

Newspaper Clips

May 26-27, 2013

May 26

Hindustan ND 26/05/2013 P-5

मैकेनिकल इंजीनियरिंग के लिए आईआईटी दिल्ली देश में अक्वल

नई दिल्ली | कार्यालय संवाददाता

मैकेनिकल इंजीनियरिंग की पढ़ाई, प्लेसमेंट, सुविधाओं और नए प्रयोग के मामले में आईआईटी दिल्ली देश भर के शिक्षण संस्थानों में अक्वल है। नतीजतन, इंजीनियरिंग की इस शाखा की डिग्री हासिल करने के लिए दुनिया भर के छात्र आईआईटी दिल्ली की ओर रुख कर रहे हैं। विश्व भर के शिक्षण संस्थानों की गुणवत्ता जांचने वाली ब्रिटेन की क्यूएस वर्ल्ड शोध कंपनी की ताजा रैंकिंग इस बात की तस्दीक करती है। बता दें कि शोध कंपनी ने विश्व भर के 2000 मशहूर शिक्षण संस्थानों की रैंकिंग जारी की है।

क्यूएस वर्ल्ड यूनिवर्सिटी की ताजा रैंकिंग के मुताबिक, मैकेनिकल इंजीनियरिंग के लिए भारत में आईआईटी दिल्ली पहले स्थान पर है। इतना ही नहीं, ऑक्सफोर्ड, हार्वर्ड जैसे मशहूर विश्वविद्यालयों को पछाड़ते हुए आईआईटी दिल्ली ने मैकेनिकल इंजीनियरिंग में दुनिया में 43 वां स्थान

हासिल किया है।

बेंगलुरु स्थित भारतीय विज्ञान संस्थान (आईआईएससी) का मैकेनिकल विभाग देश में दूसरे स्थान पर रहा है। इसे विश्व में 60वां स्थान दिया गया है। आईआईटी दिल्ली के उपनिदेशक (ऑपरेशन) एसएन सिंह ने खुशी जाहिर करते हुए कहा कि उनका संस्थान कई सालों से बेहतरीन शिक्षा देने का प्रयास कर रहा है। उन्होंने बताया कि आईआईटी दिल्ली में मैकेनिकल और

इतवारि खास

कैमिकल इंजीनियरिंग के लिए साल दर साल छात्रों में कड़ा मुकाबला देखने को मिल रहा है। इन दोनों ब्रांच के लिए आवेदकों की संख्या में 35 फीसदी तक वृद्धि देखी जा रही है। रैंकिंग संस्थानों की फेकल्टी, शिक्षा पद्धति, प्लेसमेंट और सुविधाओं के आधार पर जारी की गई है। विश्व में मैकेनिकल की पढ़ाई के लिए पहला स्थान अमेरिका के मैसचुसेट्स इंस्टीट्यूट ऑफ टेक्नोलॉजी और दूसरा स्थान लंदन की केंब्रिज यूनिवर्सिटी की मिला है।

कैमिकल व कंप्यूटर साइंस में दूसरा स्थान

कैमिकल, कंप्यूटर साइंस समेत सिविल इंजीनियरिंग में आईआईटी दिल्ली देश में दूसरे स्थान पर और विश्व में 59 वें स्थान पर है। कंपनी के शोध के अनुसार, इन तीनों विषय की पढ़ाई के मामले में देश में पहला स्थान आईआईटी मुंबई को मिला है। वह विश्व में 39 वां स्थान पाने में कामयाब रही है।

देश की सबसे आधुनिक लैब

आईआईटी दिल्ली के मैकेनिकल विभाग के प्रो. एम.आर. रवि ने बताया कि देश में जितनी भी आईआईटी हैं उनमें मैकेनिकल विभाग की सबसे आधुनिक लैब आईआईटी दिल्ली में है। यहां 165 से ज्यादा नई प्रौद्योगिक के उपकरण हैं। इस लैब की खास बात यह है कि यहां प्रयोग के लिए कई ऑटोमोबाइल कंपनियों आती रहती हैं। ये बाजार की नई तकनीक छात्रों से साझा करती हैं और उनकी परियोजनाओं का आकलन करती हैं।

आईआईटी दिल्ली में कितनी सीटें

- 75 सीटें हैं मैकेनिकल में
- 80 सीटें हैं सिविल इंजीनियरिंग में
- 45 सीटें हैं कंप्यूटर साइंस में

मैकेनिकल इंजीनियरिंग
2012 में 51वां स्थान
2013 में 43 वां स्थान



क्या है क्यूएस कंपनी

ब्रिटेन की क्यूएस कंपनी दुनिया भर में शिक्षण संस्थानों पर रिपोर्ट व रैंकिंग जारी करने वाली दुनिया की शीर्ष दस शोध कंपनियों में से एक है। इसने 2004 में पहली रैंकिंग जारी की। विश्वविद्यालयों के सालाना प्रदर्शन के आधार पर रैंकिंग जारी करती है। 2008 से देश के आईआईटी संस्थान इसकी रैंकिंग में जगह बना पाने में कामयाब हो रहे हैं। इसे ब्रिटेन की क्वॉलिटी एश्योरेंस प्रोजेक्ट फॉर हाइपर एजुकेशन (विश्वविद्यालयों को मान्यता देने वाला प्राधिकरण) की रैंकिंग में छटा स्थान मिला हुआ है।

नौकरी में लहराया परचम

35 लाख का पैकेज मिला 2011 में आईआईटी दिल्ली के मैकेनिकल के एक छात्र को
67 लाख का पैकेज मिला 2012 में मैकेनिकल के दो छात्रों को

100 फीसदी प्लेसमेंट रहा बीते पांच सालों में मैकेनिकल और इलेक्ट्रिकल और कंप्यूटर साइंस में

स्रोत: आईआईटी दिल्ली

- ब्रिटेन की क्यूएस वर्ल्ड शोध कंपनी ने विश्व भर के 2000 मशहूर शिक्षण संस्थानों की रैंकिंग जारी की
- ऑक्सफोर्ड को पछाड़ते हुए आईआईटी दिल्ली ने मैकेनिकल इंजीनियरिंग में दुनिया में 43 वां स्थान हासिल किया

Indian Express ND 26/05/2013 P-4

IITians teach madrasa teachers physics, maths

SEEMA CHISHTI
NEW DELHI | MAY 25

A TEAM of physicists from IIT-Delhi is conducting a five-day workshop to teach the subject to madrasa instructors in Taleemabad, near Jamia Hamdard. Speaking to a class of 30 madrasa instructors-turned-students, Vipin Tripathi, Dr Sanat Mohanty and Dr Pawan Kumar began their workshop by talking about bridges. The earnest maulanas, from Delhi and Faridabad, participate enthusiastically, as they are asked to figure out why a corrugated sheet makes for a sturdier bridge than a plain one. Principles like elasticity are explained effortlessly as instructors talk of building a bridge in a village.

The metaphor is carefully

chosen, as Dr Sanat Mohanty, an IIT professor, tells them that the idea is to respect differences.

"There are several ways of handling oppression. We need different tools to tackle it. Just sheer power is sometimes not enough. We need to enhance our capabilities, understand and improve critical thinking among youngsters and allow them to play with complex ideas, theories, be able to distinguish right from wrong and handle injustice. And build bridges with people different from us," he says.

Teaching the madrasa instructors is one of many such initiatives piloted by Sadbhav Mission, a 24-year old organisation working for peace and amity by enhancing the skills of those considered margin-



Thirty maulanas are attending the 5-day workshop in Taleemabad, near Jamia Hamdard

alised, helping them find virtue in education, beyond careers, and to enable them claim their rights.

Led by former IIT professor Vipin Tripathi, who has done similar work in Gujarat, Bhagalpur and Azamgarh, Sadbhav Mission's objective

is to de-jargonise mathematics and science and use fundamental principles, to help teachers, who live in neglected areas, discover a sense of liberation in science and strengthen rational thinking.

After two days of physics and engineering, there

would be three days for mathematics, where principles of banking, accounts, elementary calculations of profit and loss and plotting graphs would be explained, enabling those present to manage small businesses and organise their lives.

Ismail Ghazi of Hamdard Education Society, who has organised this workshop, said: "Several people, who have only attended a few workshops, have set up computer training schools, small training centres, or even helped their students organise household accounts or manage their shops better."

Naeem Azhar, a mathematics teacher at Milli Model School in Abul Fazal Enclave who attended the workshop, said: "I have learnt some new ideas on how to explain complex things to students."

Yamuna Vihar-based Shaor Ahmed of the Shiksha Adhikar Abhiyan, says: "We have to start a movement that makes the government ensure that India is educated, irrespective of class or community."

IIT-B buries birthday bumps in the dumps

Cases Of Injuries Prompt Ban On 'Violent' Custom

Yogita Rao | TNN

Mumbai: Birthday bumps, considered a custom across student hostels to call in a friend's birthday, is history in IIT-Bombay. A source of fun, it is now being seen as a potential danger to the physical well-being of students. After all, students' accounts of this traditional affair — spraying deodorant and setting the back on fire, bathing the birthday boy with garbage bins full of ants, trying to lift a student to bash him up, hitting the student with slippers or belts for an average of



one hour — does sound scary.

Following some cases of injuries caused due to the bumps — 'GPL' in IIT-B lingo — the institute has called for a ban on the 'custom'. In a notice sent to students, officials said birth-

day bumps will be treated on a par with ragging and the same norms will be applicable.

The circular warned students with stringent action, without specifying the nature of punishment. General

secretaries of the hostels and hostel councils have been made responsible for implementation of the ban. "A note against this practice was also issued by the students affairs office earlier. I just reiterated it as some reports say they go out of hand once in a while," said U A Yajnik, the dean.

However, the authorities had not received any formal complaint from students as the birthday boys, or rather victims, refused to approach the authorities against their friends. While some students supported the ban, other said they have continued with the practice. The students' magazine, 'Insight', recently carried an article that presented both the sides of the practice. "People would be ready to bear the brunt of a huge mob because it shows that they have a large following and a good social circle," argued a pro-GPL student in the article.

May 27

Indian Express ND 27/05/2013P-1

IIT-K called in for detailed study on city pollution

APURVA

NEW DELHI, MAY 26

CONCERNED ABOUT rising levels of air pollution in the city, the Delhi government has commissioned IIT-Kanpur to conduct a comprehensive study of pollution levels and causes. The government plans to use data to formulate a policy to control and reduce air pollution, and initiate a second-generation air action plan.

Commissioned last month, the IIT-K study will be the most comprehensive study since the 2007 Central Pollution Control Board and National Environmental Engi-



neering Research Institute report. Director of Environment department Anil Kumar told *Newsline*: "We need data for a policy framework and so we commis-

sioned a fresh study." The Environment department said the predicted levels of air pollution indicators in 2017 — such as sulphur dioxide, suspended particu-

10 YEARS OF POLLUTION

POLLUTANT	2007	2017
Suspended particulate matter	9.7	15.4
Carbon monoxide	217.7	336.2
Hydrocarbons	66.7	104.6
Nitrous oxides	84.1	138.1
Sulphur dioxide	0.72	1.3

* All figures in tonnes per day

Study will also look at air pollution due to construction dust. EXPRESS ARCHIVE

late matter and nitrous oxides — showed drastic increases, thus necessitating the report.

The IIT-K study, to be complete between 12 and 18 months, will

analyse the contribution by different sources to air pollution and document new sources of pollution.

"The city has witnessed vast changes in the past five years and there are new sources of pollution that have not been studied before. We also found that the contribution to air pollution from known sources has also changed," a senior Environment department official said.

The IIT-K report will also recommend possible ways of reducing and controlling air pollution.

According to the Environment department, the contribution to air pollution from industries, vehicles, burning of waste and leaves and

construction dust will be studied.

"Air pollution due to construction dust is something that has never been studied before," Kumar said. He added that the IIT-K study will also look at rising levels of greenhouse gases.

Recently, the Environment department moved a Cabinet note regarding the second-generation air action plan, which at present is with the Law and Finance departments for consideration.

"This Cabinet note aims at formulating a framework on controlling and reducing air pollution and preventive measures available," a source in Delhi government said.

Dainik Bhaskar ND 27/05/2013 P-2

आबोहवा का अध्ययन करेगा आईआईटी

दिल्ली सरकार की पहल वायु प्रदूषण के दुष्प्रभाव को देखते हुए लिया फैसला, प्रदूषकों के स्रोत एवं बचाव की मिलेगी जानकारी

भास्कर न्यूज़ | नई दिल्ली

दिल्ली सरकार ने आईआईटी कानपुर को राजधानी की आबोहवा को खराब करने वाले सभी स्रोतों की पहचान करने, उससे बचने और हवा की गुणवत्ता में सुधार के उपाय सुझाने के लिए अध्ययन करने का काम सौंपा है। सरकार आईआईटी के अध्ययन से मिले नतीजों के आधार पर हवा की गुणवत्ता में सुधार लाने व उसे हमेशा बनाए रखने की नीति तय करेगी। वायु प्रदूषण से सेहत पर हो रहे दुष्प्रभाव को लेकर सरकार ने यह फैसला लिया है। इस बीच, राजधानी

में आबोहवा को दुरुस्त करने के लिए पर्यावरण विभाग ने एयर एक्शन प्लान का मसौदा तैयार किया है। मसौदे में हवा को प्रदूषित करने वाले हर स्रोत पर काबू पाने की योजना बनाई गई है। यह मसौदा जल्द ही दिल्ली कैबिनेट में मंजूरी के लिए पेश होगा।

विभाग के निदेशक डॉ. अनिल कुमार ने बताया कि राजधानी में सबसे अधिक 70 फीसदी प्रदूषण वाहनों की वजह से होता है। दिल्ली सड़कों पर करीब 74 लाख वाहन दौड़ते हैं। इसके बाद 20 फीसदी प्रदूषण उद्योगों के चलते है और बचा 10 फीसदी प्रदूषण जेनरेटर, निर्माण

कार्य, खुले में कुछ भी जलाने व अन्य कारणों से होता है। 2007 में राजधानी में एयर एक्शन प्लान बना था, वह पांच साल के लिए था। उस समय हवा में शामिल कार्बन मोनो ऑक्साइड की मात्रा 217.7 टन प्रति दिन, हाइड्रो कार्बन की मात्रा 66.7 टीपीडी, नाइट्रोजन के एसओटू की मात्रा 0.72 टीपीडी और एसपीएम की मात्रा 9.7 टीपीडी थी और अनुमान था कि 2017 में क्रमशः 336.2, 104.6, 138.1, 1.3 और 15.4 टीपीडी हो जाएगी। लेकिन राजधानी में प्रदूषण फैलाने

वाले कारकों के संबंध में कोई पुख्ता आंकड़े उपलब्ध नहीं है। डॉ. कुमार ने कहा, 'यदि आप किसी नीति की रूपरेखा तैयार करना चाहते हैं तो आपको डेटा चाहिए, इसी को देखते हुए आईआईटी को दिल्ली की हवा का समग्र अध्ययन करने का जिम्मा सौंपा गया है।' आईआईटी से सभी प्रदूषण कारकों को पहचानने के अलावा हवा को प्रदूषित करने में उनकी भूमिका का अध्ययन करने के साथ यह सुझाव देने के लिए भी कहा गया है कि किस तरह से दिल्ली की हवा की गुणवत्ता में सुधार लाया जा सकता है। आईआईटी से ग्रीनहाउस

गैस के प्रभाव को देखने के लिए भी कहा गया है। निर्माण कार्यों से पहले डस्ट कंट्रोल रेग्युलेशन के मुताबिक मंजूरी लेने को अनिवार्य करने, फिटनेस सर्टिफिकेट के नए मानक तय करने जैसे प्रस्ताव भी शामिल किए गए हैं। विभाग ने एयर एंबिएंस फंड बनाया है, जिसका इस्तेमाल सोलर एनर्जी के घरेलू इस्तेमाल व सड़कों पर बैटरी चालित गाड़ियों को बढ़ावा देने में किया जाएगा। यह फंड 2007 से ही डीजल की बिक्री पर 25 पैसे प्रति लीटर वसूला जा रहा है और यह अब तक 134.87 करोड़ रुपए हो गया है।

HRD ministry needs to revisit higher education

Nandini Sundar

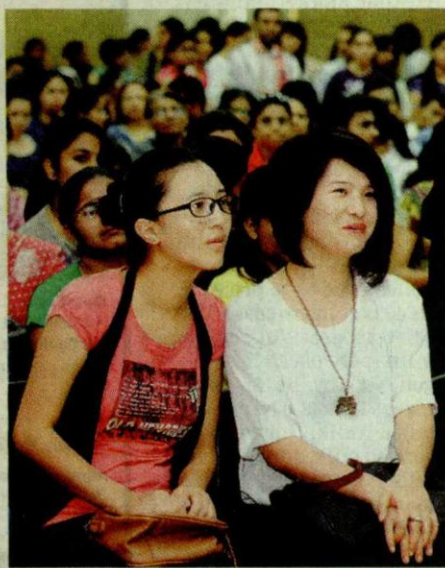


Even as the energies of Delhi University's faculty and administration are absorbed in battling over the four-year programme, few are questioning the *raison d'être* of higher education more broadly. The real questions today are not whether a degree should be three or four years, but the extent to which universities enable their students to think critically and analytically, and the way in which university education builds upon the much larger stock of knowledge both in the country and the wider world. The major challenge before universities is how to perform the difficult balancing task of being both disinterested — seeking knowledge for its own sake; and engaged with the issues of society.

While DU's vice-chancellor Dinesh Singh is justifiably concerned only about his own university, the real fault lies with the ministry of human resource development. Rather than enabling a few elite students to merge seamlessly into the US higher education system, the grounds on which minister of state Shashi Tharoor justified the four-year programme, the ministry should think of ways to improve what passes in the name of higher education in this country as a whole. A little travel by cattle class to rural degree colleges might help. Leave alone students, even their teachers are hard put to name a single book they have read in the last year. The few who are serious about education face considerable odds. Subjecting youth to even a one-year degree in some of these places is a bad idea, leave alone four years. But there will, doubtless, be pressure on everyone to adopt the four-year model eventually, for fear of being considered second rate.

The solution to building capacity is not simply more money, but includes measures like ensuring that central universities do not hire their own students, so that fresh minted PhDs from the best universities circulate. Most importantly, higher education cannot be taken out of the context of education as a whole. It should not fall on a university, as it currently does, to make good the basic skills a child should have learnt in school, including reading and writing. The government's failure to implement the Right to Education (RTE) Act in schools says much about its commitment to higher education as well.

Not only do students graduating from most of our colleges get no decent education, they often lose the native wisdom they came with. Whereas earlier, ordinary people used home treatments for many illnesses, under the



The government's failure to implement the Right to Education Act in schools says much about its commitment to higher education as well

weight of commodification, many skills and kinds of knowledge are being lost, as people purchase most of what they need from the market. The National Knowledge Commission had listed some of the traditional knowledge that is available in India including over 40,000 plant-based drug formulations, and over 4,502 agricultural practices. Of course, not all traditional practices are good, and many have inbuilt gender, caste and class biases.

Yet, few of India's graduates are able to relate to this immense body of knowledge, either to build on the good or reject the bad. We are constantly told by the government and corporates alike that people must leave their farms and migrate to cities, thus leaving their knowledge behind; artisanal, pastoral, fishing and forest communities are made to feel their occupations are inferior. The only job considered desirable is a white collar urban job, and the only question that appears to excite the minds of our educational authorities is how best to fill the existing jobs with suitable personnel.

Of course graduates need employment, but an education policy that confines itself to the less than 10% of employment that the formal sector constitutes, is bound to shortchange the remaining 90%. To quote the National Knowledge Commission again, "(p)rincipled commercialization of our cultural, creative and

legacy practices has the potential of generating employment for at least 100 million people and an annual revenue of at least Rs 6,00,000 crores per year."

One might argue that DU's four-year foundation courses with their stress on hands on projects are precisely an attempt to open students up to their wider surroundings. But university research must be different from school summer homework. Suggested project work like "Choose any one community other than your own to study how it has changed" or "Measure the impact of University on the economic life of the neighboring areas" (sic), has to be accompanied with the basic tools to understand what concepts like "change", "impact", or "economic life" mean. Such seemingly simple concepts may be quite complicated when one begins to really study them. For instance, to measure change, one must have a baseline, identify certain criteria along which one can assess change, explore causality and so on. All this requires some theory of how social transformation takes place. A university must liase with the wider world, but not at the risk of losing its own character and the value addition that serious scholarship offers.

As they stand, many of the foundation courses are wholly illiterate; quite apart from the grammatical mistakes, even the formatting of the syllabus available online at the DU website suggests a hurried cut-and-paste job. Imagine the absurdity of teaching students about unrelated topics like "media, cinema, sports, economic challenges and potentialities, access to education; collaboration in natural resources governance" all in one week (Session 14 of the course in geographic and socio-economic diversity). As far as I know, India has only one Constitution, but the same course will teach us about the "Constitutions of India, values, symbols" (Session 13). The readings are entirely unconnected to the syllabus; and just as the history faculty was not consulted in the making of the course on history, the sociologists were not deemed fit to comment on geographic and socio-economic diversity.

The four-year programme may do many things — but providing higher education is not one of them. The MHRD may have several concerns — but sadly, what Indian education should mean for Indian students is not one of them.

The writer is a professor in the Department of Sociology, Delhi University

Times Of India ND 27/05/2013
P-1 Education Times

Indian Excellence

Keen to improve research performance and feature in world rankings, Indian government holds a high-level policy discussion in Delhi to find a way forward.

Aaditi Isaac reports

With growing internationalisation of higher education, India is keen that its universities are recognised globally for research excellence and performance. With none of the Indian institutions featuring in the World University Rankings 2012-2013 by the *Times Higher Education* (UK), the ministry for human resources development (MHRD) and Planning Commission

held a one-day discussion on 'National Policy Dialogue — University Rankings, Research Evaluation and Research Funding' in the Capital on May 23.

In the THE World University Rankings 2012-13, only three Indian institutes ranked in the top 400 and the best of them was the Indian Institute of Technology (IIT)-Kharagpur. Several countries use the global rankings as a benchmark and have created a system for research evaluation to link it with funding.

This helps to create a competitive culture for research that drives the performance of the higher

education system. "India has some excellent universities and the IITs are world famous but perhaps at the system-level a focus has been laid on expansion that may have posed challenges to quality. Funding for students has declined and student numbers have increased rapidly. Also, a less focus on research excellence, and a gap between research work and what the industry demands, may be some of the reasons why Indian universities haven't received their due attention globally," said Phil Baty, editor, *Times Higher Education* Rankings.

RECOMMENDATIONS

RESEARCH EVALUATION

- Weighting should be given to patents, Indian journals & conference articles
- Strengthening of peer review needs to be accompanied by national policy for promoting research in a domain-specific metric

RESEARCH FUNDING

- There is a need to segregate Indian universities based on performance
- There should be no discrimination in funding based on the background of the university's status as state, private, etc. Funding should be solely on merit

> For full story, click on 'College Life' under 'Campus Life' on www.educationtimes.com

Brain drain or brain gain?

Uma Ganesh



OVER the last ten years, there has been a significant change in the priorities for pursuing higher education amongst the Indians. In the '60s and the '70s we saw mainly doctors followed by engineers migrating to the US and European countries to pursue Masters or higher professional qualifications having done their Bachelors programme in India. In the '80s and '90s there was a huge wave of engineers particularly from the IITs who relocated to the US in large numbers leading to the lament of the Indian intelligentsia about the brain drain and the debates on how to prevent it.

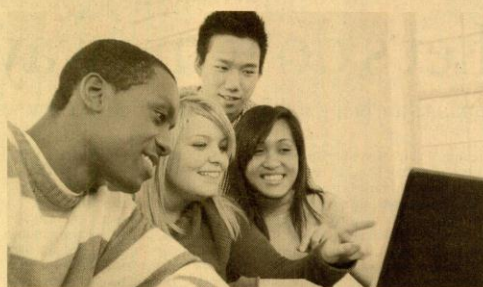
The trend we see since the early 2000 has been very different from the previous decades as this decade has started experiencing a dramatic shift both in the number of students going abroad for higher studies and also the profile of programmes they enrol themselves for. A study conducted by IIM Bangalore—'Indian Student Mobility to selected European Countries: An Overview' indicates that there has been over 250% jump in the number of students going abroad for higher studies between 2000 and 2009.

According to ASSOCHAM report, Indian students are spending close to \$17 billion in higher education abroad which is a lost revenue opportunity for the

Indian universities. Unlike in the past, a sizeable number of students now go abroad for Bachelors education. The primary reasons for going abroad include the affordability of the middle class families to provide world class education to their children, non availability of seats in premier institutions in India despite high scoring performances in the qualifying examinations and lack of programmes which have contemporary relevance and employment opportunities in certain sectors.

If we take a look at management education aspirants, the number of candidates who take GMAT has increased by 41% over 2007 and in 2012 the number stood at over 30,000 with the participants increasing in mini metros and Tier 2 towns and over 50% of them indicating US as their preferred destination. It has been observed that many of the students manage to get scholarships and grants at these universities to finance their education and in some cases they have the family support or get access to loans. The percentage of students going abroad for higher studies may be a drop in the ocean as compared to the number of students entering into the higher education system which stands at 17 million according to the UGC Report, 2011 on 'Higher Education in India at a glance'.

However what is important to note is that those going abroad are predominantly the cream of our students and by not being able to keep them within the country, we lose our top talent to western universities and eventually to the



employers there as majority of the students stay on in these countries upon completing their education.

The issue of brain drain has become more important today as compared to one or two decades ago. One major difference with the past is that unlike the previous decades when India had limited options to offer in terms of relevant career opportunities or monetary benefits, today the scenario is definitely better for returning Indians. We see many Indians who moved to the west in the '80s and '90s are returning for good because they see opportunities here or due to economic downturn in the west, some are returning to try it out for a brief period and some others are wanting to return but are not aware of the opportunities and how to make themselves

relevant for the Indian requirements. Still these numbers are not huge. Therefore it is important for the government and the industry to create a comprehensive framework to share the details of opportunities available in all sectors and motivate the young Indians to plan to return. Countries like China, Singapore and Malaysia have a well oiled machinery to send bright students abroad to acquire the proficiency in the chosen disciplines in top academic institutions and to also track them and get them back to their countries with the promise of bright and remunerative careers for them in the country.

With 3,000 doctors going abroad for higher studies in the last three years deciding not to return, the Indian government has decided to tighten its law

and recently announced a compulsory bond for those who go abroad for higher studies to return to India. Regulatory framework would prevent brain drain to some extent. But the question of providing attractive opportunities for returning candidates remain, specially when higher education abroad and wish to take up employment abroad in order to derive the ROI which is not feasible if they were to return to India.

The voluntary reverse brain drain has been witnessed mostly in the business domain with some professionals of Indian origin being sent to India to be part of the overseas business firms and many technocrats returning to India to set up entrepreneurial ventures here. In the field of science and technology, the Indian government has put out attractive schemes such as Ramanujan Fellowship programme, INSPIRE faculty scheme and Ramalingaswamy Re-entry Fellowship in order to motivate scientists of Indian origin to consider returning to India to join the academic/research institutions.

Despite all such initiatives, the issues around brain drain are complex and there are no easy answers. We would need continuous innovation in our policies to attract the best of our talent back into the country and also maintain ongoing close interactions with the Indian diaspora. At the same time, the connected world and the ease of interactions over the internet should make it feasible for governments and corporations to consider ways for brain gain. A good

example is that of the research labs of multinationals such as GE, Texas Instruments and Microsoft who have set up centres in India to attract top quality talent from India and those of Indian origin interested in being based out of India by providing excellent work environment and monetary benefits.

Setting up collaborative research projects that can be monitored remotely using technology, sharing of knowledge to enhance academic excellence of the partnering institutions and encouraging students from different campuses to participate remotely and physically in some of the common sessions are some of the ways by which brain gain could be made feasible. Such steps would enable the scientists and researchers of the Indian diaspora to contribute actively towards the betterment of science and technology in the institutions of excellence in the country and over a period of time help them consider other ways of active engagement with the institutions including sabbaticals for a short tenure or help with building new disciplines of research and teaching. The future of education and research is going to be on the strength of more and more collaboration and teaming facilitated by the rapid strides of technology and therefore instead of pondering over just brain drain, the time has come to think proactively about 'brain gain' using innovative approaches.

The writer is CEO, Global Talent Track, a corporate training solutions company

ONLINE EDUCATION

Does it really work?

There have been some success stories globally, such as Coursera and Lynda, but for online education to really work in India, focus has to be on its correct implementation



KRISHNA
KUMAR

The ever-growing online education sector is a symbiotic complement to traditional college education today. This is not without reason. Considering the costs and time required for a regular, full-time professional education course, online education offers a meaningful supplement. Online education is popular nowadays for a number of reasons—cost, convenience and efficiency. And for professors, it offers a consistent classroom format.

However, there are a number of rebuttals to this statement such as (1) learning from a teacher has been our culture, and online education has no teacher and hence it will not work for us; (2) online education lacks face-to-face interaction, which is very important in education; (3) unlike in a traditional classroom, students lack discipline while e-learning; and (4) it is difficult to assess the progress of the students while she is e-learning.

So, with the many doubts surrounding it, can online education really be understood to be a viable option? The points mentioned above are generally in the mind of anyone considering an e-learning course. Irrespective of how much technology has developed over time and no matter how much today's generation may be tech-savvy, when it comes to education, people still prefer to subscribe to the traditional method.

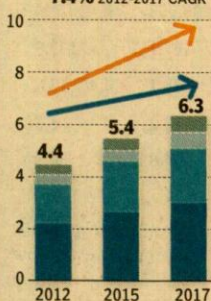
But exceptions do exist. In

GLOBAL EDUCATION EXPENDITURE

In \$bn

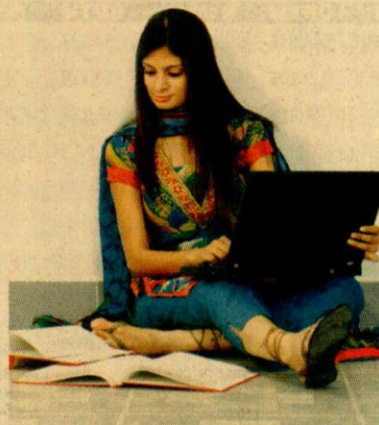
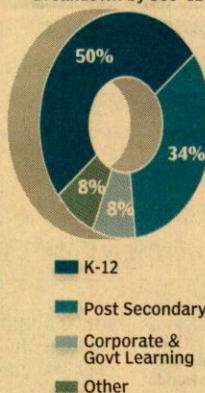
e-learning expenditure:
23% 2012-2017 CAGR

Education expenditure:
7.4% 2012-2017 CAGR



Source: <http://blogs.edweek.org>

Breakdown by sec '12



recent times, there have been some really credible examples of success stories within the online education industry. Coursera, a social entrepreneurship company, has set high standards by providing over 325 courses from 64 of the world's best universities including University of Edinburgh, Stanford University, Brown University, Georgia Institute of Technology and Duke University, to name a few. These courses are available online and are free of cost. Another such example is Lynda.com. The huge success of this online tutorial portal is an amazing story. They have 1,600 courses and 89,000 tutorials from 150-plus subjects. They have been educating 2 million subscribers globally and had accomplished estimated revenues of \$100 million in 2012. This also enabled them to receive a growth capital funding of \$103 million in January 2013.

According to a study conducted by IBIS Capital, a London-based investment bank, "The e-learning market is projected to grow by 23% between now and 2017, making it the

ONLINE EDUCATION CANNOT REPLACE THE TRADITIONAL MODE OF LEARNING. IT IS A SUPPLEMENT, MORE LIKE A VALUE ADDITION

fastest-growing market in education." (See graph.)

If we try and draw a comparison between an instructor-led classroom and e-learning, keeping factors such as quality, pace, access, control and cost as metrics, we will clearly find that e-learning is convenient as it gives the control to the students to study at their own pace and at lower cost. In addition, there are other parameters that can prove the effectiveness of online education:

Interactivity: Online education provides certain features like quizzes, practice tests, puzzles, et al, which make online education interactive and keep a student engaged in the process of studying. These exercises ensure high atten-

tiveness and retention, better knowledge transfer and also enable easier revision.

No baseless learning: Online education makes studying more organised and eliminates baseless and unnecessary digression. Immediate feedback on the concepts makes sure that the student advances to the next concept only after being thorough with the previous one.

Global peer assessment: There are no chances of biased evaluation in online education, which may be the case in face-to-face traditional education. Assessment in online education takes place on a global basis. Evaluating and providing feedback on each other's knowledge is more powerful than the single teacher's grading.

Does not replace but complements: Online education is here not to replace the traditional mode of learning. It is a supplement, more like a value addition. A blended model with both methods is more effective than either method alone.

Now, if online education has all the reasons to be the ideal mode of learning, where is the

loophole? In all fairness, while there are success stories, online education has seen its share of failures as well. It is in the implementation that this inconsistency lies. In order to make an online education project a success, it is important to understand a few points:

1. A recorded classroom session available online or a PDF version of a book on the web is not the equivalent of online education. Rather you need to clearly identify the objective of the online training course. Is it to impart a particular skill or a tutorial that helps one to pass an examination?

2. Access time is not the only metric to measure. Activities during learning are also important to be measured. One needs to create custom, multimedia interactive content with support questions and quizzes at the end of each module and allow students to advance to subsequent modules subject only to clearing the previous one.

3. A learning management system with online training courses is just a beginning and not the end. Building proper assignments and test papers at the end of each chapter/course to assess their knowledge on the subject is a pre-requisite to a successful online education programme.

To summarise the future of online education, one needs to understand no further than the words of the former Harvard president, Larry Summers: "It's important to remember this really wise quote when thinking about the transition to online education: 'Things take longer to happen than you think they will and then they happen faster than you think they could'."

The author is founder & CEO of Simplilearn. Views are personal

Lack of career-readiness is a greater challenge than unemployment

iNurture is an education solutions company that was established with the goal of building a sustainable career platform for students. *iNurture* stands for "intelligent nurturing," says **Ashwin Ajila**, founder & MD, *iNurture*. In an interaction with FE's **Vikram Chaudhary** he adds that intelligent nurturing of young talent forms the foundation of *iNurture*'s belief system and practice. Excerpts:

What is *iNurture*'s university-industry partnership model like?

We were the first initiators of the university-industry partnership (UIP) model in India as a for-profit educational enterprise in corporate sector. Our foundation is based on the belief that a new model in Indian education system is necessary to bridge the ever increasing gap between higher education and the skills required by industry. Under this model, we engage with the universities as knowledge partners on a revenue-sharing model, the particulars of which vary from case to case. The fundamentals of the basic model states that *iNurture* is responsible for creating the course content and framing of syllabi (in association with affiliating university), ensuring quality delivery of the programmes by trained faculty, preparing and providing students' learning materials and e-learning content.

How can the industry and the youth benefit from this?

The lack of career-readiness is a greater challenge than unemployment in India today. The largest playing factor in students having poor quality skills is due to the disparity between the mainstream academic courses and the actual demands of the industry. This leads them to get employed with low income level rather than unemployment. Team-



INTERVIEW: ASHWIN AJILA FOUNDER & MD, iNURTURE

Lease India Labour Report 2012 states that, in India, 58% of graduates earn less than ₹75,000 per year due to limited skill-sets. This means their average monthly income is only ₹6,250. In about seven years, the median individual in India will be 29-year-old, very likely a city-dweller. If this continues to be the fate of young India, our country has a grave issue

certification for the such jointly-offered courses, which have high career potential. There are industry leaders approaching us to create standalone courses at UG and PG level and offer them across leading Indian varsities. This exercise is creating a strong career-ready workforce and is also reducing the industry's woes of insufficient talent availability.

ACCORDING TO MERCER'S NEW TALENT BAROMETER SURVEY 2012, ALMOST 57% OF THE ORGANISATIONS SURVEYED ARE NOT CONFIDENT THAT EDUCATIONAL INSTITUTIONS WILL GENERATE THE TALENT THEY NEED

at hand. Inculcating career readiness among our youth is one of the main measures to boost India's sagging growth.

According to Mercer's new Talent Barometer Survey 2012, 57% of the organisations surveyed are not confident that educational institutions will generate the talent they need. It further revealed that sentiment among respondents does not improve even when they are looking out as far as five years from today. This lack of qualified talent is a real concern for employers but Indian universities are now quite open to enter into knowledge partnership and offer degree

What are the market prospects of developing career-ready students?

It's unfortunate that despite being on the brighter side of the demographic divide, we have not been able to link academics and career readiness. The result has been less quality workforce. Various credible global surveys have time and again indicated that a nation's growth and its GER (gross enrolment ratio) have a positive correlation. Education that does not impart the necessary skill-sets is of no real use.

How big is this market?

The combined UG and PG

market in India is about 35 million but, at best, only about 20% of them are career-ready. That leaves about 28 million students who need help, which is the total prospective market.

Which all universities are you associated with?

We are offering our industry-relevant degree and post-graduate courses in active collaboration with leading UGC-approved universities and autonomous colleges in India. We have signed as knowledge partners with a majority of universities and autonomous colleges in south India and are strengthening our foothold in north India. In fact, we have more than 12 universities as partners today. By the end of 2013 we have plans to scale it up to 20 varsities in India and in the next two years, 50 universities as partners.

How do you reach out to students in smaller towns?

Tier-2 cities have a huge number of students who are highly receptive to the unconventional courses and they spend a good amount of money in travelling to metros for quality education. Mapping this, we have started harnessing the huge talent pool available in smaller towns. Sign-ups with the colleges and universities in these locations to offer industry-updated courses in the fast growing sectors in these cities itself have already happened. As a result, students can cut down on their expenses on food, lodging, travel, as quality education and good jobs would beat their doorstep. As many credible reports, such as the National Employability Report, have time and again suggested that lack of career-readiness among graduates and postgraduates is a bigger crisis in India than unemployment, which is more prominent in tier-2 cities in India, we aim to break through this issue through our business model.

Strangling Delhi University through 'due process': An open letter to Shashi Tharoor

Dear Shashi,

Last Sunday I had the bumper of my car repaired. I gave Rs 81 out of a total of Rs 2,300 to your ministry as education cess! Come June, I shall have to cough up an additional sum over and above my income tax as a mandatory gift to the HRD. I feel cheated as a tax payer, and as an academic who returned after a fruitful nine years in one of the best universities of the world, to Delhi University, our alma mater, where I have been teaching for the past 28 years with some success and satisfaction. Today, I am consumed with impotent rage. And you know why? Because DU has become an enervating oasis where the air is putrid with apprehension, where under the guise of radical educational reform authoritarianism rules the roost, and where 'the mind is [not] free' and 'the head is [not] held high'.

How has this come to pass? DU was a much freer and exciting institution not only in July 1972 when we first encountered each other but till the other day. Is it because Prof Amartya Sen left the economics department for the US and Dr Manmohan Singh for the finance ministry and then the prime ministerial chair? Are the present lot of professors at DU of such low calibre? Are they really behaving like a pair of mule-headed oxen yoked to the slow moving cart of educational progress, taking mindless delight in dragging their feet and who need to be goaded, literally and metaphorically, to move on like the rest of the world — which in this case means the US. No Shashi that is not so, despite what Sam Pitroda and Kapil Sibal, the erstwhile minister, HRD and now our vice-chancellor might say or imply.

There already is a wide-ranging debate about the problems with the four-year undergraduate programme; I shall say something about the compulsory foundation courses, some of which are fit to be taught in Class VI of an average school, in my next letter. But here is a sample of the 'suggestive' [not suggested!] projects carrying 50% of the marks, meant for all undergraduates studying the mandatory course on Indian history and culture: Compare and contrast Chandni Chowk with Rajpath! The mind boggles.

We hear a lot about DU having followed the 'due process' in getting the new scheme approved by the Academic [AC] and the Executive Council [EC]. You yourself are on record as saying, 'If we start second guessing Academic Councils why have them at all'. Indeed. Especially when these deliberative bodies act as rubber stamps good only for approving whatever the vice-chancellors have decided before hand. So says not me, another bird-brained leftist, but the chancellor (the Vice-President's) nominee on Delhi University's Executive Council. You must have read about it in the papers. Let me share a personal detail though. I am the Visitor's (the President's) nominee on the Executive Council of one of the central universities. A note of dissent by me in 2010 led that EC to castigate me in writing at their next meeting as a swollen-headed academic given to 'grand standing'. I haven't gone to the meetings of that university's EC for the last two years. Shashi, tell me: is it dereliction of duty, or a recognition of hard ground realities? When faced with a fast approaching official car on a rainy day, it seems prudent to move further away from the footpath. That is only way to keep mud sticking on to one's shirt.

And finally a word about all this talk regarding the opposition to the DU reforms coming only from a pack of no-good 'Lefties'. You will remember that poignant moment in Hanif Qureshi, the Pakistani landlord is petitioned by a prospective Pakistani tenant's sibling, and says: 'I am



author's film, *My Name is Khan*.
stani tenant in the suburbs of London to reduce the
ter actor spits a coarse North Indian abuse aimed at the prospective tenant
not a professional Pakistani; I am a professional landlord'. Shashi, I hope you will grant me this much.
'I am not a professional Leftie but a professional historian'!

Shahid Amin

The writer is a professor of history at Delhi University. He has taught at Oxford, Stanford, Princeton, Chicago and Columbia universities