<u>Newspaper Clips</u>

December 15, 2011

Economic Times ND 15/12/2011

IITs've Somehow Slipped into Comfort Zone

LIT EXCUSIVE QUANTED As one of the top

National Research Professors, Dr. Goverdhan Mehta is a member of the Prime Minister's scientific advisory council and heads the National Assessment and Accreditation Council (NAAC) too. A veteran UT and IISc faculty, Mehta says India's top technology institutes need to revamp urgently if india wants to catch up with the developed econo mies where innovation culture is established. He also asks companies like Infosys to build stronger industry-academia links. Excerpts from a chat with Pankaj Mishra.

On unemployability of Indian graduates...

I am more worried about our general purpose, bachelor degree programs. It's a burning issue; I do not believe we have tried enough to understand the magnitude of this issue. The government is looking to recharge the higher education system, create new regulatory framework, and also at the same time reform and rejuvenate the existing system. So, all this is in the right direction.
The problem is that we are going to

touch 20% GER (Gross Enrolment Ratio) and have ambition to cross 30% GER, closer to the developed nations. If that ambition is to be realised, we will be producing more than 5-6 million general purpose graduates. You increase the GER and therefore more and more graduates who have no disciplinary capabilities and skill sets. We have this large pool of young, ambitious people, who in their own ways have strived hard, but how do we empower them to create a future for themselves? Somebody has to bring about a complete change, and reengineer the system.

On infosys founder NR Narayana Murthy questioning the quality of IITs' engineering grads...

I don't think we have understood the magnitude of problem. The problem is not only with giving them employing them but also with training. If you do not inculcate the ability to think out of the box, it is going to be difficult. IITs in my view have somehow slipped into comfort zone because they are recognised to be very good by their products. There is also, in my view. some problem with the leadership. The problem is not specific to IITs there are large number of corporate and government entities that do not have proper leadership on



top. IITs need a very strong mentor ship programme. We have enough people in our country who have great experience and a vision for the future who can be mentors. So, I think IITs have to do a considerably enhanced work, in terms of research output and the innovation that they do.

Comparing IITs with MIT and other global peers...

Lot of innovation comes from people of Indian origin but not necessarily from Indian education. We need to differentiate between a successful Indian working in different parts of world creating waves and people doing the same in our institutions. We need to accelerate the process of change. You can't

compare MITs with IITs. MIT budget is very strong mentorship IIT budget multiplied by 10. But if you programme. We have are an innovator. you know it very enough people in our country who well that we can achieve many things have great with less inputs. Their achievements should be projected not only among the

engineers, but everybody. How do we know about MIT? MIT doesn't go and publicise, but everybody knows their about their achievements through their innovations and inventions

On what it will take to create an ecosystem like Stanford or MIT at an Indian tech hub...

The element for this has to be the vision, leadership and the time In my view, we have all the other things. If we want that ecosystem we need to create that energy in the environment. Our IIT graduates, when they go abroad for summer internships, in three months they are able to do remarkable innovations. IITs have been moving in that direction, but not enough.

Times of India ND 15/12/2011

P-5

Meta-varsity by July 2012: VC

TIMES NEWS NETWORK

New Delhi: Universities are coming together to make higher education accessible to everyone.

As part of an innovative set up Delhi University, Jawaharlal Nehru University (JNU), Jamia Millia Islamia and IIT-Delhi are working on creating a meta-university to allow students to pursue courses available across these institutions.

"We are doing it on our own in Delhi. A student may not have to do semesters in quick succession. They can sit at any university and pursue the options they want. That's the fun of a meta-university," said DU vice-chancellor Dinesh Singh while delivering a lecture on 'Education in 21st Century' at Vasant Valley School on Wednesday.

Singh said that creating a hybrid model of education was essential in this age of global change and that the meta university will be launched in July 2012. He said that India needed to take a leaf out of its own history to innovate and improve on imparting and seeking education. "Tome, education is a journey to look deep within and discovering yourself. It's only when you find your inner calling that you can make a positive contribution to society.



DU VC DINESH SINGH

And this journey never ends," said Singh, as he narrated examples of Ramakrishna Paramhansa, Mahatma Gandhi, Ghalib and Kabir. Singh was speaking at the first in a series of lectures planned in the school.

He said learning from reallife situations is more effective than sitting in the confines of a classroom. "We must go back into our past to find the lessons to be learnt. India did well in the realm of knowledge and self-discovery many years ago. Bodhayan had discovered Pythagoras | Theorem years before Pythagoras himself did. Indian society is in a state of ferment right now. Knowledge is all around us. We just need to reconfigure our institutions and make learning a two-way process." Singh said.

Hindustan Times ND 15/12/2011 P-6

EDUCATIONGATEWAY

Varsities come together for a pilot project, to start by July '12,

HT Correspondent

htreporters@hindustantimes.com

NEW DELHI: In an attempt at discussing the kind of education imparted by schools within the Indian scenario, the Delhi University vice-chancellor Dinesh Singh brought out not just the present issues, which need redressal, but delved deeply into the history of educational establishment as well at a 'Learn Today' conference organised by Vasant Valley School.

Singh also spoke at length about his future plans for Delhi University. "As a pilot project, we are starting a Meta University, along with Jamia Millia Islamia, IIT and JNU," Dinesh Singh said, adding, "We are trying to create a programme that compliments the strength of each university. Like Jamia has a very strong faculty in media, IIT has a very strong technical backing. Similarly, both JNU and DU are strong in several fields and by July 2012 we'll have launched this as a 4-year programme."

In addition to this, Singh also announced that attempts at strengthening the present semester system of education in DU were underway. "By 2013, we want to reach a higher level in the semester system. Sometimes students realise halfway through a course that they are not cut out for it, so we want to create a plethora of options and courses so that students have a wide array of option. We will also give credit marks for ECA and sports and also provide exit options for students if they don't like the course," added Singh.

He also stressed on making available an option for students to graduate with a "skills certificate diploma" and coming back later and re-qualifying for the graduate course.

Financial Express ND 15-Dec-11 p-7

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uldo Tabellini, rector of Bocconi

By James Fontanella-Khan

Italy's Università Bocconi is set to become the first leading international university to open an India-based business school under its brand.

school under its brand.

The Mumbai International School of
Business Boccont will open its doors in
July and offer a two-year post graduate
programme-simllar to an MBA - to up to
100 students. The move is the initiative
of Milan-based SDA Bocconi School of
Management, ranked 28 in the Financial Times global MBA 2011 ranking

"[This is] the first initiative in which, together with entrepreneurial partners, we give birth to a post-graduate education programme aimed exclusively at Indian students and managers," says Guido Tabellini meters, Pesconi

Guido Tabellini, rector of Bocconi.
"We have chosen India to set up this
new project because of both the strong
request for managerial education
which characterises the Indian market

and the deep-rooted experience which Bocconi has in this country, beginning back in 2000."

India currently has several overseas universities that offer exchange programmes and have tie-ups with Indian universities and business schools. The prestigious Indian School of Business has a partnership with Kellogg School of Management and Wharton, two top US institutions, while Harvard Business School established the India Research Center in Mumbai in 2006. But there are no degrees that are offered by international business schools due to India's ambiguous regulation over the presence of overseas institutions.

India's cabinet approved a proposal to allow international higher educational institutes to establish campuses in India last year, but still needs parliamentary approval before becoming law.

mentary approval before becoming law. Bocconi has managed to circumvent India's thorny regulation by setting up

The Mumbai

International School of Business Bocconi will open its doors in July and offer a twoyear post graduate programme to up to 100 students

SDA Bocconi to open business school in India

an Indian trust, through which the school will be managed, in partnership with a group of local entrepreneurs. The Italian university will provide and select the school's faculty and set the curriculum in accordance with local regulation.

Duke University, Yale School of Management and the London School of Economics have all expressed interest in entering the Indian education market, which is worth about \$10bn in revenues, according to The Parthenon Group, a Boston-based consulting firm.

The entry of overseas university is seen as game changing for India's higher education landscape, which is currently controlled by a huge, rigid and highly centralised bureaucracy in New Delhi. India has more than 400 universities

India has more than 400 universities and 20,000 colleges, according to an Ernst & Young report on India's higher education sector. Yet its university system faces an acute shortage of quality higher education, which has prompted amassive exodus of young Indians who go abroad seeking opportunities unavailable to them at home.

available to them at home.

"Over the next five years if India has to grow at 7 per cent GDP growth ... [it] needs to have 7m more students enrolled into higher education institutes," says Abhinav Mital, senior principal at The Parthenon Group.

The world Bank has predicted that India will suffer a shortfall of more than half the skilled human resources needed to modernise Asia's third-largest economy over the coming years unless it overhauls its educational system.

"India's higher education system needs to produce more scientists, engineers and other masters and PhD graduates with skills matched to the needs of the innovation economy," according to the World Rank.

NR Narayana Murthy, founder of Infosys Technologies, one of the country's most successful IT companies, recently lamented the declining quality of students emerging from India's premiere technology and engineering institutions. He said that poor English and social skills of graduates and their Inability to think critically hadhindered their performance in jobs.

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No proposal to regulate www content, says Pilot

New Delhi: Amid a raging



controversy over monitoring of the internet, the govcrnment on Wednesday said there is no proposal

DAMAGE CONTROL

to formulate a mechanism to regulate content on the world wide web, Parliament was informed on Wednesday.

"Government does not regulate content and there is no proposal to formulate any mechanism to regulate the content," minister of state for communications and IT Sachin Pilot said in a written reply to a question in the Lok Sabha.

He said during the April, 2010, to November, 2011, period, a total of 57 incidents of misuse of social networking sites in terms of publishing objectionable content pertaining to political leaders, religions, national security and individuals were reported to the Indian Computer Emergency Response Team.

Last week, Telecom Minister Kapil Sibal had met officials of leading internet firms, including Google, Facebook and Microsoft, with a view to put a halt to offensive and defamatory content on the Internet, a move that sparked off controversy.

Different and strong views have emerged on the government's move to try and police the interpet.

Social networking sites have emerged as an online platform that enables users to share ideas, activities and express views/opinions on specific topics. Such sites can be accessed by all sections of societies.

"Most of such sites are hosted outside the country. Morphed photographs of our national leaders and other celebrities have been uploaded on some social networking sites," Pilot said.

The government has notified the Information Technology (Intermediaries Guidelines) Rules, 2011, under Section 79 of the Information Technology Act, 2000. These rules provide for intermediaries to observe due diligence and safeguards, he said. Pn

Billionaire takes a giant leap into space

NEW YORK

Co-founder of Microsoft financing plan to launch rockets from airplanes

BY KENNETH CHANG

One of the richest men in the world is going to build the biggest airplane ever.

And then he is going to use it to launch rockets.

Paul G. Allen, the billionaire cofounder of Microsoft, said Tuesday that he was entering the rocket business with a concept seldom used until now: a plane that can take off the conventional way and then, at 30,000 feet, or 9,150 meters, launch a rocket to orbit, carrying with it satellites, supplies and — eventually — people. The first rocket launching could be as soon as 2016.

"You have a certain number of dreams in your life that you want to fulfill," said Mr. Allen, an avid philanthropist who has also financed a radio telescope listening for alien transmissions, "and this is a dream that I'm very excited about."

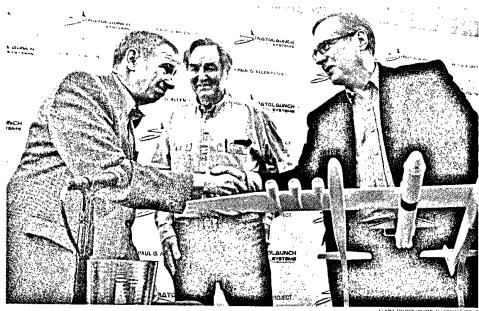
The airplane that his new company, Stratolaunch Systems, plans to build will be larger and heavier than the Spruce Goose, Howard Hughes's record-setting flying boat that flew just once, in 1947. With wings that will stretch 385 feet, or 120 meters, it will dwarf the double-decker Airbus A380, which is the biggest commercial passenger plane flown today. It will take off from a runway, fly to a normal cruising altitude and then drop off a rocket, eliminating the need for costly launching pads.

"With government-funded spaceflight diminishing, there is a much expanded opportunity for privately funded efforts," Mr. Allen said. He noted that NASA had ended its space shuttle program this year, scrapped plans to return to the moon and begun relying solely on Russia for launching astronauts to the International Space Station. He said his new effort would help "keep America at the forefront of space exploration."

Mr. Allen thus joins the ranks of tycoons who are placing big bets on the heavens. The most prominent is Richard Branson, whose Virgin Galactic subsidiary is planning to fly tourists on short jaunts to the edge of space. Other big names are Elon Musk, who used his fortune as a founder of Paypal to establish Spacex, a regket maker that is packing up portracts, with NASA, and Jeffrey P. Bezos, the Amazon.com founder, who has a space company called Blue Origin.

Mr. Allen was actually at the forefront of the billionaire space enthusiasts. A decade ago, he and Burt Rutan, a legendary aerospace engineer who, among many triumphs, built the first airplane to fly around the world without stopping or refueling, teamed up to create SpaceShipOne, the first private manned rocket to reach space, in 2004. That won the \$10 million Ansari X Prize, which had been offered as an incentive to push innovative space technology.

But afterward, Mr. Allen receded from the space limelight as Mr. Rutan worked on a larger version of Space-ShipOne for Mr. Branson's Virgin Galactic, which will launch out of a newly built spaceport in New Mexico, maybe by late next year.

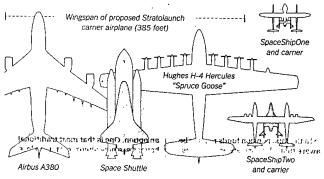


The Microsoft co-founder Paul G. Allen, right, is working with Burt Rutan, an aerospace engineer, center, and a former NASA administrator, Mike Griffin, to build a plane that could launch a rocket into orbit, land back on earth, and be ready to fly again the next day.



Heavy lifter

A company led by Paul G. Allen, the co-founder of Microsoft, plans to build the largest plane ever, and use it as a carrier to launch rockets to low-Earth orbit.



Sources: Stratolaunch Systems, Virgin Galactic

"Volume space tourism, I'd leave it to someone like Richard who knew how to pull that off," Mr. Allen said. "To me, the exciting thing would be go all the way to orbit"

His new project draws in a mixture of space industry people, old and new. Mr. Musk's company, SpaceX, will build the rockets that Stratolaunch plans to launch. Michael D. Griffin, a former NASA administrator who has been supportive but skeptical of the emerging commercial space industry, will be on Stratolaunch's board of directors.

Stratolaunch will have its headquarters in Huntsville, Alabama, which is known as "The Rocket City" because of its role in the history of spaceflight, and an aircraft hangar in Mojave, Califor-

Mr. Allen, the sole investor, declined to say how much he planned to spend. "Obviously, this is not inexpensive," he said.

His new company aims to use the same strategy that won the X Prize, and supersize it.

For the X Prize, he and Mr. Rutan took a rocket called SpaceShipOne, slung beneath a carrier airplane, and lofted it high into the sky before launching it, with a pilot on board. This time around, the carrier airplane will have six 747 engines and a gross weight of more than 1.2 million pounds, or 545,000 kilograms.

It will use a 12,000-foot, or 3.7-kilome-

It will use a 12,000-foot, or 3.7-kilometer, runway. By getting rid of the specialized launching pads used by NASA and other space agencies, Stratolaunch officials say they will be able to reduce costs, offer more flexibility, and avoid bad weather by simply flying their airborne launcher to a patch of clear sky.

The company that Mr. Rutan founded, Scaled Composites, will build the airplane. Mr. Rutan, who retired this year, did the preliminary designs and will act as an adviser.

Mr. Rutan said that Scaled Composites, which is tiny compared with companies like Boeing and Airbus, will be able to build such a huge airplane because it is designing and building only the airframe. The engines, electronics and landing gear will be scavenged from second-hand 747s.

"The things that are most difficult, we're not developing," he said. "We're just bolting them in as things that have millions of hours of picline parvice."

Instead, of a tmy, space plane, like, SpaceShipOne, Stratolaunch's carrier airplane will cradle a full-size rocket weighing about half a million pounds.

After the plane takes the rocket to 30,000 feet and drops it, the rocket's engines will ignite and tail fins will turn the rocket's direction upward. The airplane will return to the airport and could be ready to launch another rocket by the following day.

The payload capacity will be about 13,500 pounds to low-Earth orbit — less than the Falcon 9 and other larger rockets like the Atlas V and Delta IV.

At first, Stratolaunch will aim to carry smaller satellites, like NASA science probes. "This is obviously a big initial investment," Mr. Allen said, "that we wouldn't be making if we didn't think they were going to be a lot customers out there, both for cargo and manned missions in the future."

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REPORT CARD

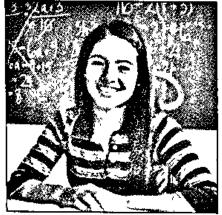
Girls are equally good in maths

Indo-Asian News Service

letters@hindustantimes.com

WASHINGTON: Girls are equivalent to boys in maths and any perceived differences can be explained by attitude towards women, says a study.

The study is based on data from schools in 86 countries, including those from non-Western societies, that concluded differences in mathematical ability were due to unequal societies and not



THINKSTOCK

biology.

Scientists previously believed that the relatively

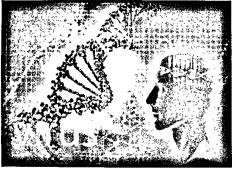
low numbers of women in high-level mathematics could be due to biological differences between men and women. But a new international study has cast doubt on the idea that the differences are biological at all, the journal Notices of the American Mathematical Society reported.

Previous studies tended to focus on a limited range of countries — whereas the new study observed schools in 86 countries.

DECCAN HERALD ND 15-Dec-11

P14

Human mind could be infected by 'computer virus'



LONDON: "Synthetic biology" is accelerating "faster than computer technology", say experts who have warned that hackers could someday use it to develop a computer virus to bend human minds.

According to Andrew Hessel of Singularity University on US space agency Nasa's research campus, "It could lead to a world where hackers could engineer viruses or bacteria to control human minds.

"This is one of the most powerful technologies in the world.

Synthetic biology – the writing of life. I advocate cells are living computers and DNA is a pro-

gramming language.
"I want to see life programmed and used to solve global challenges so that humanity can achieve a sustainable relationship within the biosphere. It's growing fast. It will grow faster than computer technologies."

He predicts a world where people can "print" DNA, and even "decode" it. But he warned that viruses and bacteria send chemicals into human brains and could someday be used to influence, or even "control" people, 'Daily Mail' reported.

A literal virus – injected into a "host" in the guise of a vaccine, say-could be used to control behaviour, says Hessel who warns people "may've to learn how to counterattack" against such weapons.

Security expert Marc Goodman said, "Synthetic biology will lead to new forms of bioterrorism. Bio-crime is akin to computer crime in the early Eighties, few initially recognised it, it grew exponentially."

When billionaire entrepreneur Craig Venter "created life" by adding synthetic DNA to a bacteria cell, Prof Julian Savulescu of Oxford University said: "This could be used in the future to make the most powerful bioweapons imaginable."

Hessel, however, is generally optimistic about the future of synthetic biology. "We are going to make synthetic genomes human genomes. It will make cloning look organic. It will make human reproduction look quaint."

PTI

Economic Times, ND 15/12/2011 P-11

॥ बॉम्बे के ग्रेजुएट्स को मिला कारोबारी कवर

चुनिंदा छात्रों को स्टार्ट-अप नाकाम रहने पर दो साल बाद प्लेसमेंट के लिए लौटने की सुविधा

देविना सेनगुप्ता

बगल्रु

'डान या नाकामी। भारतीय प्रौद्योगिकी संस्थान उद्यान या नाकामा । नारणान जाउना । (आईआईटी) बॉम्बे के जिन छात्रों ने ग्रेजुएशन परी करने के बाद आंत्रप्रेन्योरशिप के मैदान में छलांग लगाई, उन्हें दो में से यही अंजाम मिला। अगर स्टार्ट-अप से जुडा उनका आइडिया उडान भरने में नाकाम रहता, तो संभालने के लिए नीचे कोई सुरक्षा देने वाला जाल नहीं लगा था। ऐसी नाकामियां आम हैं और इन मामलों में आईआईटी ग्रेजुएट के पास खुद अपनी सुरक्षा करने के अलावा कोई विकल्प नहीं बचता। कैम्पस में जन्म लेने वाले उद्यमियों के लिए यह बड़ा अवरोध है।

ं लेकिन अब ऐसा नहीं होगा। चुनिंदा ग्रेजुएट को स्टार्ट-अप आइंडिया पर निशाना साधने का ऐसा विकल्प दिया जा रहा है, जिसके तहत उन्हें आश्वस्त किया जा रहा है कि अगर यह आइडिया नाकाम रहता है, तो वे दो साल बाद प्लेसमेंट में हिस्सा लेने अपने पुराने संस्थान लौट सकते हैं। यह किसी भी आईआईटी में अपनी तरह की नायाब पहल है।

संस्थान फैकल्टी सदस्यों और उद्योग के विशेषज्ञों का एक पैनल भी बना रहा है, जो इन छात्रों का चयन करेगा, उनके विचारों पर गौर करेगा और उनके लिए सीड फंडिंग जुटाने में मदद देते हैं। संस्थान साल 2012 की शुरुआत तक पैनल बनाने की तैयारी कर रहा है, लेकिन क्योंकि 2012 की क्लास के लिए अंतिम प्लेसमेंट पहले ही शुरू हो चुकी है, ऐसे में पैनल और डेफर्ड प्लेसमेंट अगले साल से प्रभावी होंगी। शुरुआती निवेश लाने के लिए एक एडवाइजरी बोर्ड रेफरेंस प्वाइंट का काम भी करेगा। हिलियॉन एडवाइजर्स के सीनियर



आईआईटी बॉम्बे अपने फैकल्टी सदस्यों और उद्योग के विशेषज्ञों का एक पैनल भी बना रहा है, जो इन छात्रों का चयन करेगा. उनके विचारों पर गौर करेगा और उनके लिए सीड फंडिंग जुटाने में मदद देगा

एमडी कंवलजीत सिंह ने कहा, 'अगर मैं जानता हूं कि कोई विशेषज्ञ एक स्टूडेंट को मेंटर कर रहा है, तो सीड फंडिंग का पहला दौर आसान हो जाता है।' सिंह के लिए इस तरह की एडवाइजरी संस्थाएं एक इकोसिस्टम मुहैया कराएगी, जो भारत में अब तक पूरी तरह विकसित नहीं है। यह कदम आंत्रप्रेन्योरशिप के लिए इनसेंटिव तो है. साथ ही इसमें छिपी नाकामी से कवर भी महैया कराता है। इसका लक्ष्य कैम्पस में पढ़ने वाले छात्रों में से ज्यादा आंत्रप्रेन्योर बनाना और उन्हें निखारना है। आईआईटी-बी के प्लेसमेंट हेड रवि सिन्हा ने बताया कि कुछ छात्रों ने चंद आईआईएम में उपलब्ध इस तरह के विकल्प की तरह उन्हें भी सुविधा देने का

आग्रह किया था, जिसके बाद यह कदम उठाया गया। प्लेसमेंट हेड ने कहा कि अब तक संस्थान के जिन ग्रेजएट के वेंचर नाकाम साबित होते थे. उन्हें संस्थान से प्लेसमेंट का दूसरा मौका नहीं मिलता था, लेकिन अब इसमें बदलाव आने वाला है। डेफर्ड प्लेसमेंट एक ऐसा विकल्प है. जिसमें प्लेसमेंट प्रक्रिया से बाहर रहने वाले छात्रों को तय अवधि के बाद इंटरव्यू में बैठने की इजाजत दी जाती है। मसलन, आईआईटी बंगलौर में यह सुविधा तब दी जाती है, जब आंत्रप्रेन्योरशिप वेंचर उड़ान नहीं भर पाता। मैनेजमेंट संस्थान 2010-11 से यह सहलियत दे रहा है।

आईआईटी-बॉम्बे में बनाए जा रहे पैनल में सोसाइटी फॉर इनोवेशन एंड आंत्रप्रेन्योरशिप (एसआईएनई) के प्रतिनिधि भी शामिल होंगे। आईआईटी बॉम्बे का यह बिजनेस इनक्यबेशन सेंटर आंत्रप्रेन्योरशिप को बढावा दिया जाता है, जिसमें एलुमनाई भी शामिल होते हैं। एसआईएनई के चीफ एडिमिनिस्ट्रेटिव ऑफिसर पॉयनी भट ने कहा, 'एसआईएनई इन विचारों को ठोस आकार देने और उपक्रमों में बदलने में मदद करता है।' हालांकि, आईआईटी के इस मैथेड को आधिकारिक तौर पर अपनाने में कुछ वक्त लग सकता है।

आईआईटी मद्रास में डीन ऑफ स्टूडेंट्स और टेक्नोलॉजी इनोवेशन, डेवलपमेंट एंड आंत्रप्रेन्योरियल सपोर्ट के इंचार्ज एल एस गणेश ने कहा, 'इस कदम से आंत्रप्रेन्योर की संख्या में काफी इजाफा होगा, क्योंकि छात्रों को मुसीबत में कोई सहारा मिलने का भरोसा रहेगा।' गणेश ने आंत्रप्रेन्योरियल जगत के बारे में जानने की दिलचस्पी में खुब इजाफा देखा है, लेकिन इसमें शामिल जोखिम की वजह से यह विकल्प चुनने वाले

छात्रों की संख्या बेहद कम रहती है।