Newspaper Clips

January 26-28, 2013

January 26

HT Chandigarh

Yoga gets the biggest science thumbs up yet

Charu Sudan Kasturi
charu.kasturi@hindustantimes.com

NEW DELHI: Yoga works much like antidepressants and psychotherapy and helps tackle most mental health problems including depression, attention deficiency and even schizophrenia, researchers have concluded, giving the ancient practice science's most comprehensive thumbs up yet.

It helps modulate levels of key chemicals such as serotonin and cortisol, a review by Duke University scientists has confirmed. For some illnesses, yoga may work as a standalone remedy, and in others, as an adjunct to medicine, they found.

"Additionally, there is likely to be a positive group effect when one practises yoga in a group," Dr Meera Balasubramaniam, the lead author of the research told *HT*. Yoga is practised by 200 million people worldwide, including 100 million in India and 16 million in the US. But while its use in helping mental health is widely recognised, medical science particularly outside India has till now viewed its potential to tackle major illnesses with scepticism. As the practice gained popularity globally through the latter half of the 20th century, with cultural icons like the Beatles subscribing to it, cases of fraud gurus duping innocent people also started popping up. "It has become difficult to differentiate legitimate claims from hype," the authors of the Duke research wrote in their paper published on Friday in the respected journal Frontiers in Psychiatry.

(For full story, log on to hindustantimes.com/yoga)

HT New Delhi

China's mobile landmark

BEIJING: China, with a population of over 1.3 billion, now has 1.11 billion mobile phone users, according to official data released Friday. The ministry of industry and information technology (MIIT) said mobile phone users represent 80% of all phones users in the country.

Publication: The Times Of India Delhi;Date: Jan 26, 2013;Section: Times City;Page: 10;

21 Delhiites on Padma list, one from Noida

TIMES NEWS NETWORK

New Delhi: Delhi's haul at the Padma Awards has increased considerably from last year. Of the 108 Padma awards, 21 were claimed by Delhiites and the number is 22 if you count Prof. Yashpal who now lives in Noida.

One of the four Padma Vibhushans awarded this year has gone to artist Syed Haider Raza who returned to India after six decades in France in December 2010. A spokesperson at Raza Foundation said the 91-year-old was 'very happy' that his country chose to award him again after his return. He won the Padma Shri in 1981 and the Padma Bhushan in 2007.

Prof. Yashpal, (above) Ritu Kumar

Prof. Yashpal, who won for science and engineering, said he had an "inkling" the award was coming his way. "They talked to me to find out if I was the right person," said Yashpal laughing. "Ultimately it was an income tax official who'd come to check if I had paid my taxes who told me."

Five of the 24 awarded Padma Bhushans are Delhiites -- actor Sharmila Tagore and Bharat Natyam dancer Saroja Vaidyanathan, Vijay Kumar Saraswat and A Sivathanu Pillai, chairman and chief controller of R&D, respectively, at DRDO, and paediatrician Dr M K Bhan. Bhan is credited with developing the rotavirus vaccine.

Fifteen of 80 Padma Shris went to Delhiites. They include cancer specialist Dr P K Julka from AIIMS, cardiac surgeon Dr G K Mani, radiologist Dr Sudarshan K Agarwal, fashion industry designer Ritu Kumar and founder of VLCC Group Vandana Luthra.

Kumar said she thought someone had called the wrong number when she was informed. "I was at the literature festival. I had caught a cold at one of the sessions and I thought they had the wrong number. They were asking me if I would accept the award and I was even more convinced they had made a mistake," she said.

January 27

Mail Today, ND 27/01/2013 p-4

DU students use waste paper to 'recycle' lives

The CBS students pose with MTV VJ Nikhil Chinappa.

By **Harsh Mishra** and **Gargi Agarwal** in New Delhi

WASTE paper has many uses. The students of Delhi University's Shaheed Sukhdev College of Business Studies are using it to shape lives.

As part of a business model, they collect paper discarded by corporate houses and educational institutions and recycle it to give livelihood to the needy. These undergraduate students started 'Project Akshar' in 2011 to create wealth from waste to gain experience in business planning as well as help the society.

The project is aimed at giving sustenance to the economically backward and differently abled people by involving them in the production of eco-friendly notebooks by reusing and recycling waste paper. "It is a ray of hope for such people who have been challenged by the circumstances prevailing in their lives," says Karan Kampani, a member of this project.

These students are a part of Enactus, an international non-profit organisation that mobilises university students to make a difference in their communities while developing the skills to become socially responsible business leaders.

Project Akshar aims to create wealth from waste

The paper discarded by corporates, schools and colleges is collected by the students through regular waste paper collection drives. The most recent drive was carried out in Gurgaon where two tons of waste paper was collected.

"Even well-off families are willing to contribute when made aware. Besides colonies and corporate offices, we hold awareness programmes in our college and also Jesus and Mary College and Lady Shri Ram College where our members have helped sensitise students and organise such collections," Kampani said.

He added that 100 kg provides 27,000 sheets of recycled paper. This waste paper, in the form of newspapers, magazines, sheets etc, is then recycled and used by the identified beneficiaries to make notebooks. The students have tied up with two NGOs which coordinate the whole exercise.

The people who make these notebooks include the disabled and even former drug addicts. They have a regular income now which goes up to ₹5,000 a month.

"I was on drugs and had lost all hope for future. But with the help of these students, not only have I become an independent individual but I am also helping others," says Achint (name changed) who is now trying to reclaim his normal life.

Rashtriya Sahara ND 27/01/2013 P-2

साइकिल से बिजली पैदा करने वाले छात्र ने चौंकाया

लखनऊ (एजेंसी)। साइकिल से बिजली पैदा करने वाले मेधावी छात्र अजित कुमार ने मुख्यमंत्री अखिलेश यादव को शनिवार को यह कहकर चौंकाया कि उसके गांव में बिजली नहीं है। फैजाबाद जिले के सदर तहसील के ददेरे गांव का निवासी अजित कुमार यहां राज्य के चार अन्य होनहार छात्रों के साथ मुख्यमंत्री के हाथों सम्मानित होने आया था। इन पांचों छात्रों ने अपने क्षेत्र में अजूबे आविष्कार किए हैं।

आईआईटी इंजीनियर बनकर विशेष शोधों के जरिए कृषि क्षेत्र में कुछ खास ईजाद करने की तमन्ना रखने वाले अजित कुमार ने साइकिल के माध्यम से बिजली पैदा करने की तकनीक बनाई है। उसने छह बोल्ट की बिजली बनाई है। वह चाहता है कि बड़ा होकर कृषि शोध में खास योगदान दे और कृषकों की आय बढ़ाने में मदद करें। फैजाबाद के ओपीएस कालेज के दसवीं कक्षा के इस छात्र में आत्मविश्वास और सोचने की क्षमता गजब की है। वह कहता है कि अलग सोचने की क्षमता इंसान को अलग बनाती है और वह इसी बलबूते पर आगे बढ़ रहा है। दलित वर्ग के इस मेधावी छात्र ने बताया कि उसके गांव में सड़क भी नहीं है। इतना विकास होने के बावजूद बारिश के मौसम में उसे घर जाने के लिए कीचड़ से होकर गुजरना पड़ता है।

झांसी के मेधावी छात्र शिवांश गुबरेल को रेलवे के मानवरहित क्रासिंग पर आए दिन होने वाली दुर्घटनाओं को देखते हुए स्वचालित मानवरहित फाटक बनाने की सूझी और उसने इसमें सफलता अर्जित कर ली। शिवांश ने बताया कि इलेक्ट्रानिक्स आधार वाली तकनीक से बनने वाले रेलवे फाटक को खोलने बंद करने के लिए किसी व्यक्ति की जरूरत नहीं होगी। उसमें ऐसी तकनीक है कि ट्रेन के आने से पहले वह बंद हो जाएगा और उसके जाते ही खुल जाएगा। कक्षा नौ में पढ़ने वाले शिवांश का दावा है कि उसकी इस तकनीक से मानवरहित रेलवे क्रासिंग पर होने वाली दुर्घटनाओं को रोकने में कामयाबी मिलेगी।

▶ फैजाबाद ओपीएस स्कूल के दसवीं के छात्र अजित के गांव में नहीं है बिजली, सड़क
▶ गणतंत्र दिवस पर अखिलेश यादव ने अजित सहित प्रदेश के पांच होनहार छात्रों को किया सम्मानित

फिरोजाबाद से आए कक्षा दस के छात्र आकाश पचौरी ने इलेक्ट्रानिक लेटर बाक्स का आविष्कार किया है। आकाश का कहना है कि इस लेटर बाक्स में पत्र डालने पर पत्र कब पहुंचेगा और किन किन रास्ते से होता हुआ जाएगा इसकी पूरी जानकारी मिलेगी। बहराइच से आए आयुष पांडेय ने एनर्जी ट्रांसफर प्रोजेक्ट बनाया है और वाराणसी के सिगरा डीपीएस स्कूल के आयुष देवा ने इलेक्ट्रानिक डिवाइस तैयार की है। इससे एयर कंडीशन से निकलने वाली गर्म हवा से पानी गर्म करने के साथ ही बिजली बनाने की तकनीक का अविष्कार किया है। कक्षा दस के छात्र आयुष का कहना है कि एसी अपना काम करता रहेगा और साथ ही ये परियोजनाएं भी परिलक्षित होती रहेंगी। आयुष के साथ विशेष बात यह रही कि उसके पिता को मुख्यमंत्री के पिता मुलायम सिंह यादव ने बतौर मुख्यमंत्री विज्ञान के क्षेत्र में विशेष योगदान के लिए सम्मानित कर चुके हैं।

इन होनहार पांचों बच्चों को मुख्यमंत्री ने सम्मानित किया। गणतंत्र दिवस के अवसर पर राज्य सरकार के माध्यमिक शिक्षा विभाग और इन्टेल कंपनी के सहयोग से आयोजित इस समारोह के बाद अखिलेश यादव ने दो वाहनों में विज्ञान यात्रा को रवाना किया जो राज्य के 21 जिलों से होकर गुजरेगी। बच्चों की उपलब्धियों से गदगद मुख्यमंत्री ने कहा कि विज्ञान के सहयोग को नकारा नहीं जा सकता क्योंकि विज्ञान अर्थव्यवस्था को सुधारने में काफी मदद करता है। विज्ञान यात्रा तमाम छात्रों के सवालों के जवाब देगी और उन्हें आगे बढ़ने की प्रेरणा देगी। मुख्यमंत्री ने कहा कि समाज की बेहतरी के लिए शिक्षा को बढ़ावा देना ही होगा, लेकिन उस समय उन्हें काफी पीड़ा होती है जब पता चलता है कि अध्यापक से ज्यादा जानकारी छात्र रख रहे हैं।

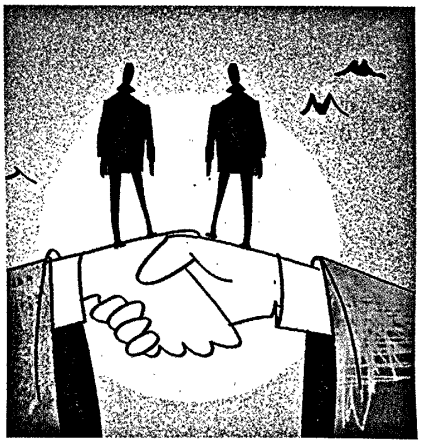
January 28

Economic Times ND 28/01/2013 P4

FUELLING HIGH-END RESEARCH IN INDIA

IIT Madras Talks Joint PhDs with US Universities

Move to improve profile of students & produce globally relevant research



HARI PULAKKAT
BANGALORE

Last July, Indian Institute of Technology Madras (IITM) director Bhaskar Ramamurthy and external relations dean R Nagarajan set off on a rather unusual mission: to ask American universities whether they were interested in offering joint PhD programmes with IIT Madras. The IITs have got the best undergraduate students in India – probably in the world – but their PhD programmes were not going too well. Most IIT undergraduates left for high-paying jobs or management education after their degree and the remaining went for PhD in overseas universities. All the IITs were working to change this, and IIT Madras had found its own unique method.

Ramamurthy and Nagarajan went to 20 American universities. These universities were not picked at random. They had IIT Madras alumni as senior faculty who could be used to broker relationships. IIT Madras, like many top institutions, had a number of collaborations between the faculty in many universities. But Ramamurthy wanted to take the collaboration to a deeper level culminating in a joint PhD programme in the near future. IIT Madras had one such programme with National University of Singapore, but it had not gone too well – only one student had used it in six years. Ramamurthy wanted to sow the ground first with US universities before offering joint PhD programmes.

Their tour went exceptionally well. US universities were too keen to collaborate with IIT Madras. Michigan State University was eager to get to a joint PhD programme quickly, as soon as later this year. Two others, Purdue University and the University of Maryland, also wanted to move on to deeper relationships culminating in a joint PhD programme.

IIT Madras expects more US universities to join this list soon which should expand to include universities from other countries. Taiwanese universities are at the top of the list outside the US since they found many IIT PhDs end up in the Taiwanese semiconductor firms.

THE SHIFT

The IITs are now in the middle of a paradigm shift as they try to morph from world-class teaching institutions to world-class research centres. Their PhD students are an important part of this shift. But they have not been able to persuade their undergraduate students to do PhDs in their own institutions. Integrated programmes for undergrads have had very few takers while their masters and PhD students come from other engineering colleges, and often with inadequate preparation for the rigour of a PhD programme.

Most of them do not get exposed to global trends during their PhDs and the IITs do not get foreign students to any significant degree. Meanwhile, IIT faculty has got strong hints about the possibilities of sending students abroad. "We've seen students who go abroad come back transformed," says Ramamurthy.

IIT faculty has found that students who spend some time abroad on collaborative projects are better prepared for continuing their research work here. They also meet students from many countries and get a better sense of their own place in the global education ecosystem. Unlike the great universities, IITs are not ethnically-diverse campuses. Foreign research students come to India in small numbers but IITs and other institutions are keen to increase their presence. "A joint PhD is a good way to bring visitors to our own campuses," says Ramamurthy.

THE OPPORTUNITY

The IIT Madras brains trust also thinks that the opportunity to work in two universities in different environments will be a good motivation for students to pursue PhDs in their institution. Says Nagarajan: "This programme is not for everybody. Only 10% of the students will be able to earn a joint degree." The joint PhD students are to be selected based on their performance in the initial two years of work after beginning their PhD programme. Then they will spend one year in the US university working on a problem – usually complementary to their IITM work – given by the US professor. The student will then return and finish the degree requirements at IITM and be awarded a joint degree with the US university. The MoU may involve an equal partnership where US students will come to IITM for a year and are awarded joint degrees too. In practice, a substantial number of new rules have to be worked out by both universities before they can sign a deal.

The IITs have got the best undergrad students in India – probably in the world – but their PhD programmes were not going too well

IIT Madras has recently seen an increase in the number of external collaborations, and it had hired a full-time official to look after their progress. Professors in universities work together often, but in recent times collaborations have started going up a level in scope and have resulted in MoUs between the parent institutions. Michigan State University, for instance, has 160 collaborations with other universities. The Obama Singh 21st Century Knowledge Initiative, signed during US President Obama's trip to India, now funds some of these collaborations between Indian and American institutions. Michigan State University is an important collaborator for IITM, as are the University of Maryland and Purdue University.

All the IITs have an extensive alumni network in the US and IITM is drawing heavily on this to pursue collaborations. One such alumnus is Suresh Garimella, professor at the School of Mechanical Engineering and Birck Nanotechnology Center in Purdue University. Garimella is responsible in many ways for pursing this collaboration with IITM. Purdue is vigorously multicultural and hosts the second largest number of global students in a US university. Purdue is keen on pursuing relationships in India. "IIT Madras and Purdue have good resonance between their missions and capabilities," says Garimella.

Michigan State University, on the other hand, is already working on products with IITM. Syed Hashsham, professor of Civil and Environmental Engineering, works among other things on the rapid detection of microorganisms in water. He is collaborating with T Pradeep, professor of chemistry at IITM, who is a nanotechnologist and has developed filters for pesticide removal.

The two are combining to develop methods to quickly detect both chemicals and microorganisms in water. "You have put water treatment plants in many houses in India," says Hashsham, "but we do not have any method to test whether they are working after some time."

Safe drinking water is a global need and research problems like this tackled by universities are now global in their scope. They increase the need for collaboration between researchers, who are now looking for students with all-round capabilities. The electrical engineering and communication department of the University of Maryland, for one, works on two areas of interest to IITM: low energy communication and high efficiency solar cells. But their area of expertise are different. While University of Maryland faculty is skilled in the packaging of solar cells, IITM is good at fabrication. The two are combining to develop highly-efficient solar cells. "We have experience in the same field but we not the same expertise," says Prakash Narayan, professor of Electrical and Computer Engineering at the University of Maryland. Students stand to gain when trained by faculty with different skills.

One of the aims of IIT Madras is to make sure the funding is just right. "We don't want this to be a get-rich programme," says Nagarajan, "because the students will then be attracted to it for the wrong reason."

Times of India ND 28/01/2013 P9

IIT expert for pollution survey

Study Ordered By Noida Authority To Find Causes & Extent

Ayaskant Das | TNN

Noida: The Noida Authority has sought assistance of IIT-Roorkee for undertaking a survey to determine the causes and extent of pollution in the city.

Following an order of National Green Tribunal on January 15 for the formation of an expert committee to undertake the survey, the Authority has appointed a technical expert from IIT-Roorkee to be part of the panel. The panel also includes representatives from the Union environment and forests ministry, besides representatives of the central and UP state pollution control boards.

The Authority has appointed A A Kazmi, associate professor of the department of environmental engineering of IIT-Roorkee, as the expert member. The committee will have its first meeting at the headquarters of Central Pollution Control Board (CPCB) in New Delhi on Tuesday. It has been ordered to submit the report within four weeks from January 15.

A bench headed by the tribunal chairperson, Justice Swatanter Kumar, had ordered the formation of the committee following pleas from Noida-based entrepreneurs that industries alone are not responsible for pollution in the city. The tribunal has enforced a ban in Noida since April last year on setting up of industries or expansion of existing units after a case was filed by a Noida resident alleging adverse health impacts from high levels of pollution.

Following the ban, Noida Entrepreneurs' Association had said other factors like construction activities, natural content of the soil and vehicular emissions are also responsible for pollution in Noida. The city-based industrialist, Sharad Jain, will represent industrialists in the expert committee, association officials said.

GREEN DRIVE

The tribunal's decision to determine the exact causes of pollution in Noida is also prompted by an affidavit submitted with it by the environment ministry. The ministry had banked upon a survey report of 88 industrial clusters compiled by the central pollution board. In the survey conducted in 2009, Noida had scored 78.90 on the comprehensive environmental pollution index, a scale marked from 0-100, in ascending order of pollution levels. The scale was framed to analyse dimensions of environment health, including air, water and land. On the basis of the survey, the pollution board had ranked Noida 12th in a list of 43 'critically polluted areas' in the country.

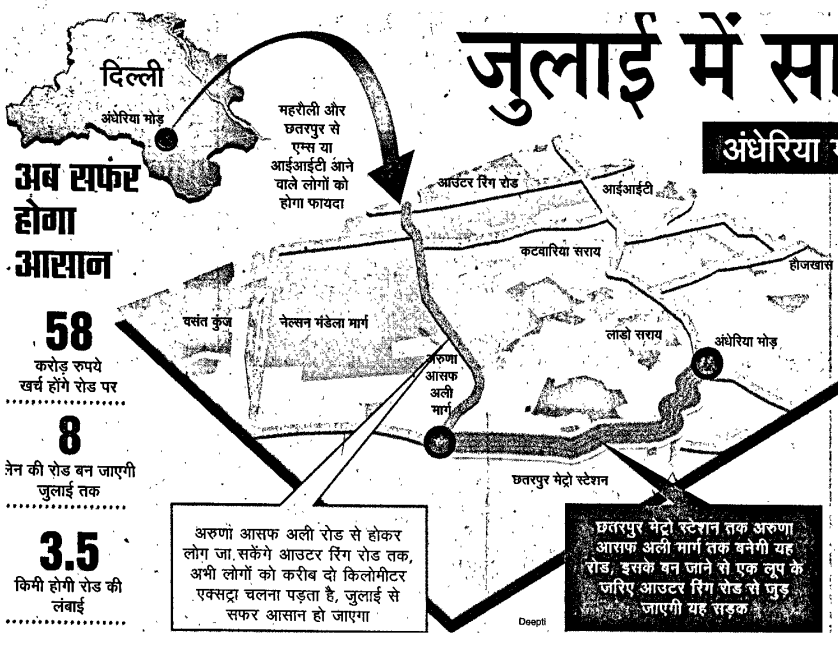
The tribunal observed in its January 15 order that "the most pertinent question that has to be examined by the tribunal is as to what are the reasons for the averments made in the affidavit of the MoEF".

Navbharat Times ND 28/01/2013

P-2

जुलाई में साउथ का रास्ता साफ

अंधेरिया मोड़ से आईआईटी तक की रोड देगी नया शॉर्टकट



वीरेंद्र वर्मा ॥ नई दिल्ली

आने वाले कुछ महीनों में गुड़गांव और छतरपुर की ओर से आने वाले लोग आउटर रिंग रोड और आईआईटी जाने के लिए सीधे एक लूप के जरिए पहुंच सकेंगे। दिल्ली सरकार का पीडब्ल्यूडी अंधेरिया मोड़ के पास छतरपुर मेट्रो से मसूदपुर अरुणा आसिफ अली मार्ग तक 8 लेन की रोड बना रहा है। रोड बनाने का काम शुरू हो गया है। पीडब्ल्यूडी के अधिकारियों के मुताबिक रोड बनाने का काम इसी साल जुलाई तक पूरा हो जाएगा।

अभी अंधेरिया मोड़ से जब महिपालपुर की ओर मसूदपुर तक जाते हैं तो रोड बेहद संकरा है। खासकर अरुणा आसिफ अली रोड फोर्टिस अस्पताल के पास तक। इस 3.5 किलोमीटर लंबे स्ट्रेच के बीच 3 रेड लाइट पड़ती हैं। तीनों रेड लाइट पर यू टर्न के लिए गाड़ियां आड़ी-तिरछी लगती हैं। जिसके कारण कई बार तो कई किलोमीटर लंबा जाम लग जाता है। जब यह रोड बन जाएगी तो अरुणा आसिफ अली मार्ग के जरिए आउटर रिंग रोड पर पहुंचकर आईआईटी तक जाया जा सकता है। इससे एम्स की ओर भी जाना आसान हो जाएगा। फिलहाल महरौली रोड से आईआईटी तक आने में लोगों को काफी जाम का सामना करना पड़ता है। इस रोड के बन जाने से गुड़गांव, महरौली और छतरपुर की ओर से आउटर रिंग रोड पर आना आसान हो जाएगा। पीडब्ल्यूडी आजकल इस रोड को चौड़ा करने के लिए काम कर रहा है। पीडब्ल्यूडी के अधिकारियों के मुताबिक सड़क के दोनों ओर 4-4 लेन की सड़क बनाई जाएगी। जमीन का अधिग्रहण और रास्ते में

Pankaj Tyagi

शुरू हो चुका है रोड बनाने का काम, जुलाई में काम पूरा होने के बाद आउटर रिंग रोड से जुड़ जाएंगे साउथ दिल्ली के कई हिस्से

लिहाजा करीब यह प्रोजेक्ट एक महीने लेट हो गया। पहले जून का टारगेट रखा गया था अब यह जुलाई तक पूरा होगा। रोड के निर्माण

Millennium Post ND 28/01/2013

p-4

DU to start online classes

OUR CORRESPONDENT

NEW DELHI: In order to compete with the global standards practised by the universities in Europe and North America, Delhi university (DU) has decided to start interactive classes aided by the information technology.

According to a DU official, 'Sam Pitroda, chairman of the National Knowledge Commission, would lead the project. The project, which started a8 months ago, is expected to be completed in three months.' The National Knowledge Network is a project under which 900 educational institutions are attached to share their knowledge under one platform.

'After the completion of the project, the classes will become interactive and students from all over would be able to attend the lecture going on in any university be it, DU, IIT or IIM,' the official added.

According to P C Jain, principal of Shri Ram College of Commerce of DU, this ambitious programme will help the students in garnering knowledge in a more flexible way.

The authorities have decided to give the project unlimited bandwidth, so that the educational aspects of the project could not be hampered. DU has signed a deal with Software Technology Park of India for the maintenance.

Times of India ND 28/01/2013 P25

Is Einstein sole proprietor of $E=mc^2$ equation?

Washington: A little known Austrian physicist may have contributed to Einstein's famous equation $E=mc^2$, American scientists have claimed.

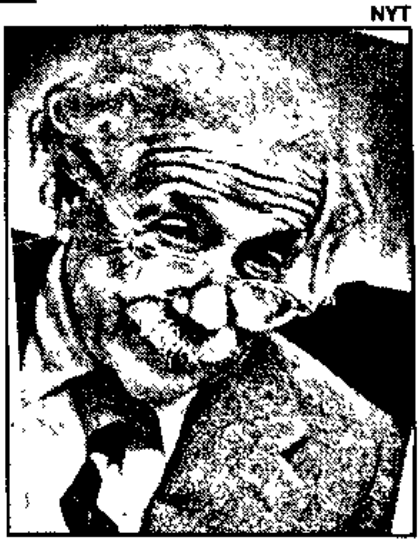
In a study to be published in the European Physical Journal H, Stephen Boughn from Haverford College in Pensylvannia and Tony Rothman from Princeton University in New Jersey argue how Austrian physicist Friedrich Hasenohrl's work, may have contributed to the equation $E=mc^2$.

The physicists outline the role played by Hasenohrl in establishing the proportionality between the energy (E) of a quantity of matter with its mass (m) in cavity filled with radiation.

In 1905, Einstein found the correct relationship between inertial mass and electromagnetic energy, which is $E=mc^2$.

The authors of the study believe the notion that mass and energy should be related did not originate solely with Hasenohrl. Nor did it suddenly emerge in 1905, when Einstein published his paper, as popular belief would have it.

NYT



LATCHING ON TO AN IDEA?

Given the lack of recognition for Hasenohrl's contribution, the authors examined the his original work on blackbody radiation in a cavity with perfectly reflective walls.

The study seeked to identify the blackbody's mass changes when the cavity is moving relative to the observer. They then explored the reason why he arrived at an energy/mass correlation with the wrong factor, namely at the equation: E=(3/8) mc2. Hasenohrl's error, they believe, stems from failing to account for the mass lost by the blackbody while radiating. PTI

Publication: The Times Of India Delhi;Date: Jan 28, 2013;Section: Education Times;Page: 41

Software park at DU

Vatsala Shrangi/TNN

Delhi University has announced setting up of a software park on campus by the new academic session, in order to provide greater exposure to students in the realm of information technology (IT). The software park will be set up at the cluster innovation centre (CIC), for which DU has partnered with the Software Technology Park of India (STPI). The park is intended to help students engage with real world problems and gain hands-on learning.

According to Sanjeev Singh, project co-ordinator, Institute of Informatics and Communication (IIC), DU, it was time that students in universities in India are exposed to all flavours of technology. The software park will be like an eco-system in which students and faculty are well connected and deal directly with real industry processes and experiments.

HT New Delhi

PROJECT SHIKSHA WITH MICROSOFT

Microsoft Partners in Learning initiative aims to develop among educators and students 21st century skills and inculcate advanced IT-based approaches to learning.

Under the first phase of the programme called 'Project Shiksha', which was launched in India by Bill Gates in 2003, the company has partnered with 12 state governments, including Maharashtra, Uttarakhand, Andhra Pradesh, Karnataka, Gujarat, Bihar, Mizoram, Madhya Pradesh, Punjab, Rajasthan, Tamil Nadu and Uttar Pradesh.

Fourteen shiksha academies have been set up and the company also operated 100 state-run District Institutes for Education and Training (DIETs) that offer a range of education resources.

Publication: The Times Of India Delhi;Date: Jan 28, 2013;Section: Education Times;Page: 44;

DOUGLAS CLEAVER, professor of materials modelling, Sheffield Hallam University, and Chair of the university's Research Degrees Sub-Committee, talks to Malini Sen on best practices in research and development

EXCELLENCE IN RESEARCH

Douglas Cleaver

What are the best practices followed in the UK to achieve excellence in research that India could learn from?

Professional bodies (IEEE, Institute of Physics, Royal Society of Chemistry, British Psychological Society, etc) have important powers to 'accredit' degree-level provision. This is independent of government quality assessment and aimed at maintaining high levels of subject provision and, at a later career stage, professional development. There are some equivalent bodies in India (Institution of Engineers, Indian Physics Association, Indian Chemical Society), but their remit does not appear to cover accreditation. University course design pays great heed to the requirements of professional body accreditation.

In the UK, huge national assessment exercises are performed to judge research quality department by department (the next is REF2014). In practice, the UK Research Assessments are costly (in time and resource), promote undesirable rivalries (between departments and institutions) and encourage poaching of 'star' academics. The high level of co-operation between Indian academics that I have seen during my visit is far more productive than the rivalry I would have seen at an equivalent meeting in the UK. Largescale research assessments provide government with a tool with which to compare and influence universities, but they do NOT in themselves engender excellence in research.

India is investing strongly in new institutions — this is very positive. For these to thrive, though, they will need to recruit AND develop new faculty. This is a problem, since it is apparent that existing institutions already have unfilled positions and there is a danger that newly appointed faculty may struggle to establish themselves due to heavy teaching loads. Given the current shortfall, a concerted attempt to recruit internationally could bear fruit (I was unaware of the attempted expansion prior to this visit).

As well as new institutions, India needs national (or international) facilities to give its researchers access to equipment that could not be sustained by individual institutions. These should also host support staff with a remit to promote effective use of their facility and provide training to all (e.g. via annual summer schools for all relevant research students).

> PG STUDENTS NEED INDIVIDUALISED TRAINING PROGRAMMES IN SUBJECT-SPECIFIC AND BROAD SKILLS — WITHOUT WHICH, THEIR WORK WILL BE MIRED IN INEFFICIENCY

How do you create the right environment for budding researchers to encourage original work?

Postgraduate students and postdoctoral researchers need individualised training programmes in subject-specific and broad skills — without these, their work will be mired in inefficiency. It is important to be part of some sort of group (a virtual one can work) so that day-to-day support can be obtained from (and provided by) peers. Groups should not be too large though —the best original research (and researcher development) occurs where budding researchers get regular input from their supervisor. Allowing groups to become too large leads to routine and repetitive projects and disengages developing researchers.

The European Researcher Concordat, which UK institutions are currently working towards, is aimed at establishing more structured career pathways for developing researchers.

Developing researchers should also be encouraged to break away from their supervisors on completion of their first project or PhD — doing something in another lab or on another topic develops independence and self-assuredness that will be needed further down the line when (as happens to all researchers at some time or other) things don't go so well.

What is the biggest challenge the world is facing and how can it be tackled?

Research integrity and ethics and, in some subject areas, complacency regarding same [this is NOT something that I have had specific concerns about in India — it is a general observation].

Teaching-only faculty. Not all faculty can deliver high-level research. They should, though, be (and be enabled to be) in some way 'active' in their academic discipline. Such scholarly activity can take many forms — developing novel teaching methodologies, outreach to schools or the wider public, knowledge-transfer to industry, consultancy, professional practice … all faculty should be active in (at least one of) these ways to effectively communicate enthusiasm and engagement with their discipline. This is, I think, a big issue in India.

For complete story, click on Expert Eye on www.educationtimes.com

HT Chandigarh

HT LIVE DEBATE: WILL STUDENTS' FEEDBACK APPROVED BY PANJAB UNIVERSITY DO ANY GOOD OR WILL IT BECOME A FUTILE EXERCISE?

Feedback to improve student-teacher relations

While most readers feel that the feedback will help improve student-teacher relations, some also point out that students may misuse the system to settle scores with teachers

Teacher will be unnecessarily targeted

I personally have no issues but it will politicise the issue. Managements in colleges will use this against the teachers and will try to settle scores with teachers. It is different in colleges as compared to university and this evaluation will be used to fix teachers if they speak for their rights.

IS Sandhu, via email

Academic committee's should not be involved

The issue of teachers' evaluation caused a stir in the senate meeting. The system should be taken as a positive move. If PU wants to be at par with its peers (read institutes) we need to have this system. All good engineering colleges and IITs have teacher feedback system. Students come and go, but teachers remain there. Every educational institute, which aspired for a position of excellence, would have to go for teachers' evaluation. If PU has to compete nationally with reputed institutes, such as IISER, IIT's and centrally funded universities, which have a good feedback mechanism, the decision of teachers' feedback is the need of the hour. However, it should be purely feedback system and no academic com mittee should be involved to evaluate the feedback.

Vineet Kapoor, Panchkula

Feedback system at PU is a good move

The decision to have teachers' evaluated by students based on feedback is good provided no undue advantage is taken. There are high chances of misuse like if this system is implemented in colleges where college managements will start using this feedback system against some teachers for their personal grudges. If implemented, some guidelines must be set up in order to make the system flawless. It should be transparent and no academic committee should be involved to evaluate the feedback. The process must strictly be between students and teachers with no punitive measures and no information related to feedback must be available on the PU website. A student has all the right to express his discomfort in case a teacher is not taking lectures but in a decent manner. The students must respect their teachers and in turn, teachers must have faith in their students, who should be allowed to give feedback about their teachers. There has to be mutual understanding between teachers and students.

Dr Shruti K Chawla, Chandigarh

System shall lead to positive change

Feedback system should be there, as it will improve the relationship of students with their teachers. Also this is a recommendation by UGC so no action against teacher in case of adverse feedback is required. This exercise is just to build up the relationship and improve academic growth.

Dinesh Talwar, PU senator

Feedback is for betterment of teachers

I am not against the issue but a third parties feedback must be brought into consideration. When the feedback is from student to a teacher, it should remain purely between them. In future such feedback should not be used against teachers. It should be kept in mind that this is just for self-improvement of teachers.

Karamjit Sigh, PU Senator

Let feedback be a two-way road

As a teacher, I continued to build on the successful experiment I had tried in 1970s to make teaching-learning an exciting two-way zone. If 'good teachers make good students', 'good students make better teachers'. In either case, the essential condition is that the teachers themselves should seek regular feedback from the students. In addition to oral informal assessment of my teaching I gave my students 'comprehension' tests to judge for myself how I had fared in transmitting knowledge in my subjects. The students taught me that I would be more effective as a co-learner than a teacher whom the Indian tradition mythically puts on a pedestal. In the case of Panjab University, where students' feedback system has been introduced with reluctance it will work only if the students do not misuse it to settle scores with a teacher and he, in turn, develops a generosity of spirit to establish his credentials by helping rather than harming a student's interests.

Dr SS Bhatti, via email

Can students adjudge high-class laureates?

I was happy to learn that Dr Grover took over as V-C of Panjab University being an alma mater but on the contrary I am sad to know that university has started showing laid-back attitude in its workings. Because the time has come that students will adjudge all high-class laureates. Now university should start recruiting faculty after being interviewed by students who give 7.5 % attendance. This is because if you put all students those who give 75% attendance a chance to judge a faculty member, they will spend 50% of their time and energy for judging the faculty. In case such things are required then Panjab University must be equipped with e-surveillance that will decide what is actually happening in the classrooms.

Dolphin Bakshi, via email

The system is a double-edged sword

Academically on the face value the much-touted student's feedback system, approved in haste by the PU authorities might look attractive. But there are many strings attached to that. Who will ensure the sincerity and seriousness of the students? How it will be ensured that the personal scores will not be settled and personal grudges will not overshadow the feedback? The deterioration in the student-teacher relations with the passage of time is quite evident. What about the action in case of adverse feedback? Since it is a sensitive matter, which involves career and personal standing of the teachers, the system has to be really foolproof, with no scope of any goof-up. Any snags in the system can be really disastrous. In the end it may not result in more harm than the intended benefits.

AK Sharma, Chandigarh

Teachers should take feedback in right spirit

In the environment of corruptions of various kind, exploitation of students, dual evaluation system by providing students' feedback about their teachers is quite thoughtful and making the education system more meaningful, purposeful and transparent. There are various types of malpractice where the teachers exploit the helplessness of students by granting internal assessments, no sustainable system to assert the professional wisdom of the teachers, so far it is a one sided approach in the hand of teachers to assess the students' performance to judge their ability, aptitude and attitude. The students are the best judge of the teachers' performance of teaching and their attitude, style of imparting education. So what if the teachers are bound by the feedback provided as no action has to be taken based on the feedback officially but it shall have big moral impact on the teachers to overcome the deficiencies pointed out in the feedback.

Capt Amar Jeet Kumar, SAS Nagar

System will help improve student-teacher relations

Feedback from students for teachers is a very novel step. It will help teachers to improve their relationship with students and it will help them to become more motivated. There is nothing to be afraid of and in my college we are already following this system and I must say it has really helped. Everyone in the campus including deans and even the VC should get feedback from students.

Dr SS Sangha, PU senator

A step in the right direction

Getting feedback from students is a step in the right direction and will help teachers in knowing their shortcomings and will also help them improve in areas where students want them. It will build up the teacher-student relationship. I am completely in favour of this.

Gurpreet Kaur, PU senator

Feedback is the need of the hour

Feedback from students is the need of the hour and if the educational institutes want to grow they should opt for this. Even the university grants commission (UGC) recommends this. I feel everyone should get feedback even the college principals and this should be made mandatory.

BC Josan, PU senator

Feedback is futile

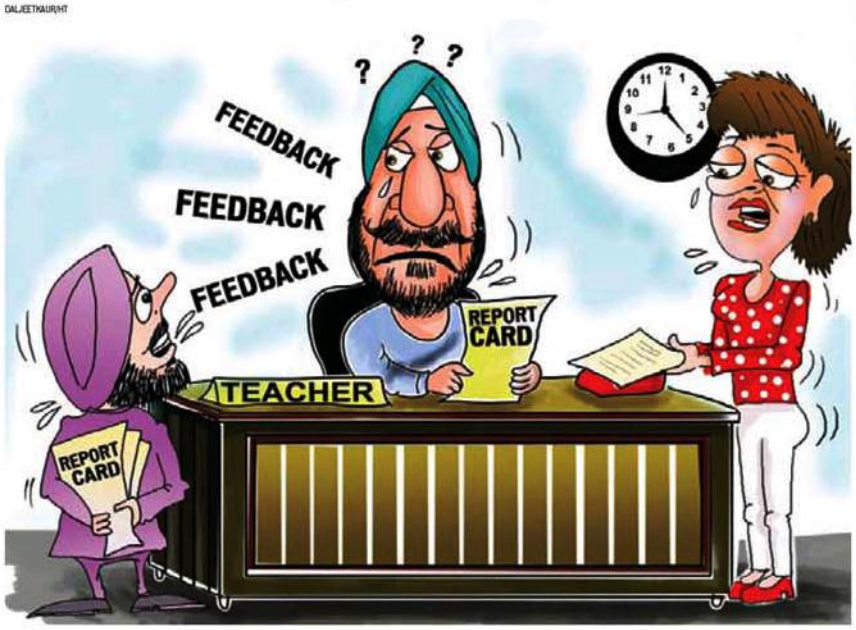
The society in which the moral values are on the decline is heading towards its doomsday. The educational institutions are also facing this problem with the deterioration in the student-teacher relationship. The teacher- the 'guru' who was considered as the person next to God in ancient Indian times seems to be a puppet in the hands of students, parents and administration. The warm and cordial student-teacher relations are becoming rare with time. At this juncture, the approval of the student's feedback system at Panjab University seems to be futile as negative feedbacks are more likely to come than the positive ones. This will add to the tensions of the teachers who are already under great stress. On the contrary, it may add to their sufferings, as there will be no check on what the students write about their teacher.

Baljinder Kaur, SAS Nagar

Students may settle scores with teachers

This system should not be approved, as it will open a window where students might try to settle scores with teachers. The admin. can have discussions but no formal system is required.

Keshav Malhotra, PU Senator



Reader of the week

Feedback will work like a toothless tiger

It will become futile because the feedback system works like a toothless tiger. Authorities don't take any action in case of adverse feedback. Many cases are pending before the author ity. They should first take the action against which are facing departmental probe. They should introduce some pragmatic idea. Authorities must probe against teachers.

Hardeep Singh, Chandigarh