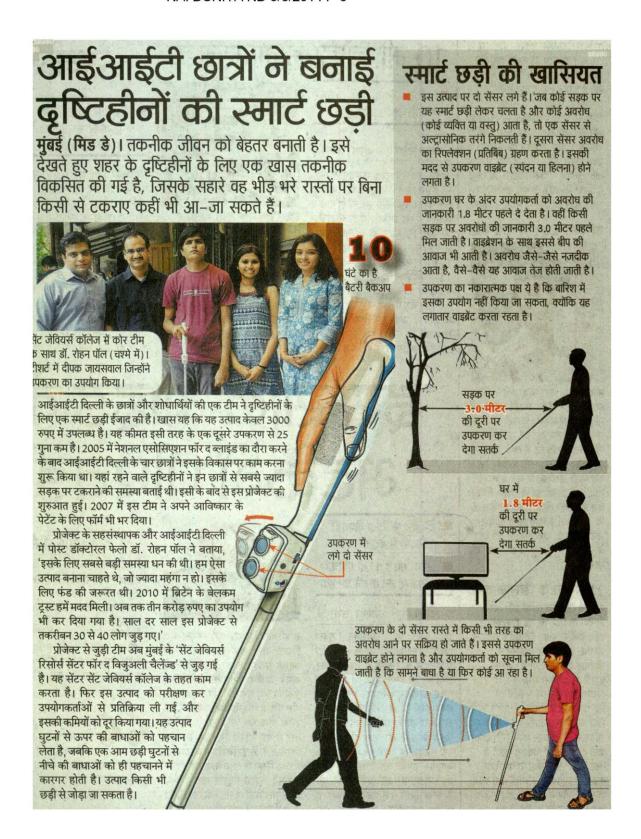
Newspaper Clips August 6, 2014

NAI DUNIYA ND 6/8/2014 P-6



IIT-Delhi creates affordable 'smart' cane for the blind

http://www.mid-day.com/articles/iit-delhi-creates-affordable-smart-cane-for-the-blind/15506173

Costing only Rs 3,000, the device sends out ultrasonic waves that enable the user to detect obstacles without touching them; around 50 of these devices will be distributed today to the disabled at St Xavier's College, free of cost

Technology is set to make lives better for the visually impaired in the city. Students and fellows at IIT-Delhi have developed a 'smart' cane that helps the blind navigate their way without having to touch or run into obstacles.



Dr Rohan Paul (in spectacles) with the core team that helped develop the product and Deepak Jaiswal (in purple), a student of St Xavier's College, who uses the device. Pic/Satyajit Desai

What's even better is that the cane only costs Rs 3,000 about 25 times less than the market price of a similar product. The experiment started nine years ago, in 2005, when four students from IIT-Delhi began work on creating a device to help the visually impaired walk, after visiting the National Association for the Blind.

People at the centre complained of having to collide with or touch every obstacle in their way in order to move around. Vowing to improve their mobility, students began the project. The group even filed their patents in 2007. However, the project got stuck for almost three years due to funding issues.



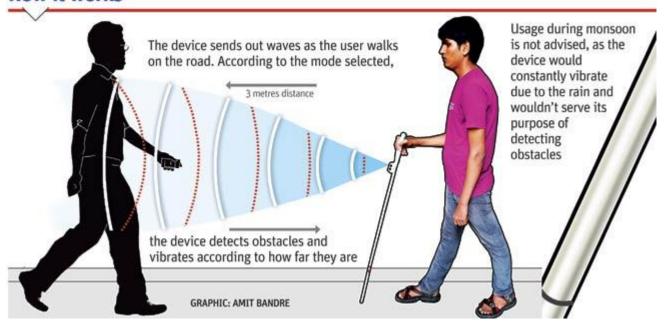
A closer view of the 'smart' cane

Cost-effective

Dr Rohan Paul, the co-founder of the project and a post-doctoral fellow at IIT-Delhi, said, "The most difficult part was the funding. We wanted the product to reach the end user in a cost effective manner, and hence, appropriate funding was required.

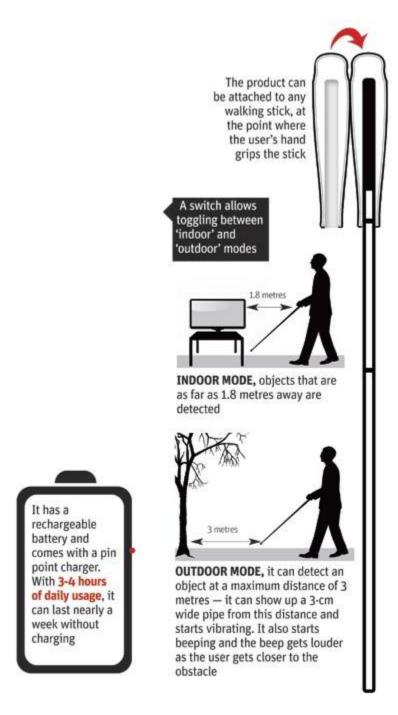
Around 2010, we were introduced to Wellcome Trust, UK, which helped us get the funding." They have used around R3 crore till date. They also found a Chennai-based firm to manufacture the product. Over the years, about 35-40 people had associated themselves with the project through various tie-ups with organisations working for the visually impaired.

How it works



Around 300-400 pieces were then distributed to the blind all over the country; in the city, the group tied up with the Xavier's Resource Center for the Visually Challenged, which is under the St Xavier's College, to give away the product for trials. Improvements were made in it after taking feedback from users.

The device detects obstacles above the knee, as opposed to a normal stick which only works for obstacles below the knee level. People were also employed to train users to get used to the device. Piyush Chanana, who trained nearly 200 people, added, "We had to take care of several aspects.



For example, there are obstacles that are not on the ground level like scaffolding or a horizontal bar but the stick will still vibrate. We taught users to follow the vibrations, even if the stick cannot find an obstacle." The device can be attached to any walking stick and comes with a charger. Users say it lasts them about a week.

Deepak Jaiswal, a student of St Xavier's, told mid-day, "I've been using this cane for 6 months. I charge it once a week. The best part is that the vibrations allow us to know obstacles in our way three metres before we encounter them. This helps us navigate without touching objects."

Around 50 of these devices will be distributed today under a government scheme to provide assistance to the disabled, at St Xavier's College, free of charge. Others can buy it from various city centres for Rs 3,000 well below the hefty Rs 80,000 that a similar product costs on the international market.

- See more at: http://www.mid-day.com/articles/iit-delhi-creates-affordable-smart-cane-for-the-blind/15506173#sthash.q3zHAFqc.dpuf

Visually impaired can now move easily with smart cane

PTI | Mumbai | Updated: Aug 06 2014, 10:51 IST

http://www.financialexpress.com/news/visually-impaired-can-now-move-easily-with-smart-cane/1276904



Mobility is now going to become easier for visually impaired with the help of SmartCane, a simple electronic device that helps in detecting presence of objects above the knee level and hanging obstacles through sensors.

"While the white cane is reliable enough to warn people of objects on the ground, and even up to knee-height, visually impaired people are often taken by surprise by over-hanging branches, protruding air-conditioners and parked vehicles. The SmartCane detects such obstacles from a safe distance, helping them avoid it, allowing safe, independent and dignified mobility," Professor Rohan Paul, IIT Delhi, who has played a key role in the development of the SmartCane device said here today.

The development of the SmartCane is an example where an academic institution, industry and a non-profit organisation joined hands, supported by an international charity to develop this technology to address challenges faced by the visually impaired, IIT Delhi professor and project Mentor Balakrishnan said.

SmartCane has been developed jointly by the Assistive Technologies Group at IIT Delhi, Phoenix Medical Systems and NGO Saksham Trust, with funding received from the Welcome Trust (UK).

The Xavier's Resource Centre for the Visually Challenged (XRCVC) of St Xavier's College (Mumbai) in association with Saksham Trust and IIT Delhi in conjunction with the National Institute for the Visually Handicapped (NIVH) today distributed SmartCane to 50 students under the ADIP scheme of the Department of Disability Affairs, Ministry of Social Justice and Empowerment.

Bollywood actor and alumnus of St Xaviers' College, Mumbai, Vidya Balan handed over the devices to the students.

"This device will now integrate visually impaired into the mainstream and make them more independent," she said today.

SmartCane device, which costs Rs 3,000, is an electronic mobility aid, fits on the top fold of the white cane serving as an enhancement to the cane and overcomes its limitations by detecting knee above and hanging obstacles.

The cane has other uses as a spatial awareness device as it can detect presence or absence of objects in the surroundings from one meter to three metres. It has in built rechargeable battery back up of 10 hours and easy charging.

SmartCane device uses ultrasonic ranging to detect objects in its path and generates tactile output in the form of different vibratory patterns.

According to the World Health Organisation, 285 million people are estimated to be visually impaired worldwide, with 90 per cent residing in developing countries.

तर्ज पर माह में दस कक्षाएं आयोजित

की जाएंगी।

Hindustan ND 6/08/2014 P-

आईआईटी देगा बॉलीवुड में प्रवेश, होगा कैंपस प्लेसमेंट नई दिल्ली |रोहित पंवार आईआईटी पढ लहराया परचम चेतन भगत (प्रसिद्ध लेखक) बॉलीवुड ने दिखाई रुचि सुमित सक्सेना चेतन भगत ने (संवाद लेखन): आईआईटी से पढ़े छात्र न सिर्फ आईआईटी दिल्ली के प्रो. वीके शर्मा वरुण गोवर (गैंग्स ऑफ आईआईटी से नई सोच के साथ नई सुमित सक्सेना ने आईआईटी बीएचयू से 2006 में पढ़ाई पूरी की है। इंजीनियरिंग बल्कि फिल्म व विज्ञापन और पूर्व छात्र अरुनाब कुमार ने बताया इंजीनियरिंग करने के वासेपुर के संवाद लेखक) तकनीक विकसित करने वाले आईआईटी कि विंग बनाने से पहले इसकी लेखन, अभिनय जैसे रचनात्मक क्षेत्र बाद आईआईएम संस्थान अब छात्रों की कला को नया वरुण ग्रोवर ने आईआईटी बीएवय से कॉलेज के दिनों से ही इन्होंने संवाद व जानकारी शाहरूख खान की कंपनी रेड में भी अपना हुनर साबित कर रहे हैं। अहमदाबाद से प्रबंधन आयाम दे रहे हैं। करबों, गांवों व छोटे सिविल में इंजीनियरिंग पूरी की। चिलीज, फिल्मक्रापट, बालाजी पटकथा लेखन का काम शुरू कर की पढाई की। आईआईटी एल्यूमनी इसे देखते हुए इन क्षेत्रों में रुचि रखने शहरों और दूरदराज के इलाकों से आने वाले आईआईटी के उन छात्रों के लिए ये दिया था। बॉलीवुड में इन्हें 'प्यार का आईआईटी में प्रवेश से पहले वे कहानियां वाले मौजूदा छात्रों की प्रतिभा निखारने टेलीफिल्म्स को दी गई थी। विज्ञापन एसोसिएशन के पूर्व अध्यक्ष रमेश शर्मा व नाटकों की स्क्रिप्ट लिखते थे लेकिन पंचनामा' फिल्म से प्रवेश मिला। इस निर्माता कई कंपनियों ने रुचि दिखाई। के लिए आईआईटी मुंबई व दिल्ली ने ने बताया कि उन्होंने एसोसिएशन से सोने पर सुहागा जैसा है जो फिल्म लेखन विज्ञापन गुरु प्रह्लाद कवकड ने कहा संस्थान की थियेटर सोसाइटी से जुड़ने फिल्म के संवाद सुमित ने लिखे थे। जुड़ने के बाद सभी कार्यक्रमों की व अभिनय में प्रतिभा के घनी हैं। ऐसे छात्र द एक्टिव आर्ट' विंग की शुरुआत की कि यह पहल अच्छी है। भले ही के बाद उन्हें बड़ा मंच मिला। बाद में संवाद के चलते छोटे बजट की इस है। इसके जरिये बॉलीवुड के प्रोड्क्शन स्क्रिप्ट लिखी। फाइव प्वाइंट समवन, संस्थान के वार्षिक सम्मेलन में भाग आईआईटी में फिल्म व विज्ञापन में काम उन्होंने अनुराग कश्यप की गैंग्स ऑफ फिल्म ने अच्छा कारोबार किया और वन नाइट एट कॉल सेंटर, रिवॉल्यूशनरी हाउस को कैंपस प्लेसमेंट के लिए लेकर ही शौक पूरा करते थे मगर अब वासेपुर फिल्म के गानों के बोल लिखे। युवाओं में लोकप्रिय हुई। करने वाले छात्रों की कमी नहीं है। 2020 जैसे उपन्यास पर फिल्में बनीं। तस्वीर बदली है। आयोजित किया जाएगा। संस्थान ने विंग को एल्युमनी में बनाया गया है। इसे आईआईटी लेकिन ये उनसे अलग है। सभी 16 अभिनय, आकर्षक विज्ञापन बनाने व आईआईटी मुंबई के कंप्यूटर साइंस के कार्यालय खोला जाएगा। एनएसडी की

अन्य लेखन में रुचि रखते हैं वे विंग से

पंजीकरण कराकर जुड़ सकते हैं।

प्रो. सुनील अग्निहोत्री ने बताया कि

सितंबर तक हर आईआईटी में इसका

'English a hurdle at IIT-B too, 1/10th freshers fail to communicate'

आईआईटी संस्थान के ऐसे छात्र जो

फिल्म व नाटक की कहानी लिखने.

Written by Mihika Basu | Mumbai | August 6, 2014 1:32 am

दिल्ली के सहयोग से चलाया जाएगा।

हर संस्थान में थियेटर ग्रुप होते हैं

एसोसिएशन के सहयोग से शुरू किया

है। इसका कार्यालय आईआईटी मुंबई

http://indianexpress.com/article/cities/mumbai/english-a-hurdle-at-iit-b-too-110th-freshers-fail-to-communicate/

Freshers at IIT-Bombay face major problems in understanding and communicating in English, thus impacting their academics. This was communicated by students' body representatives to a five-member external institute review committee, which met them on July 31.

Significantly, when questioned about what inspired them to pursue academics seriously, a majority said good placements won hands down as compared to scientific temper to pursue the courses. Some pointed out that academics and research may not have the same incentives for students to pursue the courses as compared to cultural activities or sports and hence the matter needed to be looked into.

"When questioned about how many students had a language problem owing to their lack of English skills, senior student mentors of the Institute Student Mentorship Programme (ISMP), who are responsible for the English training programme among freshers, told the reviewers that around one-tenth of the freshers faced problems while communicating and understanding English, as a result of which their academics were likely to take a turn for the worse at IIT-Bombay. At present, talks are under way with the British Council to conduct formal structured classes for freshers, who are weak in English," said Anshul Avasthi, fourth-year student at IIT Bombay and editor of the institute's student media body, Insight.

Even as the committee wanted to know what kind of issues featured in their discussions, whether they saw themselves as future leaders and deliberated upon existing problems or devised long-term plans to address them, students said a majority of the student community at the institute were job-centric and very few had long-term goals. "The students in fact told the panel members that they knew they had entered a rat race and there was a huge fight for the best jobs and companies. We also pointed out the hype surrounding IIT-Bombay as a

destination and that often after students secured a seat, they felt they had reached their goal and developed a lax attitude," said Avasthi.

The student representatives, however, told the committee that to ensure that placements were not the only priority and preparations were not just examination-oriented, an industrial approach could be made mandatory for every course so that students developed their interest towards a particular field. They also suggested that making industry experts teach a part of the course should also be made compulsory.

Students apprised reviewers about the space crunch at hostels and how this was affecting academics. Significantly, the culture of copying, lack of academic ethics and rampant plagiarism were issues highlighted by the students themselves. During their discussion with the reviewers, the students agreed that stricter measures must be implemented at IIT-Bombay. "The departments of computer science and engineering, chemical engineering and electrical engineering gave 'fail' grades to those caught cheating. Such measures must be normalised and implemented across all departments,"

4 Indians figure in top 20 extraordinary tech czars

New York, Aug. 5: Four Indians are among Fortune magazine's list of 20 "extraordinary" technology czars and young entrepreneurs analysing and processing big numbers to discover information that will "transform the way businesses operate." Fortune's maiden 'Big Data All-Stars' lists the 20 extraordinary people who are "the best at connecting the dots and digging deep."

Among the 20 is Arun Murthy, who co-founded business computer software firm Hortonworks. He started off at Yahoo when Hadoop, the opensource storage and processing software that powers much of the web's big data, was an early prototype. He helped develop a resource and workload management system called YARN that acts as a OS for Hadoop, Fotune

Next is Surabhi Gupta, a software engineer at travel rentals website Airbnb. As a graduate student at SU, she became fascinated by the art of summarisation, which is extracting meaning from text without reading the text. She was working at Google



Arun Murthy, co-founder, Hortonworks



Swatee Singh, VP, GMS IM, American Express

when she started researching a trip using Airbnb. The possibilities Airbnb's data offered fascinated her and in the four months at the firm, overhauled and improved their search engines and is currently working on condensing all of Airbnb's listings to create summaries to enable users to understand cities' vibes, the publication said.

Swatee Singh is VP of GMS IM Platforms and Big Data Capabilities at American Express, where her focus is to make "business personal." She is the



Vijay Subramanian, CAO, Rent the Runway



Surabhi Gupta, software engineer at Airbnb

brains behind American Express 'MyOffers' which aims to give members "what they want when they need it."

Next is Vijay Subramanian, CAO at Rent the Runway, an on-line service that provides designer and accessorv rentals. He built a model estimate missed demand, product longevity and occasion usage for the firm's inventory, a cost-saver for a firm that buys truckloads of dresses and accessories from designers to rent to customers. -PTI

To save Yamuna, law only recourse

Bring River Zone In EPA Act Ambit By Declaring It Eco-Sensitive: NGT Panel

Jayashree.Nandi @timesgroup.com

New Delhi: An experts' committee constituted by National Green Tribunal on restoration and beautification of Yamuna has recommended legal protection for the river zone by notifying it as an eco-sensitive area under the Environment Protection Act.

The committee, headed by the additional secretary, ministry of environment and forests, and the vicechairman, Delhi Development Authority, has also recommended constitution of an apex body under the lieutenant governor with officials from MoEF and Delhi government to look into maintenance of flow in the river and restoration of natural storm water drains.

NGT had constituted the committee on May 30 and asked its members to prepare the report in consultation with former JNU professor Brij Gopal and IIT Delhi professor A K Gosain. The committee's report is clearly contrasting with Delhi Development Authority's riverfront develop-

RESTORING THE FLOW

EXPERT PANEL'S RECOMMENDATIONS FOR YAMUNA

- > Flood-carrying capacity of Yamuna has reduced a lot due to waste dumps and encroachments. Riverbed should be restored to its original level through suitable dredging of accumulated
- Create new wetland habitats for biodiversity conservation
- Conserve riverine ecosystem as a model of an ecologically sound urban riverscape, which also meets cultural, spiritual and religious needs
- > Conserve and restore existing wetlands—wetlands north of Wazirabad, near Garhi Mandu, sub-zones VI and VII. Connect wetlands for water movement
- Leave a fringe of 50-100m on either side of river channel for vegetations like

a very ecological approach.



grasses and bushes

- Plant native species on floodplains
- > Dredge back area retrieved from Millennium bus depot into floodplains
- Treatment wetlands be developed at mouth of drains
- > A land management division of DDA under a director-level officer be set up to inspect and inform the enforcement branch

on a daily basis for immediate remedial action

- > Agricultural use of riverbed be regulated for farming by two peasants cooperative societies only for organically grown vegetables, fruits and flowers
- > All natural drains falling into Yamuna be restored as natural tributaries of the river and these may carry only storm water

ment plan which involves It quotes Australian river construction, of parking expert lots, mounds and pathways, and having boating facili-The report instead takes

Mussared-"Floodplains are as important to rivers as bark is to trees. Most of the processes that drive life in rivers happen around their edges. Just as the sap flows through the outermost ring of trees, not through its centre."

The committee has observed that the flood carrying capacity of the river has been greatly reduced by en-

croachment and dumps. These need suitable dredging of accumulated sediment and solid waste. "It should be ensured that the floodplain fulfills its primary role of passage of flood waters and recharge of groundwater," it states.

The report recommends

that all fly ash dumps from power plants in the floodplains should be removed as a priority as they are a source of arsenic toxicity. Sites of heritage value like Qudsia Ghat, Yamunabazar, Majnu ka Tila and Old Railway Bridge should be "developed with great care so as to minimize any adverse impact on the river zone".

It recommends that debris and municipal solid waste be quantified and then removed by using data from irrigation and flood control department. "Waste water without tertiary treatment should not be permitted to enter the river. No industrial waste should enter the river." The tribunal accepted the committee's report on Tuesday and has given two weeks time to respondents to submit objections or suggestions.

Learning through video from IIT professors

A team of 20 faculty members are involved in the project.

http://www.thehindu.com/features/education/college-and-university/learning-through-video-from-iit-professors/article6286877.ece

Students in select engineering colleges in the country are now taking lessons through video from professors of the Indian Institute of Technology and senior company executives under a project.

Funded by the Ministry of Human Resources Development, the <u>Quality Enhancement in Engineering Education</u> (QEEE) programme, launched last year, facilitates students to learn directly from IIT professors and senior company executives from their classrooms.

A team of 20 faculty members each from IIT–Madras, Kharagpur, Kanpur, Bombay and Delhi, are currently involved in the project, which includes 124 colleges, of which 13 are from Tamil Nadu.

Students in the third and fourth year from various engineering disciplines would be given 15 lectures each, covering a third of the portions in the curriculum that are generally about concepts and fundamentals of engineering, said Ashok Jhunjhunwala, QEEE chairman. The programme was initially started in 40 colleges and had now been extended. The idea was to bring more colleges in remote areas under the scheme, he said.

B. Santhanam, former chairman of the Confederation of Indian Industry, spoke.

IIT-Gn, Nielsen tie up to provide global opportunities to its students

Nielsen will fund several Nielsen Awards annually at the institute to enable undergraduate students to participate in international conferences, workshops and internships

http://www.business-standard.com/article/current-affairs/iit-gn-signs-mou-with-nielsen-to-provide-global-opportunities-to-its-students-114080501316_1.html

In a bid to provide global opportunities to its undergraduate students, the Indian Institute of Technology, Gandhinagar (IIT-Gn) on Tuesday signed a memorandum of understanding with global information and measurement company, Nielsen.

Under the agreement, <u>Nielsen</u> will fund several Nielsen Awards annually at the institute to enable undergraduate <u>students</u> to participate in international conferences, workshops and internships that offer them broad global exposure.

For Nielsen India, <u>IIT-Gn</u> being the only IIT to offer a course in cognitive science emerged as a favourite since the research firm itself delves into cognitive science for consumer behaviour mapping. Moreover, the openness of IIT-Gn to work with private institutions too attracted Nielsen to sign the MoU, said Piyush Mathur, president, Nielsen India.

"Talent has been at the forefront to our growth and success and we pay great emphasis on endorsing it. We have

been working with IIT Gandhinagar for some time and have found a great pool of talent, who if groomed well can become future industry leaders. We are looking to encourage these young minds and hone their skills by providing them the necessary opportunities both domestically and internationally," said Mathur.

In addition, short-listed IIT Gandhinagar students will receive opportunities to interact with and be mentored by senior executives at Nielsen during their overseas visits.

"In an increasingly globalised world, the Institute places great emphasis on the internationalisation of its curriculum. Already the Institute has a very high proportion of visiting professors from abroad, who bring diversity to the campus and our academic programmes. Nielsen's support will enable us to significantly scale up and expand the range of international opportunities for our undergraduate students. We believe that brings a distinctive edge to our undergraduate experience," said Sudhir Jain, director, IIT Gandhinagar.

While initially at least 10-15 students are set to benefit from the MoU, the number may rise in near future.

Meanwhile, Jain added that the institute is scaling up its student capacity in the new permanent campus that is coming up near Palej in Gandhinagar. According to Jain, IIT-Gn will initially have 2400 students at its new permanent campus at any given point of time.

Nielsen is a global information and measurement company with leading market positions in marketing and consumer information, television and other media measurement, online intelligence, mobile measurement, trade shows and related properties.

Hindustan Times (Mumbai),

IIT BOMBAY TO BUILD HIGH-TECH SPORTS COMPLEX BY YEAR END

http://paper.hindustantimes.com/epaper/viewer.aspx#

MUMBAI: The Indian Institute of Technology, Bombay (IIT-B) is planning a state-of-the-art sports complex to facilitate the inter-IIT sports meet, which will be held in December.

The institute had asked for suggestions from students about improvements that can be made into the campus, where a majority them opted for better sports facilities.

The institute will create an additional indoor and outdoor sports complex, measuring 55,000 and 42,000 sq. ft area respectively, at its gymkhana.

The new sports facilities will house two indoor courts for basketball, three for volley ball, three indoor cricket pitches, a table tennis hall, squash courts, a multi-stationed gym among others.

These facilities are likely to be functional by the end of this year.

"While IIT-B already offers majority of sports activities and infrastructure like cricket ground, badminton court and swimming pool among others, these new facilities will make the gymkhana a full-fledged sport complex. The construction will be completed for the inter IIT sports meet," said UA Yajnik, dean of student's affairs.

This is the 50th year of the meet, where students from all 15 IITs come together for a sporting event.

Additionally, the institute is also planning on building a brand new hostel block that will be capable of housing up to 1,044 students.

"With the central government planning on increasing the intake capacity of the IITs, the need for additional hostels has become the need of the hour," added Yajnik.

Could IITs Help Engineers Embrace The Humanities?

http://www.asianscientist.com/features/iits-engineers-embrace-humanities-2014/

AsianScientist (Aug. 6, 2014) – The Indian Institutes of Technology (IITs) are known worldwide for producing top engineers. Their undergraduate programs in various branches of engineering across 16 IITs in different parts of the country admit just about two percent of all applicants, making them among the toughest in the world to gain admission into.

Over the years, a fairly large number of IITians have taken to entrepreneurship and some of them have become rich and famous. The success of the engineer-entrepreneur IITian, especially in the US, has given the IITs a lot of visibility and made it a truly global brand.

Few people, even in India, know that some of the IITs also have fairly decent graduate departments in the humanities and social sciences that go back to their inception in the 1960s. A select few departments, in fact, boast of nationally- and internationally-renowned faculty.

The number of graduate students at the social science and humanities departments is quite small, however. Together, only around 3,000 IIT students are pursuing a PhD across all disciplines; the numbers of PhD students in the humanities and social sciences is obviously even smaller.

"Old" vs "new" IITs

I have found it quite odd that nearly all the old IITs have limited themselves to offering graduate courses and/or degrees in the same social science and humanities disciplines that they started out with during the 1960s – English, economics, philosophy, psychology and sociology (EEPPS). It is almost as if that the scope of social science inquiry became frozen at some point of time in the past and requires no change. Why stay with EEPPS? Why not history, political science or Sanskrit?

Some of the old IITs, to their credit, have diversified somewhat. The IITs at Kharagpur and Delhi now run 'popular' MBA programs. IIT-Chennai runs a reasonably successful master's program in development studies. However, overall the old IITs remain rather conservative in terms of what they serve in the social sciences and humanities.

The good news is that some of the newer IITs seem to be breaking free of EEPPS. Though most are led by faculty drawn from the older IITs, perhaps because they are still in the process of establishing themselves, they are doing things a little differently. The IITs at Gandhinagar, Guwahati and Mandi have diversified a little bit

more than the old IITs in terms of faculty expertise and courses and degrees offered, by hiring faculty in history, political science and public health.

IIT-Guwahati already runs a master's program in development studies. IIT-Gandhinagar is offering a master's in society and culture starting this year.

There are signs of change outside the IIT system as well. This year onwards, undergraduate students at BITS Pilani-Goa (where I am based) can opt for a minor in politics, economics and philosophy (PEP). While students were in the past required to complete a minimum number of courses in the humanities and social sciences, I am told that this is the first time that students at a major engineering- and/or science-focused institution in India have the option to pursue a minor in the social sciences. If the IITs and other premier engineering institutes continue down this path, they may be on to something.

Evolving beyond engineering

For now, one big difference between India's premier technology institutions and those in the West and the East—whether the Massachusetts Institute of Technology (MIT) or Nanyang Technological University (NTU)—is that the latter run superb programs in the humanities and the social sciences which have grown and evolved over time. In contrast, to my knowledge, none of the 16 IITs offer undergraduate programs in social sciences or humanities.

I get to hear every now and then that the IITs are modeled on MIT. That may well have been true for some of the IITs in their early years (IIT-Kanpur was after all built with American assistance) but, unlike the IITs, both MIT and NTU have large and substantial programs in humanities and social science disciplines which stand on their own and are widely-recognized at home and abroad.

It is a pity that India's leading engineering institutes are reluctant to build on their solid reputations in technology and science to diversify and do more in the social sciences and humanities. It is also quite unlikely that the IITs themselves will choose to offer larger and more comprehensive programs in the social sciences or humanities; an enduring trend in India is to build relatively small, specialized and narrowly-focused teaching and/or research institutions, often disconnected from one another.

However, given the shortage of good quality higher education institutions as well as well-qualified faculty, the IITs would be doing the nation a great service by expanding their graduate departments to include more social science and humanities disciplines and train the next generation of historians, philosophers, economists, public policy experts, a greater variety of Indian and foreign language experts and others. By evolving into comprehensive institutions, they would also in the process become better institutions.

It is said that old habits die hard. Perhaps the real opportunities for change lie only in the new IITs.

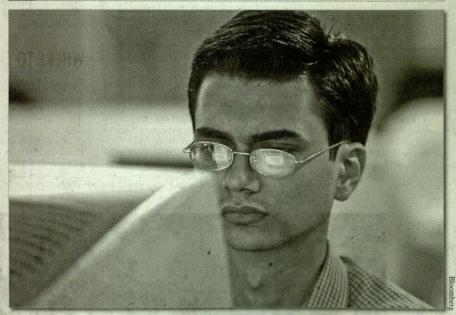
The gloomy state of higher education

IME and again we have talked about the crucial need for reforms in higher education. These discussions take different approaches each time. Such debates become more prominent when admission processes are triggered. And something similar is happening since the past two months across the country.

Today, many bright students and their annoved but silent spectator parents - are under tremendous pressure regarding admissions in colleges at undergraduate and postgraduate level. They are aware of the major issues with the system but since their child's career is directly related with admission processes, they keep running helplessly from one institution to the other, worried how much this process is going to cost them and if there is an end to this chaos. Since last year, their children, who put in enormous efforts in multiple admission tests, are being adversely affected both physically and mentally. At first, they were locked up with class 12 examinations, and then got caught up in several other entrance examinations that follow.

However, despite all the hard work put in and good scores fetched, students are still not sure if they would get admission in a college of their choice. This is also due to the fact that hundreds of students lie in the same range of marks as them. And the worst stress factor is the expenditure that their parents have borne all this while - which they may have been assimilating for years - especially those belonging to lower and upper middle class families.

Meanwhile, some parents are willing to flow in ample money into the two-layered, hollow process of admission; first, where the managements Arun Nigavekar



LOST FOCUS: A corrupt selection process generates students with substandard knowledge, who are absorbed by the industry because it always needs a pool of fresh graduates that can be train as per their requirement

of institutions come in picture, and secondly, getting their child pushed up in the merit list of the same organisation. Such parents are well aware of the power and flexibility in the hands of the top management. Here, I am talking of only the 15 per cent of families that go through such a non-controlled procedure. But we have never thought of the other 85 per cent that are simply on the border of circles. They are familiar with India's education 'chemistry' that includes the corruption and negligence of the intelligence of their children. This is specially true for socially backward and economically depressed families. Their plight is heightened as they candidly know that professional education is run and by controlled 'education

barons' whose sole focus is to strengthen their political or social identity. They do provide huge seven-star infrastructure, wonderful support facilities and world class activities at sprawling campuses where they make sure those who can afford all these amenities are invited for various, and mostly, non-academic activities.

Moreover, a majority of the faculty at such campuses is a floating faculty who run from institution to institution, while the limited permanent faculty whose main task is to see that students are kept busy for the entire day.

Such a corrupt selection process generates graduates with substandard knowledge and application experience. What is interesting is that even these raw graduates are absorbed by the industry because it always needs fresh graduates whom they can further train as per their requirement. However, today, the scenario is somewhat changing. A few decades ago, training freshly employed employees was a focused approach for industry. But in the present day and age of cuttingedge competition, companies realise the need to adopt new strategies. They must interact with educational institutions and change the entire process of delivery of education at graduate level itself. Unfortunately, a few institutes that are ever focused on admissions are not too disturbed about this

Several other aspects in the higher education sector need to be considered with utmost care. The larger hitch has been for the past six decades, especially as higher education lies in a bilateral domain - state and centre. The centre gives larger financial support to all central universities that educate just 2 per cent of higher education students, but state universities, which cater to students from low social and economic background are not heavily funded by either the state or central governments. The state government simply pays salaries of teaching and nonteaching staff and no funds are given for the overall development of the institute.

The irony in India is that it substitutes - 'subsidy' with 'reservation' and vice versa. Socially backward students need to be provided with reservation and talented students in other communities also need to be given subsidy in fees. Indeed, the government should create a policy where social identity. aptitude of students and financial strength of the families are taken into consideration with well-defined weightage to each of these elements for supporting students financially. If the nation's top talents are faced with huge fees and low quality delivery methods, quality education will remain a dream. The government should focus on tier II public institutions and upgrade them instead of opening new colleges under the old brands (IIMs and IITs). Indians have realised that privatisation cannot be the only medicine for all its problems, and that the answer is accountability at all levels. Therefore, we need critical reforms with a hard action plan.

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(The writer is former chairman of UGC, former vice-chancellor of University of Pune and founder director of NAAC)

'Many options for women in engineering'

Dr Madhuri B Khambete tells SANGEETA YADAV that hiring and advancing women in engineering is a smart move since they are more hardworking, sincere, confident and disciplined than men

What are the latest developments seen in engineering?

Technical education has always been and continues to be one of the more preferred areas of study with expectations for better career opportunities. Nowadays, software aids are being used for design development, quality control and other engineering functions. This has made operations more effective and efficient, thus attracting more students.

What is the reason for growing number of women in engineering?

It can be attributed to establishment of exclusive technical colleges imparting quality education, reservations for women by the State Government. Second, significant placement opportunities offered to women by major manufacturing and IT companies. Companies are introducing organisational provisions and policies like flexible working hours and locations, and child-care, maternity and paternity leave to make the work place more women-friendly. At the shop floor-level too, there is a transformation. Automation has transformed the working conditions, making it less strenuous and ergonomically conducive for women.

Also, the rapid growth of the software industry has opened up opportunities for women engineers where they can do desk jobs.

How difficult it is for the women to pursue engineering? What challenges come on their way?

Insufficient work-life balance, lack of support and encouragement for girls and cultural perceptions about roles of women are among a few reasons why the engineering field is male-dominated. Although there is no radical shift in the traditional ideology, the trend of growing number of women in engineering reflects the new wave of change in gender perception.

What are the job options for women in this field?

Many choices are available for women pursuing engineering, like Information Technology, Mechanical, Electronics, Instrumentation, Mechatronics etc. Post graduation, women can opt for roles in operations, quality, research & development, testing, supply chain management etc.



Dr Madhuri B Khambete Principal, Cummins College of Engineering for Women

What are the benefits for women in this profession?

Women in most disciplines come across as more confident, sincere and hardworking. Industry leaders believe women are critical to addressing the skill gap in manufacturing. In the coming years, access to a highly skilled, flexible workforce will be the most important factor. In addition to bridging the skill gap, hiring and advancing women makes smart business sense. As consumers and influencers, their experiences and insights contribute significantly to the industry's competitiveness and profitability.

Large number of women pursuing engineering drop. Why? How can this be addressed?

The drop outs are very less now. Some women don't pursue a career in engineering as they join family business or take up careers where working hours are less demanding. Few other reasons are workplace environment, work-life balance, and engineering carrying ingrained notions and biases about men being naturally suited to the field.

This can be made better if companies start addressing the work environment concerns and making them more women-friendly. Various companies have introduced organisational provisions and policies, showing commitment to the hiring, retention, promotion and career development of women while adhering to the merit principles.

DUTA seeks Pranab's help to push probe against V-C

By Mail Today Bureau in New Delhi

THE Delhi University Teachers' Association (DUTA) on Tuesday sought the intervention of President Pranab Mukherjee for conducting an inquiry into irregularities of more than ₹200 crore that took place under Vice-Chancellor Dinesh Singh's watch.

"On the basis of White Paper, the DUTA is demanding a comprehensive inquiry by President Pranab Mukherjee against the vice-chancellor, pending which, he should be made to go on leave. His continuing presence in the university, in the capacity of its chief administrative and academic officer, is detrimental to the interests of this university," DUTA president Nandita Narain said, citing replies of two RTIs filed by Academic THE Delhi University Teachers' Associ-

replies of two RTIs filed by Academic

president Nandita Naram said, citing replies of two RTIs filed by Academic Council members.

The DUTA, an elected body of the university, on Tuesday released the White Paper on the alleged irregularities and violation of the Delhi University Act by Vice-Chancellor Dinesh Singh.

In a 41-page release, the DUTA points out that ever since Singh took office, he has been flouting statutory rules and created an oppressive environment and the V-C has committed gross financial, administrative and academic regularities of over \$200 crore during his tenure.

The release questioned Singh's action to divert OBC grants meant for expansion in teaching faculty and up-gradation of infrastructure towards the purchase of laptops for the FYUP students.

"The RTI replies have been structure that there have

DUTA on Tuesday released the White Paper on the alleged

irregularities by DU Vice-Chancellor **Dinesh Singh**

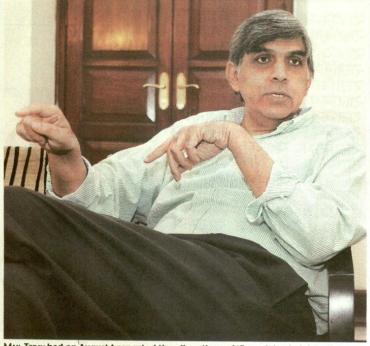
FYUP students.

"The RTI replies have shown that there have been grave misuse of OBC funds...Money supposed to have been spent on students, teachers, class was diverted in giving laptop to the newly admitted students under FYUP course, which again is illegal," the DUTA said.

"There were grave violation in introducing the FYUP which was in conflict with national policy 10+2+3 and the V-C violated the DU Act's attendant provisions. There

There was appointment, made of ad hoc teachers illegally by appointing faculty who favoured the FYUP as Singh appointed his favorites in





MAIL TODAY had on August 1 reported the allegations of 'financial, administrative and academic' wrongdoings against Delhi University Vice-Chancellor Dinesh Singh.

Violations in introducing FYUP: Implementing the FYUP without the statutory approval was a grave financial impropriety and

Financial Irregularities: Laptops were purchased out of 'OBC Grant of University Departments' for the

students admitted under the FYUP. Tender and quotation in this regard are not available on DU website.

Foreign tours by the officers of the university: A large number of trips were taken by the V-C along with Alka Sharma, the registrar. But the university stated that they

did not have detailed information about the financial expenditure

Relief fund collected for Uttarak-hand flood victims: The donation was forced on teachers. No receipt was issued to the donors and till date the university has not made public how it was utilised.

all the selection committee and head of departments," it alleged.

Violation of rules was also brought to notice with regard to the setting up of cluster innovation centre. Three courses were conducted under the cluster innovation centre in violation of the UGC rule that requires such courses to be sent to UGC six months prior to their introduction, the association said.

The DUTA also alleged that there has been an illegal diversion of funds over gal diversion of funds over the White alleged in the control of the UGC rule.

The DUTA also alleged that there has been an illegal diversion of funds over sity's School of Open Learning.

For long, DU professors

For long, DU professors had claimed that Singh was largely "inaccessible" in his office. His frequent trips abroad made the vice-chancellor unavailable to students and teachers.

and teachers.

"He has met the DUTA only once on June 2 and that too only after the directions from the HRD minister. The dialogue has been replaced with the misuse of office to deny space for meetings and then threaten and harass the teachers brutally suppressing any questioning of his misgovernance," Sanjay Bohidar of DUTA, said.

Do not Put English Farther out of Reach

The Indian Administrative Service (IAS) may not be the French Foreign Legion, but it still requires its members to be equipped with specific skills. Being proficient in English happens to be one of them. English is a link language that connects not every Indian, but every opinion-making, decision-taking Indian. To disregard this, is to disregard reality. The civil servant, well versed as he may — and should — be in any other Indian language, must be proficient in this language, rather than be able to simply comprehend it, particularly in these globalising times.

For the government to make concessions to the populist demand to scrap the English comprehension portion of the



Union Public Service Commission (UPSC) preliminary examination is doubly unfortunate in this regard. Not only does this endorse the erroneous notion that one doesn't require English to become a civil servant, but it also drives the "English-non-English" wedge even deeper. And the consequences of this will be

felt beyond the UPSC exam.

But the anti-English agitators have a point. English is a language of power, status and class. A person proficient in English is far more likely to negotiate the world than someone who is not. This is apparent in the huge demand for English language learning among young job-seekers and job-enhancers across India irrespective of their socioeconomic backgrounds. It is a travesty that non-English languages have lagged as a vehicle for quality education. And the quality of English teaching in state-funded schools is abysmal. The government should ensure that quality English is available to all. And it should abstain from compromises that would erode the quality and coherence of governance in the country.

Let language unite and not divide us

THE INDIAN Administrative Service (IAS) and the gateway to it, the Union Public Service Commission (UPSC) examination, are pretty much the heart and the vascular system of the nation. Naturally, given its origin in the colonial Imperial Civil Service, there is a residual Anglophilia and prestige associated with it. However, over the decades, the bulk of Indian babudom has been systematically decolonised, with IAS officers joining the battalion from remotest corners of the country, and the barriers - linguistic, educational, economic and otherwise - to it, have been brought down to a large extent. Yet, the top layers of bureaucracy in this country happen to have their origins, more often than not, in the traditionally privileged, upper class, upper caste, mostly Hindu, English-speaking lot, which have less trouble dealing with the periodic tinkering and tweaking of the UPSC exam pattern. In the case of the current furore, what used to be the optional paper in the preliminary test, has been replaced with the civil services aptitude test (C-SAT) that questions the aspirants on skills such as logic and comprehension, reasoning, basic, school-level English language and mathematical proficiency. While the protesters, coming mostly from Hindi belt, assert how discriminatory the new system happens to be for those preferring a regional language over English (or even Hindi,

as per the requirements until 2011), and while it is important to maintain a linguistic parity and not allow exploitation (intentional or unwarranted) along the axes of language, is the scrapping of the limited number of questions in English language really

in mediums of instruction is a happy condition, it mustn't become a handicap

While plurality

the right solution?

It must not be forgotten that IAS is a national-level bureaucratic service and UPSC is a pan-India examination, not a state-level test. Inasmuch as English still remains the link language and given the public executives are routinely required to have interpersonal and intersubjective exchanges with fellow babus, policymakers, think-tank members, politicians and representatives of international organisations, minimum proficiency in English is not only a necessity, it is perhaps integral to the idea of a bureaucratic circulatory system. Instead of upping their ante and rising to the occasion, IAS aspirants from heartlands are burning buses and creating ruckus on the street screaming discrimination, all the while not even reflecting once on what they are struggling for. In the same vein, under no circumstances can a university-level education in humanities challenge the aspirants' capability in school-level logic and comprehension. If such a threat is indeed being perceived, that is a scathing indictment of what has been going on in the name of school and university education in various parts of the country. While plurality in mediums of instruction is a happy condition of education in India, it must not become a handicap for future bureaucrats.

Pioneer ND 6/08/2014 P-13

I with the control of the agitators as unmarises the raging unrest among the CSAT-II protestors. They are unhappy that the Government has not met all their demands, the prime one being the scrapping of the CSAT (10 Services Aptitude Test) Paper II.

"Only a fraction of the problem has been addressed. By announcing that the 8-9 questions on English skills set will not be counted for gradation, the Government has given us some relief. But our other big problem has not been addressed. — Why is the language used in the Hindi medium so tough? It is not possible for an average Hindi medium student to understand the given questions, even though they are in Hindi. For those who have opted for Hindi medium, the language is so tough that they have to often read the English version first and then answer in Hindi. It is time taking and annoying. Neeraj Jaiswal, leading the CSAT protests at Janta Mantar and Mukherjee Nagar in Delhi, points out.

"There are places where we feel that there is unnecessary leverage given to English medium aspirants. But our overall demand is that the CSAT-II be completely done away with," Jaiswal insists.

While Neeraj wants Hindi simplified, many other agitators question the very need to introduce CAT-Ilike mental jogging questions in the UPSC format. They are demanding the scrapping of CSAT II on grounds that the scientific demeanour of CSAT II on grounds that the scientific demeanour of CSAT II on grounds that the scientific demeanour of CSAT II on grounds that the scientific demeanour of CSAT II on grounds that the scientific demeanour of CSAT II on grounds that the scientific demeanour of CSAT II on grounds that the scientific demeanour of CSAT II on grounds that the scientific demeanour of CSAT II on grounds that the scientific demeanour of CSAT II on grounds that the scientific demeanour of CSAT II on grounds that the scientific demeanour of CSAT II on grounds that the changing dynamics of society. Modern problems need modern mores of problems hooting which means that more than their dee

UNDERSTANDING THE FORMAT

"The CSAT was introduced in 2011 on the recommendations of the Alagh Committee. That year onwards, students were given two extra attempts and an age relaxation in order to compensate for the new pattern. The CSAT has two parts — I (100 questions) and II (80

ation in order to compensaie for the new pattern. The CSAT has two parts — I (100 questions) and II (80 questions).

"Part I is a test of general studies (History, Economics, Geography etc) while Part-II is about Basic Sumeracy, General Mental Ability, Analytical Ability, Logical Reasoning, Decision Making and Problem Solving, Comprehension (Both English A Hindi) and English Language Comprehension Skills (Xth level). Paper I and Paper II have equal weightage. The question paper comes in Hindi and English (not in any other Indian language); Ramdev Burman, an IIT Delhi alumnus and serving IAS officer in the Jammu cadre, explains. He says, the new format came into being because the Alagh panel members felt that the UPSC examination till then was too difficult and too detailed. "The CSAT makes it much easier for all students to crack the UPSC. It tests a candidate's agility, personality and working knowledge about all things around him and also tests his hold over the language. The UPSC has never been biased against any particular segment and CSAT is proof of that. The earlier versions of the test, right since the Indian Civil Services was introduced in 1862, a lot of stress was given to the English language but CSAT is very objective and has very little scope for detailed English language skill test. Surman says. He feels the Government should not buckle to the demand of doing away with CSAT II. There is a reason why they included topics under CSAT II. It is meant to guage whether the candidate has the ability and personality to be an administrative officer," he says.

ISSUE AT HAND

"Their issue now is that the language used in the Hindi version is tough and, at times, even inaccurate. The language should be simple and correct. This is a serious issue and should be dealt with. But its scrap-ping Paper II the solution? Why is no one bothered



about the language used in posing the questions in the Hindi version of CSAT Paper I? Why does the problem exist only with Paper II? Is the issue actually language or inability to deal with aptitude questions, asks Porf KD Mohapatra, guest lecturer with the IAS coaching institute. Mohapatra was involved in setting questions paper for the UPSC Mains Examination for Sociology in 2009.

the UPSC Mains Examination for Sociology in 2009.

The serious issue aspirants have is that the paper has 8 questions out of 80 on the English language skill test. These are printed only in English and are supposed to be of Class 10 level. It is not as if we cannot answer these queries. The problem is with the idea of having a separate English language skill set. Why have it? Doesn't that give an edge to English medium aspirants? In the UPSC, even two marks make a huge difference so why are they being served with these 17-odd marks, asks Manjeet Singh who is heading protests on the Jamia

with these 17-odd marks, asks Manjeet Singh who is heading protests on the Jamia campus and al Intant Mantar. Although he cleared his preliminary examination last year, Singh says it was a Herculean task for him to complete CSAT II.

Moving on from the Prelims, some aspirants even have a problem with the Mains, each student has to pass two exams of two languages (English is mandatory, second language paper optional). The papers are supposed to be of 10th Standard level. Students only have to pass in them. The marks are not added for ranking. The allegation is that the English paper is usually tough and it is not possible for Hindi

GROWING CHANT AGAINST CSAT

■ CSAT was introduced in 2011. That year onwards, students have been given two extra attempts and an age relaxation. CSAT has two papers: [100 questions) & II (80). ■ Besides the angre about English being given the edge, he issue has now diversified to other points — that the language used in the Hindi version is tough and needs to be simplified; and that the CSAT II has a bias against students from the Humanities strain. ■ Agitating asylariants now say that the Mains exame English paper is tough and it is not possible for Hindi and other medium students to obtain even pass marks (75/000) in it. ■ Often, non-English medium students are queried in and forced to answer in English during the interview.

Data from UPSC's annual report shows that after the CSAT format was introduced in 2011, there has been a drop of 15% in civil services recruits from the Humanities background

BEFORE POLITICISING THE DEBATE AND DEMANDING THAT UPSC QUESTION PAPERS COME IN AN ALL-LANGUAGE FORMAT, IT WOULD BE PRUDENT TO FIRST STRIKE AT THE ROOT OF THIS ENGLISH VERSUS OTHER MEDIUMS PROBLEM. SHOULD WE FIRST NOT PROVIDE THE TEXTBOOKS BY EXPERTS IN HINDI AND ALL OTHER REGIONAL LANGUAGES? THE DISADVANTAGE FOR NON-ENGLISH MEDIUM STUDENTS STARTS WAY BEFORE THEY ATTEMPT THE UPSC AS MOST TEXTBOOKS REQUIRED TO CLEAR THE EXAM ARE IN ENGLISH

MANOJ DWIVEDI, MD, SIDDHANT CAREER CONCEPTS

and other medium students to obtain even pass marks (75/300). That is absurd. The questions are all very basic. If you cannot answer even 75 of the 300 grammar questions, you don't deserve to be an administrative officer. There are many State level services for such aspirants, professor DK Upadhyay, faculty of Pratham Tutorials in North Delhi, says.

Protestors beg to differ. According to many who appeared for the Mains in 2013, the English language questions were definitely not of 10th Standard level. "There were questions asked on onomatopoeic (sound) words. That is not Class 10 level. We prepared with the toughest grammar books we could lay our hands on but we couldn't even answer 25 questions, let alone 7510 urd demand is not that the paper be scrapped. We only want the UPSC to keep its promise of the queries being of Class 10 level," Rau's Tutorial's student Aditi Balsavar, who will be taking the exams again this year, says.

The third issue is about the interview level. As per the format, an aspirant can choose any language (out 02 3 listed) as his/her language of interview. The allegation here is that, offen, non-English medium students are queried in and forced to answer in English during the interview. While aspirants who have faced such interviews feel this is the interview boards ploy to guage an aspirant's stress handling capacity, others say that the idea of asking a flindi medium candidate a question in English defeats the purpose of having separate languages in the first place.

"It's rubbish to say English queries test a person's stress level. There are other ways of doing that. Why strike at a person's regional or language problems? If the panel feels that only speaking good English guarantees a place in the Civil Services, they should remove other language preferences. Otherwise, it's is a pseudo approach," Balsawar asserts.

Academia across the country feels that the demand should have been to make the language simple in the Hindi version and not to scrap CSAT II. It is fine to remove those eight English skill test questions, but questions on Basic Numeracy, General Mental Ability, Analytical Ability, Logical Reasoning, Decision Making, Problem Solving and Comprehension must stay." In the changing scenario of globalistic to deal with a wide variety of which may be that of a district magistrate of a tribal area or a metro city, or a service in the world office such a variety of job profiles. If the aspirant cannot pass an aptitude test, it's a sign of incapacity and such people are incompetent for the civil services. There are other jobs in banks, State, the services and leave this elite services for those services and leave this elite service for those capable and competent for the first continuation of the competent for the services for those capable and competent for this profile. If CSAP II is cancelled under political compulsion, it will hamper the much desired reforms process in the civil services. Mohapatra says.

Like it or not, you just can't do without English

Subodh.Varma@timesgroup.com

he CSAT imbroglio has willy-nilly stirred up divisive language passions, and political brinkmanship. Some argue for more importance to Indian languages, others for embracing English, seeing it as a global lingua franca.

India isn't unique in having many languages. Indonesia has 706 compared to India's 406. China has 298, Russia has 105. Tiny Cameroon has 280. What makes India unique is the number of people speaking different languages within the country. In most other countries, one language dominates. In China, nearly 93% of its 1.3 billion speak Chinese, in one of its variants. Same is the case with German, French, or Japanese — they're spoken by a majority of the population. Most of the Third World has local languages, and often, a national language borrowed from colonial times.

India has large numbers of people with diverse first languages. Hindi is spoken by over 420 mn making it the country's largest language, not the majority one. Some languages spoken by large numbers include Bangla by over 80 mn, Telugu by 74 mn, Tamil by over 60 mn. These figures, from Census 2001, (the 2011 figures haven't been released) give an idea of the complex language issues.

COUNTRY CODE		India	
Who Speaks What, Where		Living Languages	147
France 65m French	Russ Fed 143 Russian 137	English as second land Hindi	4221
69.8m	Indonesia 238 Bahasa Indonesia 23 As second language 140 Javanese 84	Assamese Bangla Gujarati	132 834 461
Germany China Japan 80 1283 128 German Chinese Japanese		Kannada Malayalam Marathi	379 331 719
German Chinese Japanese 1197 Country		Oriya Punjabi	330 291
Population (million) Main Language Speakers (million) Source: Ethnologue and Census 2001	Malaulaca	Tamil Telugu Maithili	608 740 122

What does this imply for governance? The local administration must be well versed in the local language so there's a bridge between people and those administering. It means all languages need the opportunity to flourish through state encouragement, and promoting regional language speakers into administration.

This must be balanced with the reality of contemporary times — increasingly, English has become the language of choice for international business. This is because of history and the economic power that resides in Anglo-Saxon countries. English is the world's third most-spoken language with 335 mn primary speakers in 99 countries. Chinese is the most spoken with 1,197 mn speakers in 33 countries, followed by Spanish by

414 mn in 31 countries.

But English is now the second language for 505 mn more people, apart from the 335 mn primary speakers. The IT revolution has boosted the status of English. A reported 45% of web-pages are in English. Finnish telecom major Nokia and German softwarecompany SAP use English as official language. English learning is seen as a way of moving up. A British Council study estimates that by 2020, 2 billion people will study English. Even in China, with a highly-developed language, more people are studying English than in any country, and 100,000 native English speakers are teaching there.

While some solution will be found for CSAT, more important is to improve language teaching in schools. HINDUSTAN TIMES (EDUCATION) ND 6/8/2014 P-4

Change is good. Let us get set for the new CAT

MOVING ON The test window has been reduced from 40 to four slots, spread over two days. You have an extra month for preparation as CAT starts in November



CAT '14 has incorporated many of the changes – a two-day test window with four test slots, more questions, test in early-November, etc.

However, before we look at what the changes in CAT mean for your preparation, let us first understand the full magnitude of the changes. When we talk about any test, there are three important elements to consider – the test canvas, ie the basic details of the test, the test structure, which refers to the overall pattern of the test and, finally, the test content, which refers to the finer details of the test such as difficulty level, question types, nature of questions, etc.

CHANGES AND IMPLICATIONS

■ The Test window has been reduced from 40 slots to just four slots spread across two days. Do note that you do not have an option of choosing your slot – a test slot will be directly allotted to you. This means that students no longer need to bother about which date to choose for their test. It is entirely possible that CAT '14 may not utilise all four slots. Depending on the number of test takers, all tests may get administered in just two slots.

Hopefully, the biggest impact of this change would be that the problems that plagued the last few CATs would not surface this time around. Issues such as common questions across tests, leakage of tests, normalisation and credibility of the test, problems with penalty for errors and



weight to accuracy, etc. should be a thing of the past. For students, of course, this is welcome news.

CAT has shifted from an October start to mid-November. This means that students have an extra month to prepare. Do ensure though that you do not put off your preparation; do not relax. The best candidates will utilise this additional time appropriately and will be better prepared for the test. These candidates will be your real competition. So do not slow down; ensure that you use this time well.

The number of cities in which CAT will be conducted has increased from 45 to 99. This may lead to an increase in the number of test takers. Again, this means greater competition and hence, the need to prepare better for the test.

CHANGES TO THE TEST STRUCTURE

The number of questions in CAT has increased from 60 to 100. Past experience reveales that when the number of questions has increased, the level of

difficulty has reduced. Further, the increase in number of questions implies that candidates have more questions to choose from. Thus, an increase in cutoffs is likely.

The duration of the test has gone up from 140 minutes to 170 minutes. This means that stamina becomes more important. You need to be able to focus and perform at your peak for nearly three hours. Hence, it becomes even more important for you to take as many mock tests as possible so that you have good practice of taking three-hour tests.

The available time per question has reduced from 140 seconds to 102 seconds. This implies that a higher reading speed and greater efficiency in calculation will be very important. These will ensure that you are able to attempt the maximum number of questions possible.

Sectional time limits are no longer applicable. The test will have two sections: Section I comprising Quantitative Ability and Data Interpretation and Section II comprising Reading

TWO FACTS

- CAT has sectional cutoffs so you cannot spend all your time on your favourite sections. You need to do well in both sections in order to be considered for calls from good B-schools
- As you have the freedom to move across sections, the test might be scrollable on the same screen

Comprehension, Verbal Logic. English Usage and Logical Reasoning. Test takers can move across sections as and when they wish to. This implies that CAT will no longer be a subject proficiency Test; it will be a genuine aptitude test. In a subject proficiency Test, time management and test taking strategy have lower importance. All candidates have a fixed number of questions to attempt in predetermined amounts of time. In an aptitude test though, you have greater freedom in choosing how you allocate the time available to you. Thus, a proper test taking strategy is critical to performing well in such tests. The important elements of a good test taking strategy are:

1) the amount of time to allocate to different sections

2) the amount of time that you can afford to spend on any one question

3) question selection – which questions to attempt and which to leave

4) the sequence of attempting different sections and different question types.

In order to fine-tune these and perform well in the actual test, you need to practice a lot of mock tests so that you can identify what works best for you.

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Hindustan Times ND 6/08/2014 P-10

IGNOU distances itself from online courses

Chetan Chauhan

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NEW DELHI: To strike a balance between fund constraint and expansion, the country's national distance education provider, the Indira Gandhi National Open University (IGNOU) has ended its teleconferencing for students and free distance online course material.

India's only education channel Gyan Darshan, anchored in IGNOU, has stopped broadcast for the first time since its launch in 2000.

IGNOU has blamed the HRD ministry for the abrupt disruption. "We have been told that the

license will be renewed soon and the broadcast will resume," said a senior IGNOU official.

The university's popular teleconferencing programme helped students, in far-off districts, to get tutorials from experts at IGNOU. University vice chancellor Mohammad Aslam said the teleconferencing had been replaced by "modern" and "better" web-based conferencing where students could seek replies to their questions at a designated time. However, IGNOU officials say that web conferencing was not working as many regions did not have good broadband connection.

Another popular on-line education tool, the e-gyankosh, has been dysfunctional for the past month as the university has not updated any content on the web portal. The virtual classrooms on IGNOU's web portal has also been dysfunctional for some time.

University insiders say that portal-based education was very popular with students pursuing distance education courses from IGNOU and other universities in India. "As the university is considered a leader in distance education, its content is superior to that of the state distance education providers," a university official said.

Aslam said the university has to judiciously use its resources as the courses are not subsidised.

FALLING BEHIND

- Education channel Gyan Darshan anchored in IGNOU has stopped broadcast for the first time since its launch in 2000
- The university has ended teleconferencing for students and free distance online course material.
- Online tool, e-gyankosh, has not been updated for a month
- IGNOU's virtual classrooms on its portal have also been dysfunctional for some time.

Top honour for scientist behind DNA fingerprinting

he man who discovered DNA fingerprinting has won the world's oldest science prize - Royal Society's Copley Medal. In 1984, Sir Alec Jeffreys stumbled on a method for distinguishing individuals based on their DNA. It was a discovery that went on to transform forensic science and resolve questions of identity and kinship. He received the medal "for his pioneering work on variation and mutation in the human genome". The Copley medal was first awarded by the Royal Society in 1731, 170 years before the first Nobel Prize. It is awarded for outstanding achievements in scientific research and Charles Darwin, Michael Faraday, Albert Einstein and Stephen Hawking are some of the recipients. TNN

Uncertainty begets opportunity

No product or service can be a product or service without first having been an idea that was shaped through experimentation

STEFAN THOMKE

With the highest voter-turnout in the history of the Indian general elections and the victory of Prime Minister Narendra Modi, business leaders are optimistic that the business environment will continue to improve and economic growth will be strong. Still, with change comes uncertainty: No one knows how markets will play out or how regulations may shift. But this, too, is good news. Executives have only to benefit from embracing uncertainty: It opens the door to opportunity, in particular, to driving growth through innovation (DGTI).

Why does DGTI work? For starters, past experience can be limiting. Consider the case of W James McNerney. who became CEO of 3M - the nimble inventor of Scotchguard and Post-It notes - in 2001. Relying on his successful less-is-more strategy as an executive at General Electric, McNertightened budgets, cut thousands of workers, and implemented Six Sigma, to standardise processes and minimise variability. The result? Efficiency trumped innovation: Whereas in the past, one-third of sales had come from new products (released in the previous five years), by 2007 that figure had sunk to one-quarter. "Invention is by its very nature a disorderly process," CEO replacement George Buckley told BusinessWeek's Brian Hindo in a 2007 article, after he stepped in to undo the damage.

Important questions

That disorderly process is driven by managerial vision. Innovation requires moving beyond past experience and intuition to experimentation. Indeed, experimentation and variation are the lifeblood of innovation. They enable companies to learn how to not just manage but grow from addressing sources of uncertainty across all company domains: R&D (will the product work?), production (can it be effectively manufactured?), customers (will it address needs?), and the business itself (does the opportunity warrant the investment?). No product or service can be a product or service without first having been an idea that was shaped through experimentation.

In a "perfect" business experiment, managers separate an independent variable (the "cause") from a dependent variable (the "effect"), and manipulate the first to see changes in the second. However, the real world is rarely so tidy: Compa-

nies face changing environments, poorly understood relationships among variables, and uncertain/unknown variables. So managers must be prepared to iterate through experiments, as well as to know when to pause and observe or explore rather than act directly. New technologies computer simulations, rapid prototyping-have changed the economics and the analytical time-line of experimentation. Thus, the process need not be daunting if companies match the level of uncertainty with the appropriate testing mechanism: Structured cause-and-effect experiments, informal trial-and-error experiments, or rigorous randomised field trials.

Randomised trials

When managers know all relevant variables, they can use formal statistical techniques and protocols to develop and analyse the most efficient experimental designs to improve production processes and new products. Such structured experiments are now being used for incremental

process optimisation and for studies investigating large solution spaces to find an optimal response of a process. Randomised field trials, modelled after drug-development trials, can pinpoint a specific change (say, a new layout for retail stores) and see if it leads to improved performance (increased sales). In medicine, the process entails randomly selecting two groups from a pool of people with the same disease.

One group receives treatment, the other (control) group a placebo. If the treated group does statistically better than the control, the treatment shows efficacy. Finally, to use experimentation successfully, companies must be willing to fail - to quickly drop bad ideas and pursue breakthrough ones. Google, for one, sees failure as part of doing business. In 2010, to test search-engine improvements, it investigated over 13,000 proposed changes, of which raters tested and evaluated 8,200. A subset of users evaluated 2,800 of those in a Google sandbox, and a committee analysed the results. In the end, just 516 were implemented. Google's failure rate? Above 95 per cent. DGTI means applying these principles (and much more) to the entire organisation - when the market is up, and when it's down, to keep the pipeline of new products, services, and business models flowing for when things turn around. It starts with executives making key decisions about strategy and resource allocation, and continues through strategy execution, process design, marketing, and operations - leveraging disruptive technologies and engaging customers as partners in the innovation process.



The writer is the faculty chair of the Harvard Business School Executive Education programme 'Driving Growth Through Innovation, India'.

Getting the best out of consultants

It is for a client to know what to ask and expect of a consultant. He can be a listening post, a pressure release valve and a raconteur

TT SRINATH

A couple of months ago I was invited by an internal consultant to meet the Managing Director of a large infrastructure organisation, who ostensibly was grappling with people issues. On beintroduced to prospective client, I was asked by the client to recount the consultant's brief to me. My attempt was to lay bare what I had assimilated and also suggest our manner of

Yet even as I began the conversation I sensed I was misaligned with the prospect. All that I was saying did not find favour with him and he kept correcting me. Shortly into the meeting I realised that I was attempting to make meaning, based on inputs received, and this was not reso-

nating with the client.
I paused and asked the client to tell me what he wanted from me. The client was a little confused and told me that I had to tell him what I could offer.

The conversation ran aground and I departed sans the

My realisation as I left his office was the uncomfortable truth that I as consultant had failed to assess client need. However, more importantly I realised that the client was unclear on what he

wanted from me and this left both of us floundering. I have re-cently been retained by two organisations, one a large manufacturing company and another, an supporting a school

To both these organisations I have been invited to assess, diagnose and explain the phenomena which the organisation is coping with. While the obvious invitation is to understand, explain and interpret, clients perhaps do not recognise that such a process can be reductive, narrow the context of the true meaning, and sometimes encourage consultants to retrofit their previous knowledge current

explanation.
What the client must understand is that if a consultant takes such an approach he tries to explain the phenomena, not necessarily understand it.

His attempt will be to take the phenomena apart, to atomize them, in order to reconnect them into something that carries consultant's meaning rather than the client's.

Linear progression

It is by broadening the context that a fuller understanding of the troubling phenomena is reached; then the consultant bethe situation is possible. Undercomes a co-creator whose aim is standing grows not by narrowing it to a cause and effect linear only to assist in clarification. The context is always the client's progression but by extendand it is therefore his ining the range of questionterpretation that is likeing and broadening the ly to increase under

standing. A consult-ant cannot be an expert 'discovery inon the client's situations

web of possibilities. The The consultant can only ask to enable the client who is in consultant, the client must understand, is no expert in deciphering phenomena. The conin which the understanding of sultant, however, can help clients to open up to the phenomena without trying to decipher them. Therefore, it is for the client to know what to ask and expect of the consultant. Typically, a client can employ the consultant to mirror back what he is saying, to ask the consultant to be a listening post, a pressure release valve and a raconteur. Likewise a consultant may recognise that the manner in which he asks questions, the grammar that he em-ploys, tone of voice, the use of ords and the direction of the enquiry will cause the client to respond accordingly.

Clients therefore must encourage consultants to elicit from them responses to questions like 'What is?' 'What might be?' and 'What should be?' They must give the consultant the freedom, the support and the encouragement to help them see the whole than the sum of its parts, help them see connections and relationships, enquire into assumptions and create a shared meaning with the consultant.

Voice into the system

Unless consultants know, think and feel that they are being accepted, unconditionally, positive orientation, appreciated for what they bring and are well disposed to, consultants will tend to become guarded, perhaps less open and most often

prescriptive.
Clients should not lull themselves into believing that consultants can offer prescriptions. They must realise that the consultant only brings to the relationship and engagement eclectic wisdom gained over several contacts that he has made and the ability to look at the situation dispassionately. Clients should not employ consultants to 'voice into the system' their anxieties nor use consultants to mouth their

Consultants must have the latitude and freedom, much like a coach to be able to say it as it is and it is for the client to glean meaning and essence.

When clients hire a consultant with faith and belief in their competence and trust that the consultant means well and is sincere, the ensuing collaboration will be rich and fruitful.

Anything short of an unconditional, positive, appreciative and acknowledging engagement of the consultant will not achieve what the relationship was set out

The writer is an organisational and behavioural consultant.

Now, connect battery-free devices to Wi-Fi

Tech Uses Radio Signals As Power Source

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London: Scientists have created the world's first technology that can connect battery-free devices to Wi-Fi.

University of Washington researchers say soon your wristwatch or other wearable device will communicate directly with your online profiles, storing information about your daily activities where you can best access it—all without requiring batteries. Or maybe battery-free sensors embedded around your home could track minute-by-minute temperature changes and send that information to your thermostat to help conserve energy.

The university's engineers have designed a new communication system that uses radio frequency signals as a power source and reuses existing Wi-Fi infrastructure to provide internet connectivity to these devices.

Sensors could now be embedded in everyday objects to help monitor and track everything from the structural safety of bridges to the health of your heart. But having a way to cheaply power and connect these devices to the internet has kept them from taking off.

"If such devices are going to take off, we must provide connectivity to the potentially billions of battery-free devices that will be embedded in everyday objects," said Shyam Gollakota, a University of Washington assist-

Fastest external phone charger developed

Researchers have invented the world's 'fastest' external phone charger which ends the need to plug your smartphone into an electricity socket and can charge your device in 15 minutes. The Petalite Flux battery is small enough to fit in a pocket and has been created by Leigh Purnell, an Aston University graduate. It will be launched on the Indiegogo crowdfunding website. PTI

ant professor of computer science and engineering. "We now have the ability to enable Wi-Fi connectivity for devices while consuming orders of magnitude less power than what Wi-Fi typically requires."

This work builds upon previous research that showed how low-powered devices such as temperature sensors or wearable technology could run without batteries or cords by harnessing energy from existing radio, TV and wireless signals in the air. This work takes that a step further by connecting each device to the internet, which previously wasn't possible.

The challenge in providing Wi-Fi connectivity to these devices is that conventional, low-power Wi-Fi consumes three to four orders of magnitude more power than can be harvested in these wireless signals.