Newspaper Clips
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■ CHETAN BHAGAT BACK AT IIT-DELHI

Best-selling author Chetan Bhagat was back at his alma mater, IIT-Delhi, to deliver a lecture 'From Institute to Bollywood,' organised by the IIT-Delhi Alumni Association in the campus recently. Addressing a jam-packed audience, the author of six blockbuster books said that his mission is to put the society on path of progress through entertainment.
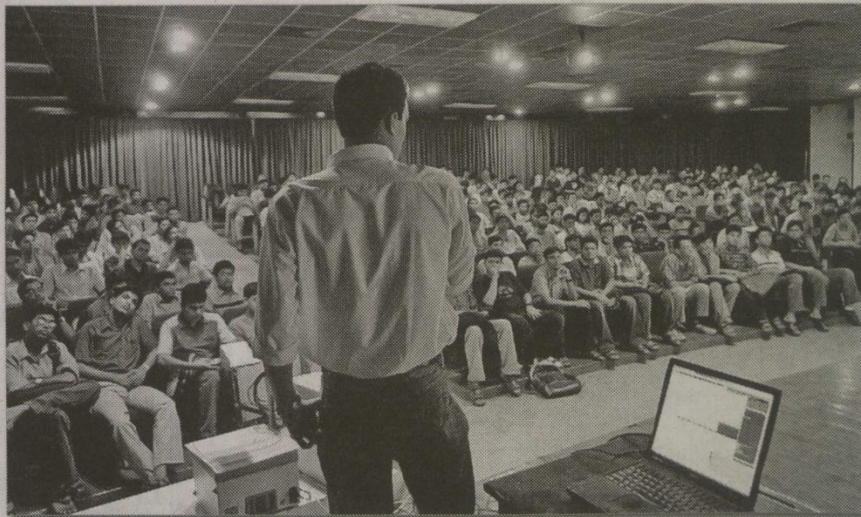
NITs can be engines of economic growth

Arun Kumar Jain

ONE ON ONE: NITs must go beyond classroom teaching and develop an agenda where its students and faculty can interact with the market for on-the-job-training opportunities and understand what the latter wants

PRIME minister Narendra Modi's 'make in India' call has set an important strategic direction for the country's businessmen, policy-makers, and regulatory agencies. It has helped generate a healthy debate as to where the country lags. That, in turn, pulls back productivity and competitiveness of our manufacturing enterprises. To start with, the government wants to ease regulation and do away with obsolete rules to improve the 'doing business in India' rank from the current 100+ position to a relatively healthy 50. How much it succeeds will be keenly observed.

One of the biggest groups of intellectual assets the country has built over decades is the 30 National Institutes of Technology (NITs) — about one in each state. These institutes have created a large pool of well-qualified technical and engineering force, which over the decades, has provided bulk of engineers to PSUs, railways, armed forces, private sector engineering companies, and state departments such as irrigation, electricity, housing and construction.

NITs are uniquely positioned to remove the various divides so glaring in the country, and at the same time, contribute substantially to expansion of Indian GDP. For example, one of the mandates of each NIT is to admit 50 per cent students from within the 'local' state. This single commandment has the power to provide access to quality technical knowledge to students coming from the remotest geographic corners of the country. With intelligent use of technology and launch of missionary programmes, NITs can help bridge the digital divide, income asymmetries, and rural-urban differentiation in the country. One third of the country lives in abysmal poverty, below poverty line. NITs can be the connecting force between rural innovations, local employment, and world-class manufacturing.

There are at least two areas where NITs can substantially increase their contribution to national asset creation. First, for some reasons, NITs have not been able to either do justice to their economic potential or keep pace with the technological development in the world. Instead of action labs where students are encouraged to experiment with cutting-edge technologies under high-quality mentors, NITs have remained steeped in traditional teaching and lecturing of courses. NITs can look at local innovations and convert the 'jugaad' into patentable products that can benefit mankind — alternative sources of energy, low-cost housing and transportation, and collaboration with local hospitals to provide cheap and effective gadgets and solutions.

Secondly, many NITs have excellent labs which can produce huge wealth for themselves and for the country. In western countries (including the US), many fundamental and game-changing researches have come out from labs where the academic programmes are student-centric and in active support and collaboration with the industry. Some recent examples of engineering-technological-industry research collaboration are genetic algorithms, 3D printing, large-scale manufacture of graphene, new and advanced materials for solar power generation (such as calcium titanium oxide also known as perovskite), interdisciplinary work between computer sciences and biology leading to neural networks, just to name a few. (Unfortunately, our NITs and IITs have not even begun work in most of these areas largely due to the missing research and industry interfaces).

While the focus of 'made-in-India' is to establish India as a world-class manufacturing base, the lofty goals require a sumptuous delivery of engineers and technical staff capable of providing solutions to tough scientific problems. This can be achieved only if the faculty can engage and excite the students with real-life problems rather than bland classroom lectures which can become too predictable and mechanical (no pun intended) within a few minutes. In many NITs, lack of funds has taken a toll even in terms of basic upkeep of infrastructure, machinery, and neglect of lab equipment. NITs have also suffered from politicisation and old-fashioned bureaucratic rules which no one wants to make an effort to remove. These are serious issues requiring immediate administrative and faculty attention.

NITs should no longer be just places of information sharing and dissemination between students and faculty, or satisfying adolescent curiosity but should become major engines of economic development for the country. Beyond teaching the basics such as engineering drawing, each NIT can specialise in specific technical domains. For example, an NIT can focus on aeronautical engineering design and collaborate in manufacturing pilot seats complete with avionics and radar control, seat-ejection system. For this, they should seek international collaborations; here students and faculty can go on exchange basis for learning and skill-development. This will also produce the necessary and urgently required technically-capable engineers for maintenance and overhaul of fighter plane equipment.

Essentially, NITs have to develop a capacity to innovate with an industry-angled (commercial) mindset. Engineering is a discipline where tacit and explicit knowledge intersect. Both theory and experimental practice is required to become world-class practitioners. NITs, therefore, must develop an agenda where its students and faculty can interact with the market for on-the-job-training opportunities and understand what the latter wants. Of course, this requires structural and cultural changes but then that is only way forward if NITs have to play a central role as engines of 'make-in-India' revolution.

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आईआईटी में एमटेक-पीएचडी की सीटें बढ़ीं

फैसला

नई दिल्ली | मदन जैड़ा

तकनीकी शिक्षण संस्थानों में प्रोफेसरों की कमी दूर करने के लिए केंद्रीय मानव संसाधन विकास मंत्रालय ने एमटेक-पीएचडी स्कॉलरशिप की संख्या 1400 से बढ़ाकर 10 हजार करने का फैसला किया है।

योजना का क्रियान्वयन एआईसीटीई और आईआईटी के जरिये किया जा रहा है। आईआईटी गुवाहाटी को फैलोशिप के लिए चयन प्रक्रिया को अंतिम रूप देने का जिम्मा सौंपा गया है। आईआईटी और एनआईटी में प्रोफेसरों के 40 फीसदी पद खाली पड़े हैं। केंद्रीय विश्वविद्यालयों में भी वैज्ञानिक संवर्ग के प्रोफेसरों की भारी कमी है। इसे दूर करने के लिए केंद्र

स्कॉलरशिप भी बढ़ेगी

- अब 1400 की जगह उच्च अध्ययन में सीटें हुई दस हजार
- प्रोफेसरों की कमी से निपटने के लिए मंत्रालय की नई पहल

सरकार ने गुणवत्ता सुधार प्रोग्राम शुरू (क्यूआईपी) किया है।

इसके तहत एमटेक और पीएचडी कोर्स के लिए स्कॉलरशिप प्रदान की जाती है ताकि छात्र बीटेक के बाद नौकरी की बजाय आगे अध्ययन जारी रखें।   उच्च शिक्षा विभाग के अनुसार अभी तक इस कार्यक्रम के तहत महज 1400 सीटें थी। जिन्हें अब

बढ़ाकर 10 हजार प्रतिवर्ष कर दिया गया है। हाल में हुई एक बैठक में मानव संसाधन विकास मंत्री स्मृति ईरानी ने इस प्रस्ताव को मंजूरी देते हुए आईआईटी गुवाहाटी को कहा कि वे छात्रों के चयन आदि की विस्तृत प्रक्रिया तैयार करें।

इस योजना के तहत चुने गए छात्रों को दो साल का एमटेक और तीन साल के पीएचडी कोर्स में एडमिशन दिया जाता है। जिसमें हॉस्टल की सुविधा और जरूरी खर्च के अलावा मासिक छात्रवृत्ति प्रदान की जाती है।

एमटेक को 8 हजार रुपये प्रतिमाह एवं पीएचडी छात्र को 14 हजार रुपये प्रतिमाह प्रदान किए जाते हैं। इस राशि को भी बढ़ाने का प्रस्ताव है। आईआईटी में इस समय मुश्किल से एक-डेढ़ हजार छात्र ही पीएचडी कर रहे हैं।

Govt tells IITs, IIMs to look into veg canteen demand

RSS affiliate from MP wants separate facility for vegetarians

Prakash Kumar

NEW DELHI: The government has asked the Indian Institutes of Technology (IITs) and Indian Institutes of Management (IIMs) to examine demand for a separate canteen for vegetarian students on their campuses.

The Human Resource Development (HRD) Ministry recently asked the premier technical and management institutes to look into the matter after a group of people, including some associated with Rashtriya Swayamsevak Sangh (RSS), from Madhya Pradesh wrote a letter to Union Minister Smriti Irani, seeking her intervention.

In their letter to the HRD Ministry, they demanded that a separate canteen for vegetarian students should be set up at all the IITs and IIMs.

A STUDENT FROM IIT-KHARAGPUR: We never had any problem in our institute. Those who are vegetarian, eat vegetarian food. Those who are non-vegetarian, eat non-vegetarian food.

"Some students at these institutes are consuming non-vegetarian food and adopting western culture. Many vegetarian students follow them and bring sorrow to their parents. Non-vegetarian food leaves an adverse impact on the person consuming it. It leads to development of 'Tamas' (dark and unrighteous) nature," they contended in the letter.

The ministry, which received the letter on September 9, forwarded the same to all the IITs and IIMs for "necessary" action later.

On October 15, the ministry wrote a letter to IITs, requesting the heads of the institutes to apprise it with the action taken by them on the demand made by a group of people from Madhya Pradesh.

"We have demanded a separate canteen for vegetarian students at these institutes so that good students are not spoiled by non-vegetarian food. If your eating habit is pure, you will have a pure nature. If you eat Tamasic food, your nature and behaviour will also become Tamasic," Satyendra Kumar Jain, one of the signatories in the letter to the HRD Minister, told *Deccan Herald*. Jain, a resident of Katni district of Madhya Pradesh, said he was a businessman and a member of the RSS.

The IITs and IIMs have a combined canteen for their students, where both non-vegetarian and vegetarian food is prepared.

"We never had any problem in our institute so far. Those who are vegetarian, eat vegetarian food. Those who are non-vegetarian, eat non-vegetarian food," an IIT-Kharagpur student said.

DH News Service

BEATING LSE, MIT

Mumbai Univ in world top 10 for billionaire alumni

BILLIONAIRE ASSEMBLY LINE

Mumbai is the only non-US, UK university on the list

Name of University		BILLIONAIRE*
University of Pennsylvania	US	25
Harvard University	US	22
Yale University	US	20
University of Southern California	US	16
Princeton University	US	14
Cornell University	US	14
Stanford University	US	14
University of California, Berkeley	US	12
University of Mumbai	INDIA	12
London School Of Economics	UK	11

* BILLIONAIRE UNDERGRADUATE ALUMNI

HT Correspondent
■ letters@hindustantimes.com

MUMBAI: Mumbai University, it turns out, has produced more billionaires than IITs.

Singapore-based research firm Wealth-X and Swiss bank UBS said in a recent report that Mumbai University ranks ninth in the world, ahead of even premium institutions such as the London School of Economics and the Massachusetts Institute of Technology, with about 12 billionaire alumni.

University of Pennsylvania led the list with 25 billionaires.

There is a difference, though. Most of the individuals in Mumbai are part of old, large business families and have inherited part of their wealth, compared to the emerging rich from the new economy such as IT and services. Some families that can trace their origins to Mumbai include the Ambanis, the Mahindras and the Piramals, among others.

"Mumbai was the industrial and financial capital for India (since British times)," said Dileep Choksi, a former managing partner of Deloitte, who now looks after the affairs of large business families through Universal Trustees.

Mumbai University ...

But growing population and inadequate infrastructure is forcing businesses to shift away from Mumbai.

"This could eventually lead to a fall in the number of billionaires as money will be made elsewhere," said Mita Dixit, family business adviser and leading researcher of Indian business families.

"Moreover, the new generation of most families are diversifying, which will take some time to grow," said Dixit.

Although UBS did not elaborate, some of the individuals who feature on the list include Mukesh Ambani ($23.6 billion), Anil Ambani ($6.3 billion), Kumar Mangalam Birla ($9.2 billion), Ajay Piramal ($2.1 billion), Rakesh Jhunjhunwala ($1.9 billion), Ashwin Choksi ($1.7 billion) and Niranjan Hiranandani ($1.2 billion).

According to Sunil Shah of Evergreen Family Business Advisors, the main reason for the concentration of wealth in Mumbai is that large business families work on creating growth with harmony.

And family disputes have been mainly responsible for the decline of wealth in cities such as Delhi and Kolkata.

Mumbai University is the only institution outside the US and the UK to feature in Wealth-X's list. The Indian Institutes of Technology did not feature even in the top 20, though they are the best institutions in the country in terms of academic excellence.

Statesman ND 28-Oct-14   P-2

TEACHERS BODY DISCUSSES HITCHES IN EDUCATION

STATESMAN NEWS SERVICE
New Delhi, 27 October

In a meeting of the Coordination Committee of Teachers Associations of Delhi (CCTAD), a collective body of the various teachers associations of the universities in Delhi and NCR discussed the hitches in the education system of India due to huge number of unfilled teaching and administrative positions.

While raising concern over the lack of international rankings for universities, the collective body of the various teachers associations of the universities in Delhi and NCR including DUTA, JNUTA and Jamia faculty revealed that most universities, IITs and IIMs do not have VCs and directors and there are a huge number of unfilled teaching and administrative positions. "The current heads of institutions of higher learning are mostly undemocratic and whimsical in their functioning. They often get away due to lack of accountability and/or political patronage," said DUTA's president, Dr Nandita Narain. The coordination committee also pointed out that at present, some universities like Guru Gobind Sinsh Indraprastha University, IGNOU, Jamia do not have decision-making bodies such as Academic Council, Executive Council and in other universities where they are elected, they are in minority. The functioning of the university must be made more democratic by ensuring elected representation of majority of its members.

Dainik Bhaskar ND 28-Oct-14   P-4

आईआईटी, मद्रास में इंडस्ट्री एक्सपट्र्स से पढ़ेंगे छात्र

आईआईटी, मद्रास में छात्रों को पढ़ाने के लिए इंडस्ट्री एक्सपट्र्स की नियुक्ति की जाएगी। इसके लिए प्रोफेसर बाय प्रैक्टिस पद बनाया जाएगा। संस्थान का मानना है कि इंडस्ट्री एक्सपर्ट बिजनेस के कई पहलुओं के बारे में फैकल्टी से बेहतर छात्रों को बता सकते हैं। संस्थान में फैकल्टी के स्वीकृत पदों का अधिकतम 5 फीसदी हिस्सा ही प्रोफेसर बाय प्रैक्टिस होंगे। 20 साल से ज्यादा अनुभव वाले प्रोफेशनल्स ही इस पद पर नियुक्त होंगे।

Lack of regulatory mechanism promotes plagiarism

Dateline
New Delhi
Prakash Kumar

Increasing pressure on teachers for publication of research papers, ignorant attitude of guides towards the standards of theses and dissertations that they receive from students as well as lack of regulatory mechanism are together contributing to the rise of plagiarism in country's higher education sector.

It is a common practice among faculties and students to lift and incorporate contents from published works and other available resources in their papers without acknowledging the source. As a consequence, India's global share in research output continue to be low, though it increased from 1.1 per cent to 3.6 per cent over the last 10 years.

The government is making efforts to expand and improve country's higher education network and its research capabilities seeking greater collaboration from developed countries like the US, but a lack of genuine interest in research and an urge to give a new knowledge to society among academia stand as a huge challenge before it.

While many senior faculties blame the University Grants Commission (UGC) for rampant plagiarism in research, a section of scholars and students rue over the education system which has so far doled out M Phil and PhD degrees just to increase the numbers in most of the cases, turning a blind eye to plagiarism.

In 2010, the UGC set various parameters for the promotion of faculties and made research publications as one of key factors. The aim was to increase the research output and publication of papers in journals. However, it turned out to be counter productive.

"It's a complex problem. The UGC should not quantify that you must have three publications or four publications then you will get promoted. Faculties are under pressures to take an easy way to plagiarise and meet their target. One publication can be better than 20 publications," former director of Indian Institute of Technology Gautam Barua told Deccan Herald.

Delhi University Teachers Association president Nandita Narain echoed Barua. "The UGC regulations are terrible. It is encouraging bad research and also affecting teaching. The UGC must address this issue."

For most of the students, as many professors say, an MPhil or a PhD programme is just something that should be undertaken to earn another degree until they get employed. "They take up these programmes just for the sake of getting another degree as they devote their time preparing for various competitive examinations. And when the deadline for submission of thesis comes closer, they look for easy options and resort to plagiarism," a Delhi University professor said.

All over the country, there are "so called experts" available in market to write thesis for PhD students for money. "They are known to every student. They will charge certain amount and write thesis. The guides, who also came from the same system, do not raise any objection. It is happening in almost all the universities," he added.

Degrees on sale

Moreover, a UGC official said, there are many private and deemed universities which are "selling" degrees. "They will ask a PhD candidate whether he likes to write his own thesis or want assistance from somebody else and will hire a professional PhD thesis writer if a candidate wants. For that, however, the candidate will have to pay additional money which ranges from Rs 50,000 to Rs 1 lakh."

But what happens when these schools face the examiners after submission of their thesis? "Such universities appoint only those PhD examiners who can protect their interest. To tell, you very frankly, I am a foreign examiner for PhD thesis of some other country. But in my own country, I hardly receive a PhD thesis. It's because supervisors know what can happen if a thesis will come to me," UGC member M M Ansari said.

Theses and dissertations are rich and unique source of information. They often do not find their way into publication. They can be used for duplication. In view of this, the UGC brought fresh regulations for awarding MPhil and PhD degrees in 2009, making its mandatory for all the varsities to submit a soft copy of theses and dissertations of the students for uploading the same on a digital repository "Shodhganga," hosted and maintained by Information and Library Network (INFLIBNET) Centre, Ahmedabad.

It was a good effort to check duplication of theses and dissertations but failed to yield the desired results. Of the total 700 universities in India, only 100 have so far signed MoUs with the INFLIBNET. Of them, only 40 varsities have so far sent thesis and dissertations for uploading on the repository.

However, the use of software by INFLIB-NET to check plagiarism prompted many universities follow the suit and cases of academic misconduct began pouring in as they started using softwares. Many professors, however, say it is not always easy to detect plagiarism, even by the use of software.

Alarmed by the situation, the UGC recently set up a committee to frame regulations to check plagiarism. The committee is likely to come up with tougher rules and propose severe punishments including salary cuts and even dismissal from job in case of a university faculty for "major" cases of plagiarism. The UGC move has been welcomed by academics and scholars across the board, but many feel the government needs to plan other measures to hit at the root of the problem.

"A tough regulation will definitely prove a deterrent. But, unless there is an overall change in our academic environment, it is difficult to check plagiarism to a satisfactory level. Students should be apprised with proper methodology of research as they begin to write papers. Students should be encouraged to read books, not question answer series," an assistant professor with JNU Ganga Sahay Meena said.

IISc in big biofuel boost

http://www.bangaloremirror.com/Bangalore/Others/IISc-in-big-biofuel-boost/articleshow/44951758.cms

The push for generating advanced biofuels in India couldn't have come at a better time

Bangalore-based Indian Institute of Science (IISc) and the National Centre for Biological Sciences (NCBS) are set to play crucial roles in a major Indo-US initiative to expand the research and knowledge base on biofuel generation. This is with an eye on boosting biofuel production within India to close the increasing demand-supply gap for fossil fuels which have proved to be environmentally degrading.

The initiative, with the blessings of Union department of biotechnology, kick-started in the USA with the launching of the Indo-US Advanced Bioenergy Consortium (IUABC), led by Indian Institute of Technology (IIT)-Powai (in Mumbai), Jawaharlal Nehru University (JNU) and University of Washington-St Louis (UWSL).

An essential solution for the planet

According to Himadri Pakrasi, director, International Centre for Advanced Renewable Energy and Sustainability (I-CARES) at UWSL, "Biofuels are an essential solution to this demand challenge, not only to bridge the supply between traditional fossil fuels and consumer demand, but to deliver better environmental performance."

In a release by UWSL, he has been quoted as saying that in the next three years, the IUABC will invest "significantly" in the knowledge base in India and US to meet the challenge of closing the gap by providing a long-lasting alternative to fossil fuel, in the form of developing advanced biofuels. Pakrasi is also the UWSL's McDonnell International Scholars Academy ambassador to JNU, and has played a pivotal role in getting this consortium up and running.

The consortium has already made an initial investment of $2.5 million, according to the UWSL release detailing the signing of the memorandum for launching the consortium that took place on October 16 at University of Washington. The signatories were Sudhir Kumar Sopory, vice-chancellor, JNU, Devang Khakhar, director, IIT-Powai, and Mark Wrighton, UWSL's chancellor. The signing took place during the McDonnell International Scholars Academy symposium on "The Role of Research Universities in Addressing Global Challenges".

Second generation

The consortium will mainly focus on developing second generation biofuels, which are also known as advanced biofuels which can be manufactured from various types of biomass. Hitherto, the focus in India had been mainly on first generation biofuel which are derived from sugar, starch, animal fats and vegetable oil.

However, now the goal of the consortium is "to increase biomass yield in plants and algae, enabling downstream commercial development for cost-effective, efficient and environmentally sustainable production of advanced biofuels," the UWSL release said.

Sources in IISc said that although the precise role the institute would be playing in this endeavour is yet not defined, its Centre for Sustainable Technologies (CST) and Combustion Gasification Propulsion Lab (CGPL) are likely to be actively involved because of the work they have been doing in the field of biofuels and biomass over the years.

The push for generating advanced biofuels in India couldn't have come at a better time. The Indian transportation fuel infrastructure is undergoing massive transformation due to increased consumer demand and a growing population, which is estimated to reach 1.6 billion by 2050.

According to a report of the Global Agricultural Information Network (GAIN) of US Developmental Agency's (USDA's) foreign agricultural service, currently, in India, the combined demand for diesel and petrol is expected to grow by more than 5 percent over the coming years.

Further, it has estimated that by end of this decade, the average demand for transport fuels will rise from 117 billion litres in 2013 to a projected 195 billion litres by 2023.

IIT-M develops app for info on buses

DC | K. Karthikeyan | October 28, 2014, 05.10 am IST

http://www.deccanchronicle.com/141028/nation-current-affairs/article/iit-m-develops-app-info-buses

Chennai: Identifying the right public transport, particularly MTC bus will soon be a thing of the past. IIT-Madras has developed a new GPS enabled technology and mobile app. All you have to do is download the app and feed the boarding and destination point in the city.

The app (named Raft) will provide real time information about the immediately available service among MTC bus, EMU and metro train and the approximate time of travel.

The technology (mobile app) developed by a team led by associate professor Lelitha Devi, transportation engineering division, department of civil engineering, IIT-M will be launched on November 15.

Three IIT alumni who launched Geotagg, a company developing solutions to urban transportation problems and currently incubated at IIT-M incubation cell, has installed GPS equipment in around 150 buses covering 25 routes in the city.

"The data sent from the buses fitted with GPS equipment will be collated at the laboratory on the campus. The real time movement of the buses and approximate arrival at a particular bus stop on the route will be available online," said Akhilesh Koppineni, one of the founders of Geotagg.

The technology works in two days. One, you choose the bus route number and select a bus stop on the route in the drop down menu.

The app will provide the exact position of the bus and the approximate arrival at the selected bus stop. Two, a person has to feed the boarding and destination and the app will provide the list of buses, trains and metro rail services available and their timings.

"We have sourced the stops, routes, fleet size from MTC. So far, we have mapped 3,500 stops. Roughly, another 2,000 has to be covered," Akhilesh noted adding that they have also obtained the schedule, network and routes of all EMU trains. Interestingly, such technologies were introduced a decade back abroad.

When asked, a senior MTC officer said "Let them give their finished project. At least half a dozen such Android apps designed by students are available free of cost in the market. This is not new," he added.