

Newspaper Clips

January 8, 2014

Millennium Post ND 08-Jan-14

p-7

'Understand nation and its institutions'

NEW DELHI: Choose to engage with 'our beautiful, complex, often difficult and sometimes noisy democracy,' President Pranab Mukherjee on Tuesday said in his message to students of premier universities and institutions.

Addressing students through video-conferencing and web-casting, the President said students are the bright future of the nation.

The extent of India's progress will be decided by their energy, drive, initiative and industry, Mukherjee said. 'Understand our



President Pranab Mukherjee with children on the occasion of New Year 2014 at Rashtrapati Bhavan in New Delhi

nation and its institutions. Read, learn and formulate views on national issues. Choose to engage with our beautiful, complex, often dif-

ficult and sometimes noisy democracy,' the President was quoted as saying in a press release issued by the Rashtrapati Bhavan.

Mukherjee delivered his new year message to students and faculty members of Central universities, IITs, NITs and other central institutions using National Knowledge Network from the Rashtrapati Bhavan.

Understand your rights and duties well, especially towards those who are less fortunate. The voiceless deserve your voice; the weak deserve your strength; and the needy deserve your help. Make the best use of your knowledge in the service of the nation and its citizens, he said.

Times of India ND 08-Jan-14

p-7

President concerned about standard of education

TIMES NEWS NETWORK

New Delhi: President Pranab Mukherjee on Tuesday raised concern on the quality of education, saying that none of the Indian universities figure in the top 200 institutions of the world. While addressing the students and faculty of central universities, IITs, NITs and other institutions through video-conferencing, Mukher-

jee said that institutions should take the university ranking process seriously to boost the morale of the academics and the students.

"The standard of higher education has a direct relationship with the development of a nation and the quality of life of its citizens. Two recent surveys conducted by reputed international organizations have brought out the

difference in the standards of education between institutions in India and abroad. None of the Indian universities find any place in the top 200 institutions," said Mukherjee.

He added, "This was not the case in the past. Between sixth century BC and 12th century AD, our seats of higher learning — Nalanda, Takshashila, Vikramashila, Valab-

hi, Somapura and Odantapuri — dominated the world. They were visited by knowledge seekers from round the world. But now, many bright Indian students go abroad for higher studies. Nobel laureates Har Gobind Khorana, Subrahmanyan Chandrasekhar, Amartya Sen and Venkatraman Ramakrishnan did their graduate or post-graduate studies in Indian universities

before they went abroad to pursue higher learning."

To improve the standards of higher education, Mukherjee said, the quality of teachers, the learning capacity of students, and the physical infrastructure should be improved. Mukherjee also thanked National Knowledge Network for helping him reach out to the large number of institutions.

Understand our nation and its institutions: Prez to students

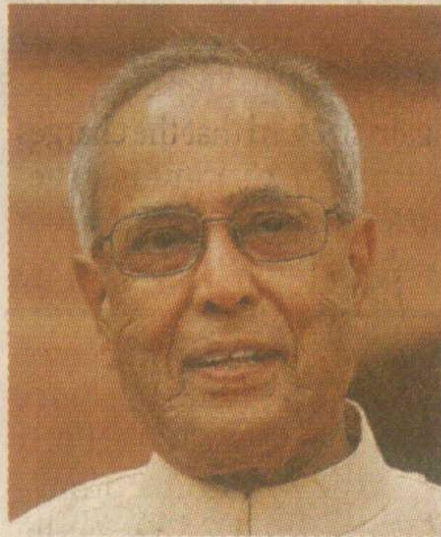
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Mukherjee said pursuit of academic excellence should be accompanied with the quest for moral development.

HT Chandigarh

PGIMER produced over 1,200 papers in 2013

CHANDIGARH: Making a mark in various prestigious national and international research journals, the Post-Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, produced over 1,200 research papers in 2013.

Dr YK Chawla, director

PGIMER, said the faculty produced over 1,200 research papers last year which is much higher as compare to 2012 in which over 700 research papers were published in various research journals.

The institute also attracted around ₹19 crore as extra mural

grants for its various research projects.

In past couple of years, the institute has taken various initiatives to promote research activities including celebrating the annual research day and honouring the best research at the institute. Every year, young

faculty members are selected for these awards.

"Besides that last year, the institute also decided to constitute a review committee, which would conduct scientific audit of the quality of research being conducted at the institute," said Chawla. HTC

IIT-Kanpur prepares metro feasibility report

TNN Jan 7, 2014, 11.20AM IST

KANPUR: The Kanpur Development Authority (KDA) is preparing a feasibility report to run metro trains here. The IIT-Kanpur is helping the KDA in chalking out the plan for metro route.

Town planner Ashish Shivpuri said that IIT-K had assured to submit the prepared plan and feasibility report by the end of the week. After a review, the report will be forwarded to state government, probably next week. Chief minister Akhilesh Yadav declared to run metros in seven cities, including Lucknow. The state government had asked the KDA to prepare a feasibility report for metro route in the city.

The KDA authorities sought help from IIT-K to chalk out the metro plan.

"Professor Vasudevan of IIT-K had accepted our proposal for preparing the feasibility report for metro in the city. He and his team had prepared the base for the train route. He is supposed to compile the report by the end of the week," Shivpuri said.

He added that if the proposed plan will be sanctioned by the state government than the authorities will take a step forward to file the detailed project report (DPR).

The feasibility report will contain all the routes of the metro. Steps for alternative routes and measures to overcome hurdles will also be the part of the feasibility report.

The assessment of financial gain and its benefits in the city are also the part of the report.

A KDA source said that the callous approach of KMC may hamper the metro plan. Even after several intimations, the KMC authorities failed to chalk out the mobility plan for metro. A few months ago, the KMC started chalking out plan for mobility in the city with the help of traffic department but the matter is being neglected since months.

IIT – Not Such a Rosy Picture

<http://www.newslaundry.com/2014/01/not-such-a-rosy-picture/>



The new year brought some good news through the newspapers – or so it seemed. Amidst the overwhelming cynicism and the impending doom of the Indian economy, a [headline](#) in *The Times of India* read, “IIT Kharagpur creates record, more than 1000 students get placed”. The supposedly punctilious *The Hindu* carried a [news report](#) – “It’s raining jobs in IIT Kharagpur”. The pink papers were expected to delve deeper into the matter. The indolence, however, befuddles me. The headlines in [Business Standard](#) and [The Economic Times](#) repeated the same sentiment. There were other newspapers and news websites too singing the same song. In spite of being a proud recent graduate of IIT Kharagpur, I found these headlines disturbing. I know students in the campus who find these headlines not just disturbing but harrowing.

These are students who have performed decently in their academics, participated in sports and managed to sketch out the required one page resumé for themselves. They have been running from one company interview to another, still unable to land a job despite it supposedly “raining jobs” on campus. Their parents read these headlines and think of their children as extremely poor performers who are unable to beat their peers who are excelling and grabbing jobs with annual salaries as high as USD 125,000.

These kinds of news reports place students under immense pressure. Let us look at the present statistics of placements in IIT Kharagpur which has created a “record” by crossing the 1000 mark. According to my sources from The Training and Placement Cell of IIT Kharagpur, the 1010 students who have been placed till January 2, 2014 form a mere 51.8% of the 1950 students who had registered for placements. The students who are supposed to have let down their families by not performing in accordance with the “record” standards set by other classmates actually belongs to a group of 48.2% students in IIT Kharagpur. If the students are enrolled in a M.Tech/MCP, MMST or LLB program in the institute, they would belong to 67.3% of the unplaced students in these programs. If these students are enrolled in a two year M.Sc program, they will be among the 108 students who have not been placed out of 116 students who had registered for placements.

The incidence of suicides at IITs is a poorly kept secret. In my four years at IIT, I have seen a few successful and heard of more than a few unsuccessful attempts. The irresponsible reportage could have an adverse effect on students who can crack under the societal pressure of not landing a good salary package during placements.

The figures I have thrown are of the Phase I placements. It is in this phase that most students are offered jobs. Very few students get jobs, especially ones with decent packages, in Phase II. Quite clearly, records have been broken and more students have been placed than in previous years. However, the system has been unable to cope with the increasing number of students’ intake. If elite institutions like the IITs, known for breaking

records in terms of number of students placed and the packages offered, are unable to place as many as 48.2% of students, we should stop expecting anything of the engineering colleges which have mushroomed throughout the nation without proper faculties and amenities.

The media is known for its cloying admiration of institutes like IITs. It has a habit of presenting a salubrious picture of the placements every year by selective dissemination of information. The media seems to lack the will or ability to ask inquisitive questions. The very fact that none of the publications mentioned cared to ask how many students are yet to be placed – while reporting that more than 1000 have already been placed – is telling. The IITs do not stand absolved in the wrong message being propagated either. Look at [the official note](#) released by IIT Kharagpur on its website. The note, quite smugly, announces the crossing of the 1000 mark in the placements. However, that is not the most misleading part of the note. The notes also states that the range of salaries offered to the students falls between INR 12 lakh to USD 125,000. Most graduates from IIT would be able to vouch that the average package must be closer to half the starting range mentioned in the note published. From what I have seen, it is more likely to find a student earning one fourth of the starting salary mentioned than find a student in the range published.

We have, till now, only focussed on the plain numbers. The greater issues such as the deficiency of enough technical jobs for students from top technical institute have never been mentioned by the media. The plum jobs are offered for the first few days and most of these jobs are offered by service sector companies instead of manufacturing sector companies (Department of Computer Science and Engineering is an exception which attracts enough technical jobs for its students). I am working with a sales and marketing consultancy after graduating from IIT Kharagpur's Metallurgical and Materials Engineering department.

We have been ignoring such problems and will continue to do so. The institute seems very happy with its performance and the unctuous media rarely asks any questions. Prime Minister Manmohan Singh recently [expressed his concern](#) over the state of affairs in the higher education sector. None of the IITs made it to the top 200 educational institutes listed in the QS World University rankings last year. The change, unfortunately, seems far away as we seem to lack enough doubting Thomases. Indian higher education including the elite institutes like IITs requires critics – is the media listening?

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Indian Institutes of Technology (IIT) Alumni in USA Announce their New Chairman and President

January 06, 2014 --

PanIIT USA, the alumni body of Indian Institutes of Technology (IIT) in USA is proud to announce that Dr. Shailesh J. Mehta will take over as Chairman and Arjun Sen will take over as President for the period 2014-15.

Dr. Mehta is the Managing General Partner of Granite Hill Capital Partners . He is a former Chairman of the Board, CEO and Founding team member of Providian Financial Corporation. Dr. Mehta has been a general partner with Invesco funds and operating general partner of WestBridge Capital. Dr. Mehta has served as the president and COO of Capital Holding which was the 10th largest insurance company in America. Dr. Mehta was Executive Vice President of Key Corp (formerly AmeriTrust). Dr. Mehta is on the board of, or has previously served on the numerous boards as directors.

Dr. Mehta has received awards for excellence for Leadership for Excellence in Business and Technology, Excellence in Corporate Citizenship, Excellence in Philanthropy, Leadership and Friendship, Special Community Awards and the Millennium Award. He has formed the Shailesh J. Mehta and Kalpa S. Mehta

Charitable Foundation, which has given millions of dollars in grants to various institutions and causes such as: Indian Institute of Technology, Bombay Shailesh J. Mehta School of Management, Asian Art Museum, American Indian Foundation, Case Western Reserve University, California State University at East Bay, and UC Berkeley.

"The IITs are renowned for producing some of the best global corporate leaders, academicians, technologists and entrepreneurs," said Dr. Shailesh J. Mehta, the incoming chairman. Mehta went on to say that "I attended the Houston Conference and was impressed with the energy and enthusiasm of the volunteers who delivered a world class conference that all of us, alumni will be proud of. It gives me confidence that working with such a dedicated group we can make a significant difference."

This year's global conference speakers included Nobel Laureate Amarta Sen and ex-president of Mexico, Vicente Fox. Past global conference speakers include President Bill Clinton, Bill Gates and Jack Welsh.

Arjun Sen, the incoming PanIIT USA President, is the President and Founder of ZenMango, a premier brand consulting company whose clients include fortune 500 companies and major sports personalities. Before ZenMango, Sen was the VP of Marketing & Operations for Papa John's International Inc. He also served as the chair of the Governor's small business council in Colorado.

Sen has been involved with PanIIT USA for the last four years. Sen said, "Our energetic and passionate alumni takes pride in giving back. 2013 - 14 are the years to showcasing the contribution of IIT Alumni brand and support our Alumni, we also realize that. Going forward, I see many opportunities to enhance our brand and provide value to our members."

There are more than 60,000 IIT alumni in USA of which more than half are actively involved with PanIIT. One of the key missions for PanIIT USA is to promote the spirit of giving back in the USA and to the IITs and to India.

ABOUT IIT (Indian Institute of Technology)

Today, IIT offers undergraduate, integrated postgraduate and postgraduate degrees in over 25 different engineering, technology and business/management disciplines in sixteen campuses around the country. Alumni from the IITs have made a significant impact in their chosen professions not only in India but also in nearly every country in the world. IIT Alumni occupy positions of leadership at top universities, at leading research institutions, at small and large companies, in government, and at non-profits.

Contribution of IIT Alumni has been recognized in the United States by all major news and media publications. CBS- 60 Minutes in 2005 stated, "IIT may be the most important university you have never heard of. Put Harvard, MIT and Princeton together and you begin to get an idea of the status of this university in India." In the same commentary, CBS -60 minutes called IIT's curriculum "may be the most rigorous in the world." The entire interview can be viewed at <http://www.iit.org/>.

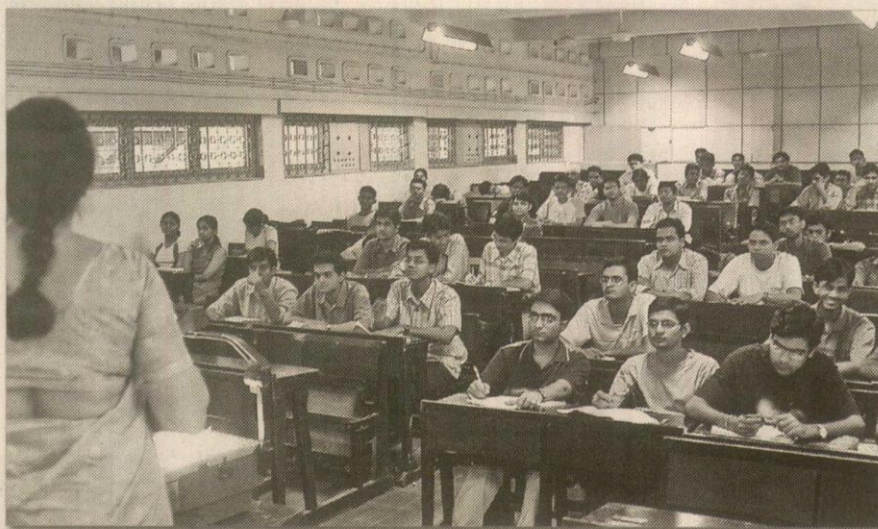
Read the full story at <http://www.prweb.com/releases/2014/1/prweb11457367.htm>.

When community leads nation

THE developed nations, particularly the US, for the last decade or so have been focusing on community colleges. In these nations, community colleges are vital parts of the postsecondary education system. They serve undergraduate students, providing open access to postsecondary education, preparing students for four-year institutions, providing workforce development and skills training, and offering noncredit programmes ranging from English as a second language to community enrichment programmes or cultural activities.

Community colleges serve close to half of the undergraduate students in the United States, which included more than 7 million credit students in the fall of 2010. The comprehensive mission of community colleges makes them attractive to a broad range of people who seek particular programmes or opportunities of special interest. Community colleges are the gateway to postsecondary education for many minority, low income, and first-generation postsecondary education students. Since 1985, more than half of all community college students have been women. In addition, the majority of black and hispanic undergraduate students in the US study at these colleges. Community colleges also provide access to education for many nontraditional students, such as adults who are working while enrolled. The average age of a community college student is 29, and two thirds of community college students attend part-time. At the same time, community colleges are not only providing access for adult students, but also serve an increasing number of high

Arun Nigavekar



NEED OF THE HOUR : Globalisation is driving changes in our economy and the need for an educated workforce has never been greater

school students who take specific courses to get ahead in their studies. In fact, half of the students who receive a baccalaureate degree attend community college in the course of their undergraduate studies.

In the US, the costs for a postsecondary degree are on the rise. As a result, increasing numbers of students at community colleges (and four-year institutions) are looking to the federal financial aid programmes to help offset or finance the cost of their education. Almost half of the students attending community college receive some form of financial aid to help finance their studies. In 2010, more than 3 million community college students received Pell grant dollars. However, in recent years, there has been a shift in government policies away from grants toward student loans. Because of the low

costs to attend community college, the amounts borrowed are lower for community college students than they are for their counterparts at four-year institutions (public and private). Community colleges are diverse institutions that serve a wide variety of needs. These include the students who attend to upgrade their skills for a particular job, students who are pursuing an associate degree to transfer to a four-year institution and students who attend to pursue a hobby (such as learning a language). The educational outcomes of community college students reflect this diversity and thus they have become sought after institutions in the US. Almost similar trends, under different titles, are happening in Europe, Australia and South Asian countries.

We in India have been blindly following the US approach as best to us, rather

than doing critical analysis of the situation. Basically community colleges are nothing but institutions that give skills training in all the service domains that have become of critical importance in 21st century. Globalisation is driving changes in our economy and the need for an educated workforce has never been greater. The majority of new jobs that will be created by 2018 will require some postsecondary education. In addition, the demographics of the workforce are changing. As a result, employers increasingly rely on the students who currently are least likely to complete their education.

The government adopted different strategies under different ministries: HRD, commerce and industries, health, communication, IT, road and transport and even law are now active. However, in our country each ministry behaves

like an independent entity and likes to publicise their contributors, to public and governments. UGC also has jumped onto this bandwagon now that AICTE's task is being transferred to the UGC. It is continuously announcing new policies or asking educational institutions to promote community colleges.

The UGC either in a pre-planned manner or without doing systematic and detailed study of how much infrastructure there is with affiliated colleges as well as what contributions they can make in skills education have asked the colleges and universities to follow community college concept and create such institutions. They would most probably provide limited financial support. What is interesting is that universities and colleges are taking this new path that would give them some money.

UGC must understand India's need and what could be done by using the existing infrastructure. UGC should have asked universities to check with their affiliated colleges (more than 32,000 colleges in our country use only 60 per cent of infrastructure) to go about this task of skill education in a more organised manner rather than following blindly the US concept.

These self-supporting affiliating colleges would do a better task because they have new challenges. Without such colleges, millions of students and adult learners would not be able to access the education they need to be prepared for the workplace. These colleges would become the access point for education in a town and a real catalyst for economic development.

(The writer is a former chairman of UGC and former VC of University of Pune)

WITHDRAWING GUIDELINES

UGC not to regulate autonomous B-schools

BY PRASHANT K. NANDA
prashant.n@livemint.com

NEW DELHI

Facing resistance from private colleges, the government has decided that guidelines unveiled last month for the oversight of technical institutes will not apply to autonomous business schools (B-schools) that have been concerned about losing their autonomy.

The draft guidelines were announced by the University Grants Commission (UGC) on 5 December and updated on 23 December to regulate all technical colleges after the Supreme Court on 25 April took them out of the regulatory purview of the All India Council for Technical Education (AICTE).

Independent B-schools, which follow their own curriculum and set their own course fees, were also required to obey the guidelines and seek affiliation to universities that function under UGC and adopt their syllabus.

Their inclusion provoked protests from administrators of these institutes, who argued that the quality of their courses, including the postgraduate

diploma in management (PGDM) programme, would be compromised and the career prospects of their students harmed.

"We have withdrawn our guidelines to regulate PGDM schools," UGC chairman Ved Prakash said. "Though we have made some progress, we have now decided to keep all diploma programmes out of our regulatory purview. Business schools providing PGDM will no more come under our supervision."

"They will run as they used to be earlier," Prakash said about the functioning of these B-schools.

The UGC chairman, however, said all other professional colleges, including engineering schools, will have to abide by the new guidelines.

On 10 January, UGC and senior human resource development (HRD) ministry officials are meeting to find ways to provide affiliation to more than 11,000 professional schools.

Last month, several private education providers' associations met HRD minister M.M. Pallam Raju to express their reservations about the UGC draft guidelines.

India has more than 300 autonomous business schools including XLRI in Jamshedpur; Mudra Institute of Communications, Ahmedabad; International Management Institute in Delhi, and Management Development Institute in Gurgaon.

These autonomous business schools are also known as PGDM B-schools because they don't offer an MBA degree, but award a postgraduate diploma. They were operating without university affiliation, but were approved by AICTE.

Some 180,000 students are studying in these schools.

B-schools said they hadn't yet been informed about the government's decision to spare them from having to follow the UGC guidelines.

"We have not received any formal communication from either the HRD ministry or the UGC about their withdrawal," said Harivansh Chaturvedi, director of the Birla Institute of Management Technology in Greater Noida, on the outskirts of Delhi.

Chaturvedi, who is also the alternate president of the Education Promotion Society of India, said B-schools were going ahead with their plan to meet the HRD minister again and explore judicial options.

Even if UGC decides not to apply the new guidelines to autonomous B-schools, the institutes would still need to be overseen by a regulator, in the absence of which their status would remain uncertain.

Times of India ND 08-Jan-14 p-20

Earth's 'gassy twin' found 200 light years away

Planet KOI-314c Has Similar Mass, But Is 60% Bigger

Kounteya Sinha | TNN

London: Astronomers have discovered Earth's 'gassy twin' with a mass similar to that of our planet in another solar system 200 light years away.

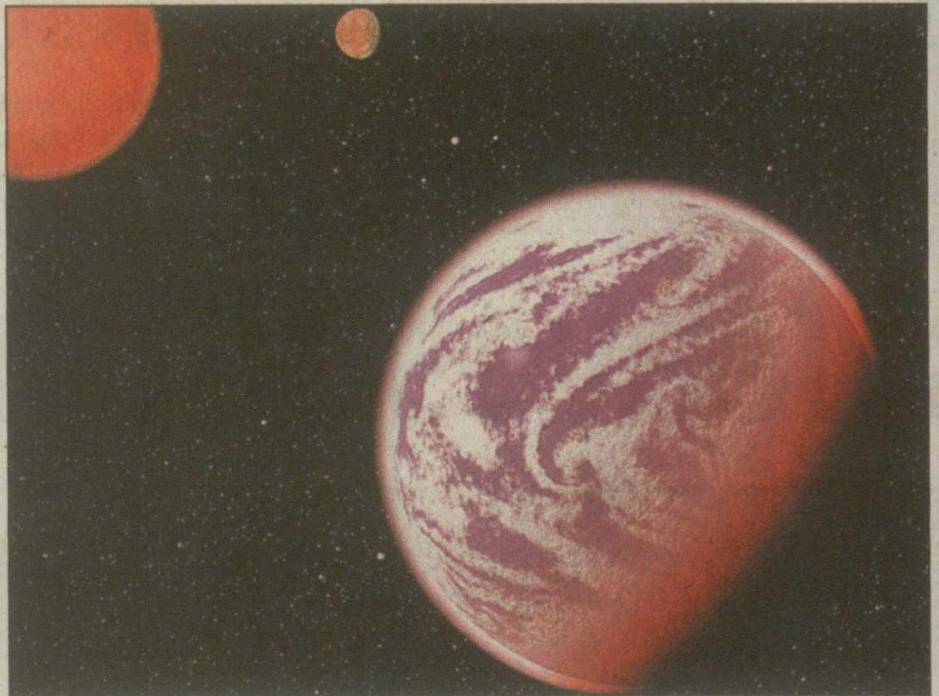
The planet named KOI-314c by a team of astronomers is 60% larger in diameter than Earth.

Being the lightest planet to have both mass and physical size measured, astronomers say KOI-314c has a very thick, gaseous atmosphere that makes the planet light despite its size. Findings confirmed that KOI-314c is only 30% denser than water.

This suggests that the planet is enveloped by a significant atmosphere of hydrogen and helium hundreds of miles thick. It might have begun life as a mini-Neptune and lost some of its atmospheric gases over time boiled off by the intense radiation of its star.

KOI-314c circles its star every 23 days. The team estimates its temperature to be 104°Celsius, too hot for life as we know it.

"This planet might have the same mass as Earth but it is certainly not Earth-like," says David Kipping of the Harvard-Smithsonian Centre for Astrophysics, lead author of the discovery. "It proves that there is no clear dividing line between rocky worlds like Earth and fluffier planets like water



BIG FIND: An artist's conception of KOI-314c. Astronomers say KOI-314c has a very thick, gaseous atmosphere that makes it light despite its size

worlds or gas giants," he added.

The team used data from Nasa's Kepler spacecraft and found that KOI-314c orbits a dim, red dwarf star located approximately 200 light-years away. Conventionally astronomers measure the mass of an exoplanet by measuring the tiny wobbles of the parent star induced by the planet's gravity.

This radial velocity method is extremely difficult for a planet with Earth's mass. The previous record

holder for a planet with a measured mass (Kepler-78b) weighed 70% more than Earth.

To weigh KOI-314c, the team relied on a different technique known as transit timing variations (TTV). This method can only be used when more than one planet orbits a star. The two planets tug on each other, slightly changing the times that they transit their star.

For the full report, log on to

Times of India ND 08-Jan-14 p-24

Young UK doctor's college notes become 'Wikipedia of medicine'^{To}

Rose Troup Buchanan

A medical student who shared his notes online has found unexpected success after his popular website was voted by medical professionals as a global industry innovator. Tom Leach, who studied medicine at Manchester University, at the Royal Bolton Hospital, initially simply shared his notes with friends — who passed them on. "One day I went into the library and there was a queue for the photocopier where people were copying my notes," Leach said.

Since creating the site almost a

doctor.com in 2009, the student from Derbyshire's small project has mushroomed.

At first, it was only used by Manchester students, but word of mouth in the medical community soon got it noticed. Now it is used by thousands of students, with hundreds of articles, blogs and course notes contributed from students and doctors around the world.

Speaking to The Bolton News, Dr Leach, now 26 and working in Australia, said: "It's like the Wikipedia of medicine, with doctors as editors to verify the content, but it's written in a simple way."

He was recognized by the Health Service Journal as one of 2013's top innovators, alongside heavyweights such as Ben Goldacre and Sir Bruce Keogh.

The young doctor commented how proud he was on making the list, but confessed: "I didn't really realize how big a deal it was until the list was released and I saw the other names on it." Dr Leach's blog entries show the humour in his job too — with one of the latest detailing the complaints of a teenage boy admitted after complaining of stomach problems and severe headaches. THE INDEPENDENT

Is an MBA better than an MTech?

CAREER COUNSELLING



USHA ALBUQUERQUE

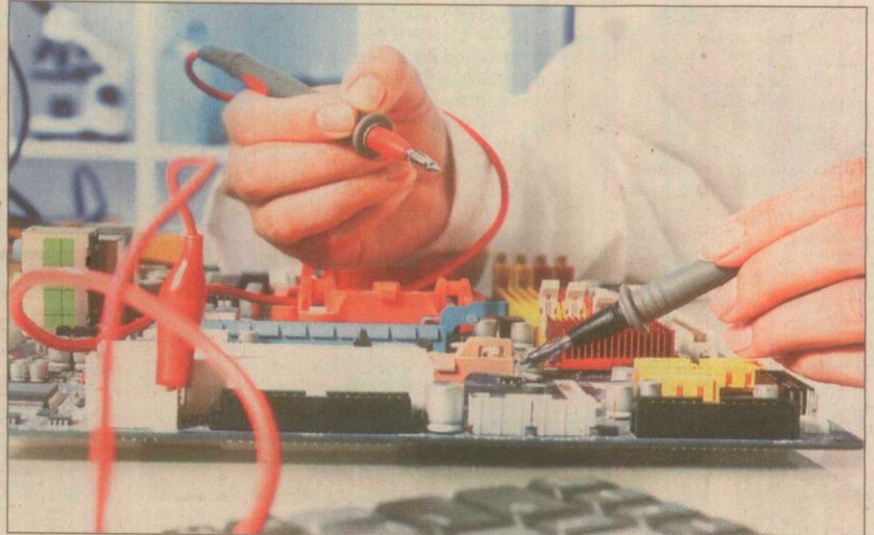
I completed my B Tech in electronics and communication in 2012 and I have been working as a research and development (R&D) engineer for a year now. I want to pursue my post-graduation, but I am confused between M Tech and MBA. Could you please suggest which of these is a better option, and also list out some good colleges in India and abroad?

— Parineet

The choice between an M Tech and MBA depends entirely on your interest areas, your aptitude and personality type. Therefore the first step is to give more serious thought to what you enjoy doing, what you are capable of doing well and your career goals. Your current job in R&D is probably a good indicator of the most suitable

career choice. But you may also want to explore career options in business management and match the requirements of the career with your own strengths and interests. Once you have a clearer picture of what future you would like for yourself, you will be able to take an informed decision.

If you enjoy handling the technical and scientific aspects of your job, working in technical creation, modification and development, and are good at the R & D work you are currently handling, then an M Tech is a good option. The M Tech qualification is required for working on design and product development – an intrinsic part of engineering. With the entry of many multinational companies, India is moving out of the traditional mould and emerging as a specialised engineering and R&D hub. Depending on the specialised nature of the job, in many MNCs, M Tech graduates are sometimes preferred. There is



THINKSTOCK

a vast scope in the area of electronics and communications. India is amongst the fastest growing telecom markets, and is emerging as a world-class VLSI/embedded systems hub.

Electronics and communication engineers can find jobs in a number of multinational corporations operating in India, as well as in government organisations like MTNL, BSNL, civil aviation, NPL, AIR, posts and telegraph department, railways, Bharat Electronics Limited and DRDO, among others. However, if you wish to combine your technical knowledge with managerial skills and work in a more administrative capacity, then doing an MBA will help.

An MBA degree will boost your leadership skills and help you build other capabilities in critical thinking, communication and problem solving. If you do decide on the MBA option, it is advisable to have a minimum of two years of work experience before moving into business management. Practically every good engineering institution in India and abroad offers M Tech programmes in electronics and communication or any other technical

specialisation you may wish to consider. Admission is through the GATE exam, and other entrance tests. MBA admission to the top institutes is through the CAT, MAT or GMAT tests.

I am a Class 12 non-medical student. I am confused about my career choice. I am keen on a career in the video/VFX/design editing field but my parents want me to become an engineer, an IIT engineer at that. I am not interested in engineering and I am not aspiring to get into IIT. Should I listen to my parents or go ahead and follow my passion? Please advise.

— Purnima Parashar

If you hate the thought of becoming an engineer, you must first find a suitable alternative career option for yourself to be able to convince your parents of your choice. Most students and parents are not aware of the numerous career choices available to young people today and so tend to only look at engineering.

If you enjoy creating monsters and flying cars and are really keen to get into the field of video/VFX/ design editing field, you can take up a course in animation and multimedia. Multimedia is an integration of multiple media elements like text, graphics, animation,

video and audio coupled with the computer's interactive power. Animation is one of the components of multimedia.

Animators can work on full-length animation movies, and TV programmes, create television commercials and use Special Effects (VFX), make DVDs, design games for the internet or consoles (like PlayStation or Xbox), work in the advertising industry or as web designers. India has over 300 animation studios employing over 12,000 animation professionals while there is a demand for over 30,000 according to NASSCOMM.

Since there are very few institutes offering degree courses in animation and multi-media, you can take up a Bachelor in Computer Applications course (BCA). It may also provide a fall-back option for you, which should reassure your parents, should you change your mind.

Send your queries at heducation@hindustantimes.com or to Career Counselling, HT Education, 1st floor, HT House, 18-20, KG Marg, New Delhi-110001. The columnist is director of Careers Smart, and author of the Penguin India Career Guides Vol 1 and 2. Ph: 011-40552321

ET/MA

India embraces MOOCs, but what if it is a 'lousy product'?

The new QEEE programme devotes some of India's top teaching resources to a plan that is not likely to succeed



RAFIQ DOSSANI

One hundred engineering colleges around India will rely heavily on virtual instruction under a new programme funded by India's Ministry of Human Resource Development (MHRD) that kicked off on January 2.

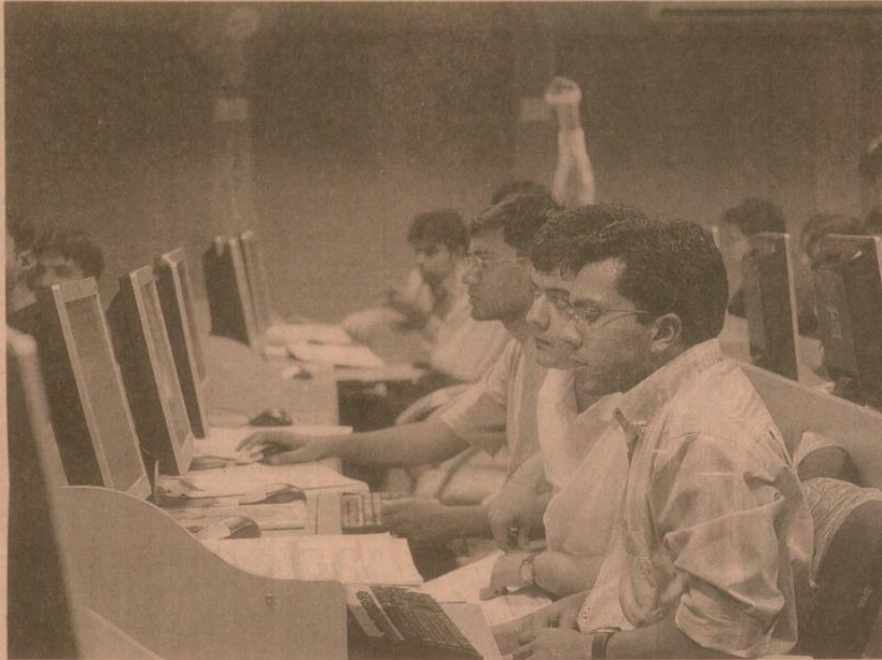
The Quality Enhancement in Engineering Education (QEEE) programme, as it is called, relies on the use of the online teaching model known as MOOC, or Massive Open Online Course. About half the students' courses are to be delivered over MOOCs.

While the MOOC model has had its successes, there also have been failures. If it is to succeed, the QEEE must be implemented in a way that leverages the advantages of the MOOC model to meet the needs of the broadest possible universe of students.

Under the QEEE programme, courses will be taught by a combination of senior Indian Institute of Technology (IIT) faculty and others. During regular class hours, the students will hear and see faculty deliver recorded lectures. Regular faculty will be present during class hours, in a supportive role. In the evening, e-tutorials will be held to enable live virtual discussions between students and tutors. Real time online experiments will be made available via e-labs.

According to a news report, as many as nine subjects will be delivered in MOOC format, including in the fields of mechanical engineering, civil engineering, computer engineering and mathematics. The courses will all be in advanced subjects such as wireless connections, linear algebra, and heat transfer for mechanical engineering.

The QEEE comes at a time when some are raising doubts about the edu-



cational value of MOOCs. Sebastian Thrun, a MOOC for higher education pioneer who founded the online MOOC company Udacity, is one of those voices. As the hype for MOOCs built up last year, Thrun said in an interview he "was realising, we don't educate people as others wished, or as I wished. We have a lousy product. It was a painful moment (when I realised this)."

Thrun's statement came in response to the weak performance of students who took MOOCs over the Udacity platform at San Jose State University in remedial mathematics, college algebra and elementary statistics. Only 25 per cent of the online students passed, less than half the pass rate for students who

took the course face-to-face in real time. Thrun is so distressed with the performance of MOOCs that he is changing the focus of Udacity from academic education to corporate education.

Given the amount India is investing in the QEEE initiative, it is important for it to make the best possible use of the complex and evolving MOOC model.

Introduced in 2011, MOOCs originally consisted of syllabus-based recorded lectures and slides seen over YouTube. Each lecture was followed by

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homework with the use of moderated forums as the only option for students who failed to understand the recorded material or the assignments. The teaching faculty was not involved in grading assignments or providing live support to the students.

Evidence from the San Jose State University experience suggests that advanced students are far more likely than their more challenged peers to participate actively in discussion forums. This would suggest that MOOCs are best suited to

advanced students and less suited to average students. But advanced students are more likely to be found at higher-ranked institutions where the best professors are available to teach face-to-face.

This contradiction led to the development of a second-phase MOOC (let's call it MOOC+), a variant of the so-called flipped classroom model in which recorded content is delivered in advance and lecture time is used to answer questions. Under this approach, which is the one being used in the QEEE programme, face-to-face faculty tutorials will support the recorded lectures.

This MOOC+ approach appears well suited to the needs of students taking basic level courses, but may not be suited to teaching advanced courses as envisioned under the QEEE programme. These courses often are better taught when students, especially the weaker ones, have access to personal attention from instructors during and after class hours. Sacrificing attention to a weak student's needs for a one-size-fits-all lecture by a senior IIT faculty risks exactly the kind of performance that was observed at San Jose State University. Perhaps a realigning of goals and resources is in order.

Under the QEEE as designed, IIT professors are being used to teach advanced courses to all levels of students through the MOOC+. This devotes some of India's top teaching resources to a programme that is not likely to succeed. A better use of the MOOC+ model would be to have senior professors from average institutions teach basic level courses to all students. Advanced courses would continue to be taught face-to-face at all levels. This would do little to improve the teaching of advanced courses to average students, but it would be a useful and more cost effective use of online education.

The author is a senior economist at the non-profit, non-partisan RAND Corporation and co-author of Higher Education: Triumph of the BRICs? (Stanford University Press, 2013)



READY, GET SAT, GO

TICKET TO THE US The Scholastic Aptitude Test checks your preparedness for study in a US college



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The Scholastic Aptitude Test (SAT) and SAT subject tests are tools designed to assess your academic preparedness for admission to a US college. The paper-based SAT is held six to seven times a year and the next edition will be held on January 25. The SAT general test (SAT I) is of three hours and 45 minutes and includes three sections of multiple choice questions on writing, reading and mathematics.

WHAT IS SAT?

The SAT subject test (SAT II) is optional, through which universities and colleges get to assess a student's knowledge of specific subjects. This test is important if a candidate is applying for a major in any specific subject.

The SAT II is an hour-long test that comprises multiple choice questions. Candidates need to select three subjects per sitting from the list of 20 subjects such as chemistry, physics, social studies, German reading, Spanish listening, world history, French, mathematics and literature.

SCORING PATTERN

The total score for SAT I and SAT II is 2400 each. All three sections in SAT I and each subject in SAT II are scored on a scale of 200-800. A score of 500 in each section is good enough for admission to a top college. "It is useful to take the test more than once. Based on our analysis, we have seen that students who repeat SAT do better. It also helps in some cases as some US universities accept a best of three SAT scores," says Renuka Raja Rao, country coordinator, EducationUSA Advising Services, United States-India Educational Foundation (USIEF).

WHY IT IS IMPORTANT

Submitting SAT scores as part of one's college application for admission to an undergraduate programme is mandatory in most cases, except when one opts for alternatives. "For example, some colleges have been accepting the ACT as an alternative to the SAT, and some require neither the SAT nor the ACT (test-optional schools). International students are sometimes awarded scholarships based on their SAT scores or sometimes even due to the mere fact that they have a SAT or ACT score to submit at all," says Nina Merchant, a Mumbai-based academic counsellor for students appearing for these tests.

Students who have successfully cracked the test say that while a good SAT score (2100+) is definitely important, it's not enough to land you a spot at a top college. "The SAT is not a passport to college success but

a mere step towards it. To attain a spot at a top university, one needs to have done something exceptional. Strong extra-curriculars, excellent academic credentials, a certain amount of well-roundedness, a demonstrated overwhelming desire to succeed are musts and can affect your application," says Udai Bothra, an Indian student studying at Harvard University.

PREPARING FOR SAT

Students can practise from the Official College Board Guide or the Big Blue Book that comprises questions from the actual test. Candidates can also subscribe to the official SAT online course at the official website of College Board to familiarise themselves with all aspects of SAT. The course offers interactive lessons, official practice papers, immediate computer generated score and personalised score report.

"Aspirants must look at the big picture of what the writers of the exam are perhaps looking for and might have had in mind when they wrote the questions. Each SAT question, for example, can be categorised as easy, medium and difficult - each of these categories comprise one-third of the questions (except reading comprehension). Students should prepare with the aim of getting all the easy and medium questions correct, and then focus on improving their skills with the difficult questions. This will maximise their scores, since each question is worth the same points," says Merchant.

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