Newspaper Clips

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Higher education sector needs ₹10 lakh cr by ’20

■ Of this, pvt sector may invest ₹50,000 cr per year

Kirtika Suneta

New Delhi, Nov 8: Comprising over 31,000 institutions, the higher education system in India needs an investment of ₹10 lakh crore by 2020 to create an additional capacity of 25 million seats. The private sector, which accounts for 52% of the total enrollment, would invest ₹50,000 crore of this per year.

These are the findings of the annual Ficci-Ernst & Young report, which also reveals that the compound annual growth rate (CAGR) of the number of institutions at 11% is faster than that of student enrollments of 6%. In fact, more than 5,000 colleges have been added in the last one year alone.

Further, the market is expected to grow as the number of students enrolled in Classes 9-12, which is an indicator of potential demand for higher education, has increased at a CAGR of 5.7% over 1996-2008, in line with the growth in higher education enrollment.

"The demand for graduates is there but the capacity in each institute is not very large. However, many institutions are going vacant because of lack of quality education," explained Shobha Mishra Ghosh, director, Ficci’s education committee.

Geographically, the central region has experienced the highest increase in number of institutions, while the southern region has exhibited the highest increase in student enrollment. The Gross Enrollment Ratio (GER) currently stands at about 13.8%, with west India having the highest GER of 25.7%.

In fact, the report has pointed out that the government’s target of 30% GER by 2020 seems difficult to achieve at the current pace of development and, hence, it should go the US way and allow for-profit education as that will encourage investment in the sector. If India is to meet its 30% GER target by 2020, about 40 million students should be enrolled in the higher education system in 2020.

"The Indian government should consider allowing for-profit education while putting in place a regulatory framework to ensure that for-profit players impart a certain standard of education. This will enable greater private capital inflow for setting up new capacity and therefore assist in achieving the government’s GER targets," the report recommends.

As for the infrastructure, 48% of universities and 69% of colleges have infrastructure deficiencies, the report says.

The report also says that currently, state private universities are concentrated in a handful of states - the top five states account for about 65% of such varsities as they have put in place enabling regulatory environments and provide government support.
Beyond conventional IT education

India's IT industry got a boost when the US faced the Y2K problem in the last decade of the 20th century. This created an enormous necessity for graduates with expertise in information and communication technology skills. The department of electronics, which became operational in the late 70s, triggered the teaching programmes by giving financial grants as well as academic support through creation of curricula at the postgraduate level in some universities. Other universities were quick to appreciate the importance of launching graduate and postgraduate teaching programmes. In a few years, they initiated several engineering programs in IT and computer and degree programmes in computer science that attracted the best talented young minds. All these activities produced significant amount of skilled human power in software as well as computer hardware. The quality of these graduates might be questionable but the IT industry had no complaints as they were helping them to be world leaders in the support services industry. Several universities, in the past two decades, have established independent computer science faculties. Teachers, who were teaching pure mathematics or physics or electronics, switched their loyalties to computer science and technology. The IITs also launched exclusive programmes in computer science education. India became the hub for IT industry.

Now, in the 21st century, India is not just recognised as a haven for BPOs, KPOs and EPOs, but is moving up the value chain towards research and development (R&D) projects in sectors like IT, automobiles, bio-sciences, genetic engineering and pharmaceuticals, to develop new products.

Arun Nigavekar

FUTURISTIC APPROACH: Academic curricula, both for computer science and engineering in IT, need to be changed to meet the demands of R&D activities in the future. The report shows that the Indian centres are much ahead on the overall maturity curve. With all the requisite processes in place and better talent, they are well positioned to take up more work in the overall R&D value chain as compared to China. The India advantage is at two levels: firstly, there is immense intellectual power for carrying out research activities in a time-bound manner and secondly, there is the competitive cost of hiring talent. In the past few years, operating cost of R&D centres in India has gone up by 9 per cent but it is still 25 per cent lower than in China. Multinational companies with their R&D subsidiary centers in India will need to redefine their approach towards globalization over the next 12 months, according to a study conducted by Zinnov Management Consulting. The study titled 'Compensation and Benefit Study 2010', highlights that changes will happen in terms of controlled salary increments; cuts on campus hiring; increasing role for service providers and focus on tier II and tier III locations for non-core functions.

The challenges for India to remain at the forefront of research and development are manifold. We must realise that innovation, competency in handling complex problems and working at cutting edge technology with a proven leadership are going to be of importance in the future. The curricula, both for computer science and engineering in IT, need to be changed to meet the demands of R&D activities. The delivery methods have to be changed with blended education, wherein one should combine face-to-face education with e-learning objects. Teachers should use the virtual environment to bring real-time experiences to students through interaction with researchers working in R&D centres in India and abroad. Students should be encouraged to take up projects that are aligned to futuristic problems in various applications in emerging fields. The teaching emphasis has moved away from memorising facts towards finding, evaluating and using information. Increasingly, we are seeing the following trends, directions and movements in teaching and learning. Now, course time is devoted to discovery-based (that is, inquiry-based, resource-based, project-based, and active) learning over traditional lecture modes of transmitting knowledge. The course content is predominately interdisciplinary, interdepartmental, and team-taught; it is publicly accessible and shared beyond the members of an individual course. Research and teaching are perceived as mutually enhancing rather than adversarial. The research component has to be seamlessly integrated in the entire learning and understanding process. This is a new challenge for our teaching community. But we must accept it, mainly because there is a larger advantage to the Indian IT industry. They would remain at the forefront of change in science & technology related to IT.
Single test fits all biz schools

Based on CAT model, CMAT will curb stress

By Ritika Chopra
In New Delhi

The AICTE has planned to hold the three-hour-long online test in February next year. THE ALL India Council for Technical Education (AICTE) has decided to conduct its single entrance test for the MBA programmes next February. Based on the CAT model, the Common Management Admission Test (CMAT) would be an online test, to be conducted over 15-20 days.

AICTE chairman S.B. Mantha said the eligibility criteria for the test would be similar to that of CAT, conducted by the 13 IIMs. Though the exact schedule will be announced by next week, the test is expected to begin around February 10. The three-hour examination—likely to be taken by nearly 2.5 lakh candidates—will have multiple-choice questions to assess quantitative and data interpretation, logical reasoning, general awareness and language comprehension.

AICTE will make it mandatory for all the recognised institutes to admit students only through CMAT in 2013. There are around 4,000 institutes offering MBA and another 900 offering AICTE-recog-

Announced with the intent of reducing the mental and financial stress on the MBA aspirants. But the idea has not been well received by many business schools and organisations like the Association of Indian Management Schools (AIMS) and the Society for Promotion of Education in India, which challenged the AICTE’s notification of December 28, 2010. The notification envisaged sweeping changes in the way B-schools conduct their entrance tests and holding a single entrance/aptitude test for the admissions.

The Supreme Court order of July 25 this year has already allowed private B-schools to continue with the practice of using CAT, XAT, MAT, ATMA, and JMET (though now scrapped) exams for their admissions. However, the matter is still sub judice.
Scientists to explore Indian Ocean’s depths

Associated Press

Johannesburg, Nov. 8

The first time scientists explored deep in the Indian Ocean, they found a new species of glowing squid. Now researchers who are departing from South Africa with even better equipment were hoping for similar success.

In 2009, the scientists collected some 7,000 samples including the newly discovered squid, which has light-producing organs that it uses to attract its prey.

Researchers aboard the RRS James Cook are taking along special cameras for photographing the ocean floor, something they didn’t have last time.

“We don’t know much about the deep sea community,” Aurelie Spadone, a sea specialist with the International Union for Conservation of Nature, said in a telephone interview on Monday before setting out. “It would be very surprising if we don’t find something like a new species.”

The trip is focused on learning more about how deep sea fishing is affecting marine life along seamounts, peaks rising from the floor of the southern Indian Ocean.

Carl Gustaf Lundin, director of IUCN’s Global Marine and Polar Programme, said many of the species that live around seamounts grow and reproduce slowly, so overfishing can severely affect their populations.

“Deep-sea bottom fisheries, including bottom trawling, can damage seamount habitats and negatively impact fish stocks,” Lundin said. “It can also irreversibly damage cold water corals, sponges and other animals.”

(Oxford’s Alex Rogers, the expedition’s chief scientist, said the goal was to better understand a unique underwater environment and the threats it faces.

“Based on what we learn by studying five seamounts in the southwest Indian Ridge, we’re hoping to get a better idea of where special habitats, such as cold water coral reefs, occur on seamounts and how we can protect them in the ocean globally,” he said in a statement. “Perhaps we’ll also be lucky enough to discover some new species living in these virtually unknown waters.”

The expedition is being funded by IUCN, the Global Environment Facility and Britain’s Natural Environment Research Council.
Cambridge launches study on ancient India

Ashis Ray | TNN

London: Britain's Cambridge University, one of the world's leading seats of learning, has embarked on a landmark exercise in 'linguistic archaeology', which is expected to unearth greater knowledge of India's ancient intellectual and religious traditions.

The effort will involve completion of a comprehensive examination of the South Asian manuscript collection at the university's library, which includes the oldest dated and illustrated Sanskrit document in the world.

The estimated 2,000 manuscripts in Cambridge's collection are said to reflect South Asian thinking on astronomy, grammar, law, philosophy, poetry and religion. Some of these are written on now-fragile birch bark and palm leaf.

Heading the project will be Sanskrit specialists Dr Vincenzo Vergiani and Dr Eivind Kahrs. The former said: "In a world that seems increasingly small, every artefact documenting the history of ancient civilizations has become part of a global heritage to be carefully preserved and studied." He added: "Among such artefacts, manuscripts occupy a distinctive place—they speak to us with the actual words of long-gone men and women, bringing their beliefs, ideas and sensibilities to life."

He, then, explained: "One reason this collection is so important is because of the age of many of the manuscripts. In the heat and humidity of India, materials deteriorate quickly and manuscripts needed to be copied again and again. As a result, many of the early Indian texts no longer exist." A discovery made in 1883 represents treasures like a 10th-century Buddhist Sanskrit manuscript from India – the oldest dated and illustrated Sanskrit manuscript known anywhere. Some of the oldest holdings were discovered in Nepal. These now priceless cultural and historical artefacts were rescued in the 1870s from a disused temple, where they had survived largely by chance.

"The word Sanskrit means refined or perfected. From a very early stage, its speakers were obsessed with handing down their sacred texts intact," Vergiani elaborated. "Out of this developed an attention to how the language works. A grammatical tradition arose that produced, around the 4th century BC, the work of Panini, an amazing intellectual achievement and arguably the beginning of linguistics worldwide, which made the language stable and transmissible." It is this robustness that Dr Vergiani believes explains how the language became so prevalent in South Asia — a situation that has been likened to the spread of Latin across Europe.
The recently concluded, "US Universities Fair" helped clear doubts of many aspirants planning to study in the United States of America. The fair was organised by The United States-India Educational Foundation (USIEF), in collaboration with the Institute of International Education, a not-for-profit organisation.

Close to 34 representatives from various US universities participated in the fair and offered detailed information about their institutions and programmes to enthusiastic students. Says Pulkit Agarwal, a Class 12 student at Bal Bharati Public School, Pitampura, "I got to know about the fair through HT Education and came to clarify my doubts around studying sciences and engineering in the US."

Ask him if the interaction was fruitful and he says, "Yes, it was. It helped me understand the admissions process of US varsities. Also, I gathered enough information on scholarships and funding options," he says.

The fair provided a platform to students and university representatives to connect, hold one-on-one sessions with admissions officers and get reliable, authentic information about their programmes.

"The response has been overwhelming; We can see a very strong interest in the undergraduate programmes. The primary reason for most Indian students looking at undergraduate programmes can be the limited capacity of Indian varsities to entertain students," says Renuka Raja Rao, country co-ordinator, USIEF.
How to interpret rankings

Several university rankings systems, different opinions. Experts tell you how to gauge a college based on its rank

For the first time in eight years, Harvard University, arguably the biggest name among higher education institutes in the world, has been upstaged in the Times Higher Education (THE) World University Rankings by Pasadena-based California Institute of Technology or Caltech. However, the importance of reading too deeply into ranking systems is debatable according to experts.

As every system produces different results and rankings change every year based on new facilities and faculty changes, students need to remember that their course, personal preferences and individual departments are important criteria to consider when applying abroad.

The process
The THES system, which began in 2004, is one of the most respected systems of ranking universities in the world as it uses 13 different indicators to evaluate the universities. These are then divided into five headings, each carrying a different weightage towards the total score.

There are: industry income - innovation (25%), teaching - the learning environment (25%), research - volume, income and reputation (20%), international outlook - staff, students and research (10%) and citations - research influence (10%).

The significance
Experts believe that such rankings play an important role in shaping students' choices and aspirations for higher education. "I think such rankings have tremendous influence on students. Most of these are conducted in the most precise and professional manner, keeping a lot of variables in mind, particularly research and academic influence," says Madhur Desai, Mumbai-based overseas education counsellor.

"These rankings hold weightage, particularly for undergraduate students. This is because when they apply for a master's programme or even for a job after graduation, the name of the university from which they graduated, makes a lot of difference. Employers as well as academicians abroad do look at the kind of university you are coming from." However, Desai warns students against blindly following a ranking system. "You need to take into consideration only those rankings that are the most authentic and well-researched. There are a few that you cannot go wrong with, such as the US News university rankings or the Business Week rankings when it comes to business schools," she adds.

How to interpret the rankings
Like Desai, most counsellors recommend that students interpret university rankings based on their course, needs and interest. "Ultimately students need to look at what their requirements are in terms of budget, course, location and study environment," says Sonam Moonhara, an international education consultant. "If students are serious about interpreting the ranking system, they should look into the specific criteria that are being ranked on, keeping their own interests in mind." Moonhara adds that while the top 20 world universities remain more or less the same every year, there are bound to be some changes, especially if one university acquires eminent faculty or big infrastructure changes.

The Indian Institute of Technology is the only Indian university in the top 400 list.

Ranking of a university is not as important as is its standing in the course, which a student wants to pursue. "I first chose the colleges that offered the course I wanted to study, then looked at how highly rated each of them was for my particular course. Whether it is in the top ten or 20 of all world universities is irrelevant to me," said Sambuddha Guhatakurta, 20, who is looking to study film studies in the US. In 2015...
Carnegie Endowment seeks centre in Delhi

New Delhi: A delegation from international thinktank Carnegie Endowment for International Peace on Tuesday met PM Manmohan Singh. The delegation, led by Carnegie Endowment chairman Sir Richard Giordano and including Sunil Bharti Mittal, a member of its board of trustees, also met home affairs minister P Chidambaram, HRD minister Kapil Sibal and National Security Advisor Shiv Shankar Menon.

Carnegie Endowment is exploring the possibility of setting up a South Asia Centre in New Delhi. “Given India’s vital geo-political importance, Carnegie is eager to explore creating a South Asia centre here. We are greatly encouraged by the interest shown by senior Indian officials and thought leaders in this regard,” said Jessica Mathews, its president.
MIT Scientist Has a Kill Switch for Viruses

Breakthrough discovery is a possible cure for the common cold—and every other virus

The July issue of the science journal *PloS One* detailed an explosive finding: a drug that creates a kind of viral self-destruct switch. In years to come it could be used to eradicate diseases from HIV to the common cold. “Forget the flu shot,” wrote *Men’s Health*. “How about a flu cure?”

Even more impressive, the study’s main researcher isn’t a doctor. Todd Rider entered the Massachusetts Institute of Technology in 1986 at age 17 and left nine years later with four degrees, including a PhD in electrical engineering and computer science. He also minored in relativistic quantum field theory and solid state and optical physics. “Once you start on the path of the dark side, you are hooked,” jokes Rider of his obsession with science.

When he finally graduated in 1995, Rider briefly went to work for a biotech startup but returned to MIT two years later to take the position of staff scientist at the Lincoln Laboratory, which is dedicated to using advanced technology for national security. Rider, now 42 and a senior staff scientist, initially devoted his research to finding new ways to sniff out viruses.

By splicing jellyfish genes into white blood cells—nature’s front line against viral invaders—he created a biological sensor that glows in the presence of disease. The technology is faster than chemistry-based methods of disease detection and is now used by the government to test air samples for biological threats. Starting next year, Rockville (Md.)-based Innovative Biosensors plans to sell nasal swabs that use Rider’s technology to spot infectious-disease outbreaks in hospitals.

Rider moved on from detecting viruses to destroying them. He describes in the recent journal article a new drug, still under development, which he has successfully used to destroy 15 viral strains, including dengue fever, a stomach virus, and a polio virus. To create it, Rider combined two proteins commonly found in the human body. One binds to viral double-stranded ribonucleic acid, a type of molecule found in all viruses. The other induces apoptosis, which is essentially programmed cell suicide. The drug acts like a homing missile that seeks out and kills cells infected by a virus. It appears to have few negative consequences and works against all diseases, even as they mutate. “Most viruses kill the host cells anyway. They are like aliens in a movie,” says Rider. He has tested the drug in mice, but it may be as many as 10 years before a commercial version is available for humans. “This is a very clever approach, we are very encouraged by the proof of concept,” says Anthony S. Fauci, director of the National Institute of Allergy and Infectious Diseases, one of the study’s funders.

Rider is a sci-fi aficionado, and he patented a rocket-staging system in high school. The invention earned him the grand prize at the International Science and Engineering Fair, along with a trip to Stockholm and a chance to meet Nobel prizewinners in literature and physics. —NYT
सरकारी खर्च पर दी गई शिक्षा को क्या छात्र पर कर्ज नहीं माने?

सरकार आईआईटी और मेडिकल के छात्रों पर पानी की तरह पेसा बहाती है। उसके बाद सरकारी नौकरी से करियर बनाता है। मगर उसके बाद यदि व्यक्तिगत हित में कोई नौकरी खो जाता है तो क्या उसे धोखाधड़ी नहीं मानते?

पिंपोटर हरप्रीत

शिक्षा चाहिए हमें उसकी आदर्शता का अनुमान नहीं है। एक नया स्कूल में खानी के बच्चों को मानसिक संस्कृति किसी भी विश्वविद्यालय के परामाणु क्षेत्र की वाचक पीढ़ी के बच्चे है।

यह कारण है कि दिशात्मक में सिद्धांत संस्कृति की नीतियों का पालन करने आए तनाम छात्र हमें इसे करने में दाखिला लेते हैं, नाक हारस्ट के सास पा का लाभ उठा सके।

ती भाषा के प्रमुख विद्वान, अर्जुन शेखर महाराज आर्थिक भविष्यवाणी के क्षेत्र में अपने आईआईटी और मेडिकल के छात्रों पर पानी की तरह पेसा बहाती है। उसके बाद सरकारी नौकरी से करियर बनाता है। मगर उसके बाद यदि व्यक्तिगत हित में कोई नौकरी खो जाता है तो क्या उसे धोखाधड़ी नहीं मानते?

अर्जुन शेखर ने अपने पत्रकारिता में अपने पत्रकारों के दर्शन जो कुछ ही है, उसे देखने के बाद मुझे यह कहने मौजूद है कि हमने खाने खाने वाले लोग बहुत पेसा बहाते हैं।

अर्जुन शेखर का बयान है कि अर्जुन शेखर ने आईआईटी के छात्रों को भाषा में हारस्ट करने का अनुभव नहीं है। उनके दर्शन में यह है कि उन्होंने यह दर्शन किया है कि उन्होंने कैसे अपने आईआईटी के छात्रों को भाषा में हारस्ट करने का अनुभव नहीं किया है। इसलिए, उन्होंने सिद्धांतों को नीतियों का पालन करने आए तनाम छात्र हमें इसे करने में दाखिला लेते हैं, नाक हारस्ट के सास पा का लाभ उठा सके।

इसलिए, उन्होंने सिद्धांतों को नीतियों का पालन करने आए तनाम छात्र हमें इसे करने में दाखिला लेते हैं, नाक हारस्ट के सास पा का लाभ उठा सके।
पेशेवर शिक्षा की पार स्थाने बाली छात्रों को हाईजुक्लू में कम अंक पाने पर नहीं होता प्रेरणा की लिसाक
इंजीनियर बनने के लिए 35 फीसदी अंक ही काफी

नई दिल्ली | वादा जेई

हाईजुक्लू में 35 फीसदी अंक ही तो कम हुआ। पढ़ाई में इंजीनियर बनने का सपना पालन हुए हैं तब भी विद्या होने की नजर नहीं।
अब ऐसे हताश भी साकार कर सकते हैं पेशेवर शिक्षा का सपना।
दरअसल देश-विदेश में पेशेवरों की बढ़ती मांग के मृदनजर ऐसी प्रयास किए जा रहे हैं। अगले शैक्षणिक साल में 35 फीसदी अंकों के साथ हाईजुक्लू पास करने वाले छात्र
इंजीनियरिंग, फॉरेस्ट, अर्किटेक्चरर,
हॉटल मैनेजमेंट या अन्य अन्य आउटस और भारत के तीन प्रारंभिक शिक्षण कोष में प्रवेश ले सकते हैं।
अभी तक अंक सीमा 50 फीसदी ही है। इसके साथ ही पेशेवर कोर्स में प्रवेश मिलने की राह आपात होगी।
अभी भारतीय तकनीकी शिक्षा परिषद (एआईएसईटी) ने पेशेवर शिक्षा में प्रवेश के लिए न्यूटाम अंक सीमा में और छुट्टी लेने का प्रवाह किया है।
एआईएसईटी ने तकनीकी कॉलेजों में जून 2012-13 साल में प्रवेश के लिए शिक्षा कोर्सों में स्पेशल अंक सीमा में 15 और हिंदी कोर्सों में 9 फीसदी की कमी की है।

पेशेवर कोर्स में कुल सीटें

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लाक्षणिक लाभ

- भारतीय तकनीकी शिक्षा परिषद की सह-बल, अभी तक से सामुदायिक अवधारणाओं में हाईजुक्लू के लिए अंक सीमा में 15 फीसदी की छुट्टी हासिल कर सकती है।