slots for identities such as those of Dalits, religious minorities, disabled, and many more.

Notwithstanding the dynamic nature of these slots, communities with diverse identity markers, at times, subscribe to the position that a right for representation rests solely with them. And they believe that outsiders, no matter how much their willingness and capacity to reach out, will not be in a position to understand them.

Such a worldview is restrictive since it underestimates one's ability to get into others' shoes. Human propensity for cruelty is as boundless as that for kindness. And as vast for empathy. Esoteric knowledge, uniquely possessed by one community or one individual, can therefore differ from other strands of knowledge only in kind, and not in degree. However, a trained social scientist may be able to reach out to understand the inner worlds of a Dalit or a disabled person, and yet fall short in accessing something that is completely esoteric and experiential about them. Hence, we need to evolve learning environments that encourage a re-creation of esoteric forms of knowledge in some tangible shape. Fiction, poetry, music, and other forms of human expression can come handy in this regard.

Empathy, therefore, is not necessarily an inherent human trait and needs to be cultivated. Neither an identity slot nor political assertiveness can automatically lead humanities scholars to a mission of empathy. This requires carefully orchestrated pedagogical systems. Without imagination and empathy, politics will become a burdensome and a straight-jacketed exercise.

Twenty-first century humanities establishment in India will have to integrate subaltern or marginalised communities in a conversational environment that is both empowering and soulfully enriching. A symbiotic relationship with the sciences, a rich linguistic heritage, and a pedagogy rich in empathy will help it achieve the goal.

(Hemachandran Karah works in the fields of disability studies and medical humanities.)