Newspaper Clips
January 29, 2015

Hindustan Times ND
29/01/2015 P-16

Venkaiah Naidu, UD minister

IITs TO CHIP IN WITH GOVT'S 'HOUSING FOR ALL' PROGRAMME

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NEW DELHI: The Indian Institutes of Technology (IITs) are likely help the government's 'housing for all' project which aims to build three crore affordable houses by 2022.

The ministry of housing and urban poverty alleviation has written to the human resource development (HRD) ministry and sought its views on a possible memorandum of understanding with the IITs.

Prime Minister Narendra Modi, in his address to the IIT directors last year, had asked the premier technical institutions to help build economical and eco-friendly houses to help fulfil the government's vision.

The civil engineering department of the IITs, a senior ministry official said, could help in building affordable houses. IIT Madras has already been at the forefront of pioneering research in affordable housing and its researchers in 2013 developed a unique method where it is possible to construct a two-bedroom house with 800 sq ft area for ₹10 lakh.

Using glass fibre reinforced gypsum (GFRG) panels, they constructed a two-storey building to showcase the technology they developed to build cost-effective mass housing.

Housing for all programme, which proposes to build three crore houses across the nation by 2022, is one of the priorities of the NDA government.

"By the time the nation completes 75 years of its independence, every family will have a pucca house with water connection, toilet facilities, 24x7 electricity supply and access," President Pranab Mukherjee had said in his address to the Parliament.

Times Of India ND 29/01/2015
P-14

IIT-B students get first 'start-up' fair

Most Grads Prefer New Ventures To Jobs

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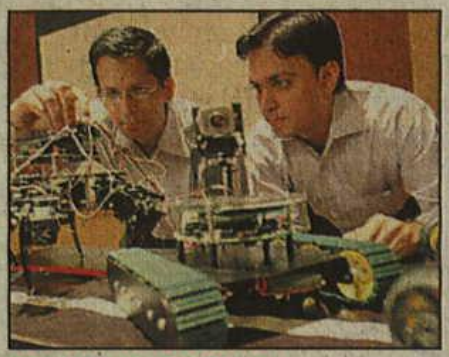
Mumbai: Around 88% of IIT-Bombay alumni who quit their jobs to start their own ventures are now happy with their move, a new survey has revealed. Almost 40% of the alumni surveyed from the past three batches — around 40% — moved from a job to a different field within three years, including some who quit without even completing a year. Apart from moving to a new job and setting up their own entrepreneurial ventures, some have been pursuing higher studies, research and social work as career options.



TRAINING GROUND

With the intent to highlight IITians' post-placement dilemma and the flaws in the placement process, the students' media body surveyed around 220 respondents from the 2011, 2012 and 2013 batches and published their findings in the latest edition of Insight released on Wednesday.

Considering the broad trend of students choosing to launch their own ventures, IIT-B's placement and entrepreneurship cells will hold a first-ever start-up fair on Sunday. It will allow students to intern at start-ups of their choice and if both parties so wish, also join them as co-founders.

Around 11 start-ups have registered for the fair on Sunday, said Mohak Mehta, placement manager at the cell.

Students will get to interact with start-ups in the morning and know more about their profiles, and then be part of walk-in interviews in the afternoon. The fair will be open for students from second and third years—the ones who are studying at the institute—and final-year students who are yet to get placed.

In the survey, a little over 50% of the alumni who changed jobs they had secured on campus thought there were issues with the placement process. Around 50% even said they switched jobs as they did not like the profile or had a conflict with the companies' values. The rest said they wanted to explore different fields or to raise money for their future career paths.

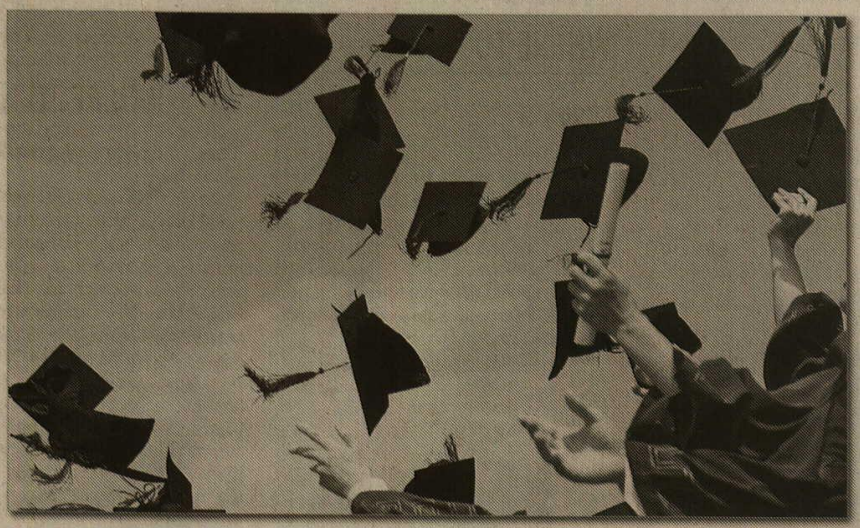
"We need to understand the requirement of a process where more informed choices are made... The placement process must ensure this does not stem from lack of information or a thorough understanding of the job," said the article. Indicating the flaw in the process, the survey further revealed that around 35% of the respondents who switched over felt that those jobs are a "perfect fit" for them during campus placements. Of the 2012 batch passouts alone, 55% said they intend to change their jobs and 35% are still unsure.

The study, though, also claimed the institute is doing well enough to nurture the entrepreneurship culture as 54% of the ones who started their venture decided to pursue their passion—the dream to become their own bosses one day—was born within IIT-Bombay.

Financial Chronicle ND 29/01/2015
P-11

Will the adventurous UGC succeed?

Arun Nigavekar



FORBIDDEN FRUIT: The youth painfully realise that there are innumerable diversities amongst the states and they further know that numerous world class universities are also accessible to them in an on-line mode

THE impact of the Modi government on the education sector is slowly and surely being seen. In higher education, this is being triggered by recently published guidelines and brochures in the last few months. To be fair to the MHRD and UGC, they have reinvented the wheel that was accepted by the earlier Vajpayee government in the last phase of their governance. In 2003, the then government fully accepted the new approaches for higher education that were written in the tenth plan and cleared the applications of the same. However, very soon, the Vajpayee government lost the elections and the new government completely sidetracked the strategy projected by the former government and never touched the issues that were of great importance to the youth of India.

Nothing significant happened in MHRD in Manmohan Singh's government's two periods, 2004-2014. Indeed, since the then-premier had once held the chairmanship of the UGC before he became the finance minister under the prime minister ship of PV Narsimha Rao (June 1991 to May 1996), everyone had expected radical reformative changes in higher education. He gave the HRD ministry to a very senior Congress leader but unfortunately no radical reforms took place. The only aspect that got a boost was the number of the deemed-to-be universities. These universities fully focussed on professional education, mainly in the domains of engineering, medical, management and law. Even today these universities are a strong financial source for the owners of these deemed universities.

The present PM is categorically talking about reforms in education and have picked up a minister who he feels would completely change both the school and the higher education sectors. There have been discussions on the appointment of the minister itself and a major issue raised by politicians and academicians was that the person has had no previous exposure to such a difficult and complex sector. We must, however, realise that in a fascinating democratic system like India, one would historically find several instances when ministers have been picked for various ministries in the last six decades whose credibility was questionable and we should accept such appointments as a part of democracy.

The most important aspect we should focus on is to critically observe how the MHRD is going to bring about a comprehensive policy that covers as diverse a country as India. And much more than these facets, the criticality of success is linked with the type of operative structure the MHRD triggers to touche the different level of complexities in each of the states.

There are two critical challenges before the MHRD. First they should bring out a very dynamic legal structure for what one calls the Act of the universities. This is very critical because at present we have almost seven layers of existing universities with almost similar but very tangential legal structures. We have Central universities, information and communication sector, universities with Central status like the universities created by the department of atomic energy, Indian space research organisation and many such entities, deemed-to-be universities, entities like IITs, central and state level open universities, state created public universities, state private universities, training institutions at university level by industries and a few foreign universities that have set up geographical campuses on Indian soil.

These universities follow various admission processes, an assortment of academic and examination structures, diverse teaching approaches and a mixture of academic delivery system. The net result is that, even in a given state, the flow of students within a given university is a blocked process. One cannot even imagine the mixing of subjects in a given discipline. Therefore, cross faculty education becomes a tough challenge.

More than six decades have passed after independence and more than 600 affiliated and campus universities are in operation but numerous diversities still are the ground realities.

The above mentioned realities as observed in the higher education structure bite into the vibrant minds of today's youth in India.

They feel that they are hitting their heads against dead governmental synergy. They also painfully realise that there are innumerable diversities among the states and they further know that numerous world class universities are also accessible to them in an online mode.

The UGC has suddenly started readdressing these aspects, which were the key issues of the tenth plan. They have issued as many as eight guidelines and regulations to keep the higher education institutions alive. They have also allocated grants to colleges and universities to trigger skills education programmes at well-established general graduate programmes.

But as is common in our typically rushed way of policy implementation, UGC has given very scant instructions on how the colleges should go about bringing in skill education at an operative level. The colleges and universities have not yet deliberated to discover what aspects they must analyse and how synergy should be created between all parties, namely students and teachers, and most importantly how communication with appropriate industries would be established. The UGC has to create a machinery of experts to work out the approach for achieving their dream. Then, and then alone, would it succeed.

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

Now IIT-B online courses for housewives

http://www.asianage.com/mumbai/now-iit-b-online-courses-housewives-862

The Indian Institute of Technology, Bombay (IIT-B) launched IITBombayX, the ‘extended’ online educational services for the benefit of Indian learners and training workshops for teachers on January 26 at the institute at the hands of Prof. Devang Khakhar, Director, IIT Bombay. The service will offer MOOCs (Massive Open Online Courses) that includes modifications to make it suitable for blended MOOCs and Indian language interfaces. The functionality is expected to be extended in future to also cover special needs of school education and vocational training.

Speaking about the courses that will be offered initially, Prof Deepak Phatak who designed and worked on the format with the help of other professors, researchers and students said that initially the courses on offer would include introduction to computer programming, thermodynamics and signals, and systems.

While speaking about IITBX Prof Phatak said, “Enhancing quality of education cannot be achieved without appropriate use of technology. We at IIT Bombay are happy to use new opportunities like IITBombayX. These online courses emphasise on availability of information/material, easy access and learning. It is not only beneficial for students but even the T10KT (Teach 10,000 teachers) workshops will now adopt a blended MOOC model to reach out to millions.”

Prof U N Gaitonde from the department of mechanical engineering while speaking about the absence of any age limit for the courses and the feedback they received from the pilots ran earlier during the testing phase said, “MOOCs provide a pleasant satisfaction of reaching out to a large number of students — from 15-year-olds to 75-year-olds. The feedback received is also diverse, and is hence rich and valuable.”

Ajnala village picked as IIM Amritsar site

Hindustan Times (Chandigarh)

AMRITSAR: The Punjab government has finalised Awan village in Ajnala tehsil, 35 km from here, as the location for setting up the Indian Institute of Management (IIM), Amritsar.

Chief minister Parkash Singh Badal has given the nod to the location and the district administration has earmarked 150 acres in the village for the institute.

Deputy commissioner Ravi Bhagat told HT, "After detailed discussions, it has been decided that the IIM will come up at Awan. The site has been selected as it has good approach road and is near the international airport. The place also has a good approach road from the Fatehgarh Churian side. It is a panchayat land and there are no acquisition issues."

Bhagat said since the chief minister had signed the documents, a central team was expected to visit the site, following which the Centre would sanction the budget.

He said the institute would give a major fillip to the place and would attract students from all over the country.

Of the eight locations seen, the administration had shortlisted two — Awan and Sheron Bagga near Baba Bakala.

Union finance minister Arun Jaitley had announced the IIM for Punjab during the general budget of 2014. Since then the administration was on the lookout for the land.

Times Of India ND 29/01/2015 P-17

New search engine claims to outsmart Google

London: Researchers claim to have developed a new search engine that outperforms current ones, and helps people to do searches more efficiently.

The SciNet search engine, developed by researchers at the Helsinki Institute for Information Technology (HIIT), is different because it changes internet searches into recognition tasks, by showing keywords related to the user's search in topic radar.

People using SciNet can get relevant and diverse search results faster, especially when they do not know exactly what they are looking for or how to formulate a query to find it.

Once initially queried, SciNet displays a range of keywords and topics in a topic radar. With the help of the directions on the radar, the engine displays how these topics are related to each other. The relevance of each keyword is displayed as its distance from the centre point of the radar — those more closely related are nearer to the centre, and those less relevant are farther away.

The search engine also offers alternatives that are connected with the topic, but which the user might not have thought of querying. By moving words around the topic radar, users specify what information is most useful for them.

When people are uncertain about a topic, they are typically reluctant to reformulate the original query, even if they need to in order to find the right information, researchers said.

With the help of a keyword cloud, people can more quickly infer which of the search options they receive is more significant for them because they do not need to visit the pages offered by the search engine to find new search words and start again.

It's easier for people to recognize what information they want from the options offered by the SciNet search engine than it is to type it themselves, according to the project's coordinator, Tuukka Ruotsalo. The team of researchers has founded a company called Etsimo Ltd to commercialize the search engine. PTI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FINDERS' HELPERS

Business Line ND 29/01/2015 P-9

Indian science's Y chromosome bias

Why are women virtually non-existent in the Indian science establishment?

ANU ACHARYA

One of the first things I am asked by strangers meeting me for the first time is: Why would a woman like me study physics and pursue an entrepreneurial career in a branch of science such as genomics? I am apparently an oddity. I hope these odds change during my lifetime and my daughters don't get asked the same questions.

As a child I had all the luxury to read, dream and transform my life the way I wanted it to be. I went to IIT Kharagpur to study physics as I always wanted to study physics. It did not seem like an odd decision and I often dreamt of making ground-breaking discoveries.

However, as I discovered my true calling, I recalibrated my aspirations to become an entrepreneur in science and that was perfectly fine by my family. In the environment I grew up in, everything was possible.

But over the years I have realised that I was special and privileged, and that my parents were extraordinary and my family truly supportive. It wasn't the same for those around me and others in India, especially women who wanted a career in STEM (science, technology, engineering and mathematics). There is a massive drop-off of women, especially at the leadership level, and it bothers me that we remain a check mark for diversity at senior leadership levels in both academia and the corporate world.

Not meant for her

Like you, I have seen statistics about women in STEM strewn around the internet and conferences. In the media, we often hear about the large number of women who don't have access to any education, leave alone good quality education, and many schools don't even have access to a lab or computers. Girls, if sent to schools, go to the closest one and get the barest education; often they get married before they complete a graduate degree or, perhaps, even earlier depending on where they are located. And most of the times, it is not in science or technology.

I will, for argument's sake, take only the urban middle-class as an example, as the situation in villages is worse. Girls are conditioned to believe their education is to ensure that their kids can get educated. Girls are reminded to be gentle and obedient and that their aim in life is to get married and reproduce and thereby complete the circle of life.

This conditioning is dangerous and has an effect on the overall leadership roles we see for women. Of course there are the occasional rebels and rogues that manage to reach leadership roles, and we have several examples of those in India.

Moving to the more mundane social milieu like the one I am familiar with, girls are the crown jewels in almost every primary and high school. When I was growing up, the top positions were dominated by women.

This may not be true for everyone, but we had a particularly strong woman dominance in our class and that matters as peers influence our minds heavily at that age. At the undergraduate level, engineering schools such as the IITs show a rapid fall in the number of women.

What is to be done?

Women are just 14 per cent of the total scientific community in India and the story at the top is even worse. Women are under-represented in top jobs. Just one woman director at a CSIR lab, and that too in 2013, for the first time in India's history.

And so the case of women in the STEM funnel resembles our famous drug discovery — one where you start with thousands of compounds and end up with a handful of possible targets. Similarly, women make up 50 per cent of the population but only a handful make it to the top.

Testing times Let our girls study science and technology V GANESAN

So I hope that just as drug discovery has been revolutionised by new technologies such as genomics, technology and out-of-the-box techniques can help us come to a personalised approach to this problem.

Confidence in women is one of the key areas to focus on. Parents are the harbingers of hope for the country. The second important factor is education; it makes a big difference as peers start to influence our minds at a young age.

Another key factor is aspiration. We become what we read about and what we see around us. Growing up in a campus town full of scientists made us all want to become one of them. The other key thing we must all do is encourage more girls to read fiction as it fuels the imagination and allows them to think beyond what is in front of them. Another thing that encourages women in STEM would be competitions — in the form of games, awards and recognition. That is a powerful motivator.

The next challenge is our environment-induced biases. I remember a lecture by Mahzarin Banaji from Harvard about the hidden biases of good people. She did a simple test on a class that was highly educated where each of us thought we did not have biases. Alas, that was not true. When you extrapolate this to a larger, less-sophisticated audience, you realise how widespread biases can be.

This bias should go

In general, the perception is that STEM fields are harder for women and therefore men are likely to get a better chance at securing a position. Movies and media also have a role in shaping and influencing our biases and it is important that the messages sent out can help mitigate the current biases that exist in our society and change stereotyped images. My hope is that social media becomes 'family influential' — we all have a role to play there too.

Once in the workplace, there are some obvious steps that can be taken to ensure that more women are recognised early in their careers as engineers and technologists or the job they do, rather than adding a 'woman' as a prefix to that recognition.

The other issues are to do with relocation and reimbursement and if we can address these using out-of-the-box measures, we are likely to see more women in STEM follow their dreams.

Most of us do not know many Nobel laureates who are women in STEM. There are 47 women who have won the Nobel prize and Marie Curie won it twice. While several of these women are from STEM fields, they are not glorified enough. Once that happens, aspirations will change over a period of time.

The other thing we need to do is to find effective mentors who can gently guide them through their careers. This cannot be forced.

And now the part that probably drives political leaders. Apparently countries with better policies for women do better at empowering women. India has some great policies. We have a right to education, right to livelihood and so on, and now the *Beti Bachao, Beti Padhao* scheme. While the concept and the thought process are good, I have a strong suspicion that schemes have a natural tendency to slip through the cracks especially with the passage of time and the introduction of more schemes.

We have to look at a systemic treatment to this issue that plagues our mind and clouds our thinking about the fantastic effect a nation can have when more women innovate, invent and invest in the STEM field.

The writer is the CEO Mapmygenome

Times Of India ND 29/01/2015 P-17

Sun-like star with '5 Earths' found

Experts Call It Galaxy's Oldest Planet System, May Offer Clues On Ancient Life

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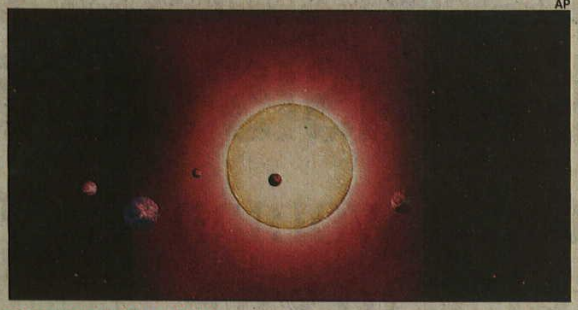


AP

STAR-STUDDED HISTORY: An artist's rendering shows the Kepler-444 star system including at least five Earth-sized planets

London: Scientists led by University of Birmingham asteroseismologists have discovered a solar system with five Earth-sized planets dating back to the dawn of the galaxy.

Using observations made by Nasa's Kepler satellite, the scientists announced on Tuesday the observation of a Sun-like star (Kepler-444) hosting five planets with sizes between Mercury and Venus. Kepler-444 was formed 11.2 billion years ago, when the universe was less than 20% its current age. This is the oldest known system of terrestrial-sized planets in our galaxy — two-and-a-half times older than the Earth.

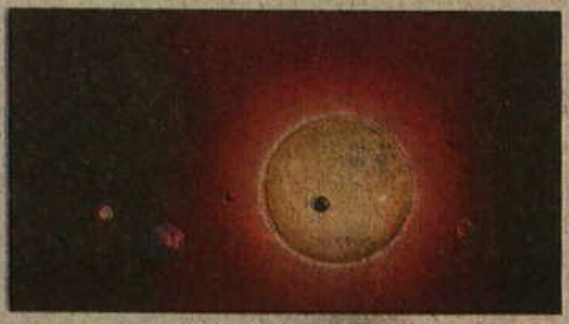
The team carried out the research using asteroseismology — listening to natural resonances of the host star caused by sound trapped in it. These oscillations lead to minuscule changes or pulses in its brightness, which allow the researchers to measure its diameter, mass and age. The planets were then detected from the dimming that occurs when they transited, or passed across, the stellar disc. This fractional fading in the intensity of light received from the star enables scientists to accurately measure the size of the planets relative to the size of the star.

"There are far-reaching implications for this discovery," said Tiago Campante, from University of Birmingham's School of Physics and Astronomy, who led the research. "We now know that Earth-sized planets have formed throughout most of the universe's 13.8 billion year history, which could provide scope for existence of ancient life in the galaxy. By the time the Earth formed, the planets in this system were already older than our planet is today. This discovery may now help to pinpoint the beginning of what we might call the era of planet formation."

Professor Bill Chaplin, also from the university, said, "The first discoveries of exoplanets around other Sun-like stars in our galaxy have fuelled efforts to find other worlds like Earth and other terrestrial planets outside our solar system."

Dainik Jagran ND 29/01/2015 P-18

नासा ने खोज निकाला 11.2 अरब साल पुराना तारा



लंदन, एजेंसियां : अंतरिक्ष वैज्ञानिकों ने तकरीबन 11.2 अरब साल पुराने तारे की खोज की है। यह अब तक पहचाने गए तारों में सबसे पुराना है। अमेरिकी अंतरिक्ष एजेंसी नासा के केपलर अंतरिक्षयान द्वारा चार साल में भेजे गए डाटा के विश्लेषण से इस तारे का पता चला।

वैज्ञानिकों ने इस तारे का चक्कर काटने वाले पांच ग्रहों का भी पता लगाया है, जिनका आकार पृथ्वी के लगभग बराबर है। यूनिवर्सिटी ऑफ बर्मिंघम के शोधकर्ता टिएगो कैंपेंटे ने बताया, 'शोध में पता चला कि पृथ्वी के आकार के ये ग्रह ब्रह्मांड के 13.8 अरब साल के इतिहास में निर्मित हुए हैं, जिससे आकाशगंगा में प्राचीन जीवन के अस्तित्व की संभावना और मजबूत होती है।' शोध में बताया गया है कि आकार में सूर्य से 25 फीसद छोटे तारे केपलर-444 की पृथ्वी से दूरी 117 प्रकाश वर्ष है। इस तारे के पांच ग्रहों के आकार बुद्ध और शुक्र ग्रह से मिलते जुलते हैं। ये ग्रह अपने तारे से इतने पास हैं कि 10 दिनों से भी कम समय में तारे का चक्कर पूरा कर लेते हैं। तारे के इतने पास रहने के कारण ये सभी ग्रह बुद्ध से भी ज्यादा गर्म हैं और जीवन के अनुकूल नहीं हैं।

HT.COM ND 29.01.15 P-8

DU'S CHOICE-BASED CREDIT SYSTEM A BIG CHALLENGE

TOUGH ROAD AHEAD Implementing the choice-based credit system (CBCS) is likely to be a colossal task for Delhi University this year

Gauri Kohli

A recent notification issued by the University Grants Commission (UGC) to vice-chancellors of Indian universities asking them to implement the choice-based credit transfer system (CBCS) and semester system from the academic year 2015-16 is likely to pose a challenge to Delhi University.

Delhi University introduced the semester system a few years ago amid opposition from a section of teachers and students. This was followed by the implementation of the Four-Year Undergraduate Programme (FYUP), which proved to be very unpopular and was rolled back last year. Faculty members at the university feel the new UGC notification is likely to lead to another standoff between DU, its faculty and students.

Abha Dev Habib, member of the executive council at DU, says, "Academic reforms cannot be rushed. Teachers and students have been systematically articulating their opposition to the semester system. It is unfortunate that the UGC without any data/feedback from universities is trying to conclude that semester (system) is working. Today, teachers and students at Delhi University shun the word 'reform' as the first victims of these hurried reforms have been students and academic quality. The university should first study its experiences of semester system and FYUP. Till date, the university has not been able to implement OBC expansion in terms of infrastructure and teacher recruitment."

Habib feels that the UGC document should have focussed on challenges in higher education and listed changes that would help students and higher education. "It is not clear how the suggested changes will help students. The first reform which the education sector needs is infrastructure development and appointment of faculty members. State and Central universities are crumbling as teachers have not been hired on a permanent basis for many years and lakhs of teachers are working under a contract. As a result, the quality of teaching and learning processes have degenerated," she adds.

Some faculty members at DU fear that credit transfers promote private and foreign campuses, which have few takers today. "MoUs will be signed and students will be pushed to these campuses for a semester or two. There are reports that some other universities in Madhya Pradesh, Gujarat and Kerala are against the semester system too. It is for the UGC to collect feedback on the semester system from universities and put it on public domain. The time spent on examinations has increased while time for teaching, self-study and for extra-curricular has reduced," adds Habib.

Some members of the university's academic council have also written to the DU vice-chancellor expressing their reservations over CBCS. "The education policy change cannot be done by simple notifications of the UGC or human resource development ministry (MHRD). CBCS is being pushed through such a notification. If the government thinks that the current system needs overhauling, then there must be a commission with educationists which would consult all stakeholders and finally take the matter to the Parliament," says Amitava Chakraborty, member of the academic council.

Explaining why he does not approve of CBCS in the present context, Chakraborty says, "No education system is bad or good as such. Oxford and Cambridge with annual system, Harvard with trimester system, Yale with semester system all retaining their position at the top of all rankings through years proves this. The semester system cannot work in a large classroom system that India has. That's why even states like MP, are reverting to the annual system. CBCS is likewise inapplicable for a large country like India. Calcutta University vice-chancellor has already said they cannot implement it due to infrastructure problems. We need to utilise the corpus created through the education cess. Thoughtless, sudden, cosmetic changes like semester, CBCS are not going to help Indian higher education," he adds.

The CBCS is devised to allow students mobility between institutions. Some modules can also be completed online. "But the success of this system relies on faculty from a wide array of disciplines and specialisations. It also depends heavily on very advanced infrastructure," says Chakraborty.

LETTER GRADES AND GRADE POINTS

The UGC recommends a 10-point grading system with the following grades

The University Grants Commission has recommended two ways of grading. The relative grading is based on the distribution (usually normal distribution) of marks obtained by all students of the course and the grades are awarded based on cut-off marks or percentile. Under absolute grading, the marks are converted to grades based on predetermined class intervals. To implement the grading system, colleges and universities can use any one of the above methods

Letter grade	Grade point
O (Outstanding)	10
A+ (Excellent)	9
A (Very Good)	8
B+ (Good)	7
B (Above Average)	6
C (Average)	5
P (Pass)	4
F (Fail)	0
Ab (Absent)	0

THE SUGGESTED CHOICE-BASED CREDIT SYSTEM WILL FOCUS ON

The UGC has asked universities to consider setting up a working group of senior faculty members to address some pertinent issues which have a strong bearing on the implementation of CBCS. These issues include:

- Semesterisation of curricula for various courses
- Restructuring the syllabi in the form of modules
- Standardisation of examinations across universities
- Switching over from numerical marking system to grading system

THINKSTOCK