दिल्ली रिस्क जीरो के दम पर हुआ आईआईटी दिल्ली नंबर-1

नई दिल्ली

आईआईटी दिल्ली को देश की सर्वोच्च रैंक वाली संस्था बनने का गौरव हासिल हुआ है। बीटेक, एमटेक कोर्सेज के साथ-साथ यहाँ भी खास फोकस किया जा रहा है। एसपैस मानते हैं कि किसी भी इंस्ट्रयूजन को पहचान उसके रिसर्च वर्क से होती है और आईआईटी दिल्ली रिसर्च की फील्ड में लगातार आगे बढ़ रही है। यहां पर रिसर्च के नये-नए प्रोग्राम लाये जा रहे हैं। आईआईटी दिल्ली में डिज़ायर्डर्ड्स (फैकल्टी) प्रो. एम. बालाकृष्णन बताते हैं कि पिछले वाले सालों में पीएचडी करने वाले स्टूडेंट्स की संख्या में 70 परसेंट का इजाफा हुआ है। इससे शुरूआत पर 1450 से अधिक स्टूडेंट्स पीएचडी कर रहे हैं। प्रो. बालाकृष्णन के मुताबिक रिसर्च के लिए फंड की कोई कमी नहीं है। स्टूडेंट्स व फैकल्टी को हर संभव सहायता दी जा रही है। पीएचडी दिल्ली को प्रसंग करते हैं। किसी भी इंस्ट्रयूजन की टॉप रेंकिंग में यहाँ के कोर्सेज और रिसर्च वर्क कोशियों का अहम योगदान होता है। आईआईटी के विज्ञान डॉ. राकेश कुमार का कहना है कि इंडियनु टोप में साथ तालमेल बढ़ाया जा रहा है जिसके लिए स्टूडेंट्स की जोब के ज्ञान मौके मिलें।
No browsing after midnight

Indian Institute of Technology-Delhi has restricted the use of internet after midnight for students in hostels

Vishakha Sharma/TNN

IIT Delhi has recently taken a decision to prohibit its students from using the internet in the hostel premises between 1am and 6am. The institute, during these five hours, disconnects the internet facility available to students in their hostel rooms.

The reason, according to Shashi Mathur, dean, students, IIT-D, is to ensure that the academic performance of students does not suffer. He says, “The internet connection, which was available to students during the midnight hours earlier, would disrupt their studies. Students would watch videos or be busy on social networking sites; download movies or play games till late in the morning. Hence, waking up late and getting delayed for classes.”

However, the internet facility will still be available to students 24x7 in libraries, labs and research rooms on campus. “Students, who need to use the internet for their studies or project work, etc, can use these facilities. Also, we have not restricted students from using their own wireless internet connections in their rooms during the night,” adds Mathur.

Students, however, are not convinced. “We already have a restriction on the amount of data that we can download using the internet connection in the hostel. With the new restriction, we can’t use the internet late at night. There are many students in the hostels who use the internet to study at night. We put forward our point of view to the authorities, but to no avail. Since the institute has not put a restriction on personal internet connections, I have to use one,” says a second year student.

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No browsing after midnight

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Ravi Kumar, first-year student of mechanical engineering, says, "We understand that the institute has our best interests in mind, but without internet in the rooms, it's difficult to download e-books, which a lot of students use. The research rooms are located about 1.5 km from our hostels and are generally occupied by seniors, so it is inconvenient."

The decision to curb the usage of internet in hostel rooms after midnight was first taken by IIT-Madras. Students of IIT-Madras are not allowed to use internet in the hostel from 1am to 5am. IIT-Bombay, too, followed suit.
Move clears hurdles to promotion for two professors

MOUSHUMI BASU ■ NEW DELHI

In an unprecedented move in the run-up to the appointment of IIT-Kharagpur Director, the Board of Governors (BoG) of the premier institute recently quashed CBI cases pending for the last five years against two of the top applicants for the coveted post. The BoG includes the Secretary, Higher Education under Ministry of Human Resources Development (MHRD).

The controversial decision will come to the help of present IIT Patna Director Prof Anil K Bhowmick and Dean, SRIC, IIT Kharagpur, Professor PP BoG in a meeting in March 2012 decided to ‘reject the CBI report and quash any action taken against anyone based on the report immediately’. This, according to sources, was ‘abuse of power by the Board in the name of Academic Autonomy’.

Chakraborti. CBI had indicted them along with a senior IIT Kharagpur professor RN Bannerjee for committing irregularities in the ₹40 crore Coal-net project for computerising Coal India Limited (CIL) and its subsidiaries. Even the CAG report had pointed to serious lapses in implementation of the project.

The move of BoG at this juncture will save Prof Bhowmick and Prof Chakraborty from hurdles in getting vigilance clearance mandatory for appointment as IIT Director. The BoG is headed by Shiv Nadar, Chairman HCL, and has Vibha Puri Das, secretary, MHRD as its member.

The selection process for the post of Director is already underway and MHRD advertised for the same about two months ago. The tenure of the incumbent Director IIT Kharagpur Dr Damodar Acharya will end in June this year.

As per documents available with The Pioneer, BoG in a meeting in March 2012 decided to ‘reject the CBI report and quash any action taken against anyone based on the report immediately’. It also decided to write to CBI authority to withdraw the report immediately and drop the charges against the two professors.

The sources have questioned the blatant “arbitrary” and “unauthorised” move of the BoG in this regard without following the mandatory procedures as recommended by CBI. This, according to sources, was “abuse of power by the Board in the name of Academic Autonomy”.

The Pioneer had earlier reported on how Prof Anil K Bhowmick was promoted to the post of Director, IIT Patna despite CBI’s recommendation of action against him way back in 2007. Bhowmick as the then Dean, Sponsored Research & Industrial Consultancy (SRIC), IIT Kharagpur, along with two others (mentioned earlier) had

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New central univs await campus land

Kirtika Suneja

New Delhi, Apr 1: Almost three years after the government decided to set up 18 central universities in the country, it has failed to allocate land for the proposal, leaving most of the varsities making do with non-permanent campuses.

In the case of Bihar, the state government had offered sites at Motihari, which the human resource development ministry did not find suitable. The state government has now proposed an alternate site in Gaya, which belongs to the defence ministry. The varsity will finally be set up here, although the ministry is yet to officially communicate to the state government in this regard.

In Gujarat and Jammu and Kashmir, the sites for the campuses have been identified and construction will start only after formal transfer of land is done by the state government. As per the state government, over 580 acre of land has been allocated for the proposed central university in Jammu, while over 560 acre has been marked for Kashmir.

For the varsities in Haryana, Karnataka, Orissa, Punjab, Rajasthan and Tamil Nadu, the construction work is in final stages.

In fact, the central university of Rajasthan recently shifted its 14 departments to the new campus in Kishangarh, about 80 km from Jaipur. The institution has recruited about 60 staff so far.

UGC EARMARKED Rs 1,054 CRORE FOR UNIVERSITIES IN THE 11TH PLAN AND ALLOCATIONS FOR THE 12TH PLAN WILL INCLUDE THE PROPOSALS FOR CONSTRUCTION ACTIVITIES OF THE NEW CAMPUSES

"We would have ideally liked the universities to shift to their own campuses by 2012 but financial and land issues led to the delay. Most of the institutes are operating from makeshift campuses, while a few have partly shifted to their own premises," said a ministry official. For each of the new central universities, the respective state government was to provide free of cost land to the tune of over 500 acre.

In Punjab, the state government wanted to test the allocated land for uranium deposits till sometime back. However, the construction work is in progress.

The university in Himachal Pradesh has been granted land for two campuses in Dharamshala and Dehra, the land for which is yet to be formally transferred.

The University Grants Commission had earmarked Rs 1,054 crore for universities in the 11th Plan and allocations for the 12th Plan will include the proposals for construction activities of the new campuses.
Reforming education

Quality education powers growth, therefore focused reforms are the need of the hour

Increasing globalisation has given rise to job opportunities involving diverse skill sets. Due to this phenomenon, quality of education has emerged as a distinct constraint for generating additional employment in countries like India. Quality education here refers to an education system which is aligned to the requirements of the job market.

Under the given circumstances, the strong correlation between the education sector and the process of economic growth cannot be overlooked. After all, the education sector has a direct bearing on the availability of qualified, skilled labour force, and the availability of a vibrant labour market is critical to achieve overall economic growth targets.

However, the quality of higher education in India has been traditionally constrained by shortage of qualified faculty, deficient physical infrastructure and weak industry interaction; this, in turn, constrains the placement of students within the corporate sector. Recent international research further indicates that merely enabling access to education is not adequate enough and that quality of education plays a critical role in determining future income levels and contribution of the educated class to economic growth.

Continued government support for education is critical to ensure a balance between economic and social imperatives. In this regard, the Union Finance Budget for 2012-13 endeavours to make education more affordable for masses in India and proffers increased importance towards skill development, a crucial pre-requisite for an emergent economy like India. Exempting educational institutions from the service tax net would improve access to education, while incremental funds, i.e. allocation of ₹1,000 crore for the National Skill Development Corporation (NSDC) towards the skill development initiative, would ultimately culminate into augmentation of skilled workforce in India.

While these fiscal measures would augur well for the sector in the short run, from the long-term sustainability viewpoint, there is a need for more target-oriented reforms and non-fiscal measures to boost scalability and quality simultaneously. The scalability and infrastructure can be enabled with the involvement of private and foreign sector, in addition to funding assistance from multilateral world organisations. The government has introduced the Education Institutions (Regulation of Entry and Operations) Bill, 2011, in Parliament, though it still awaits sanction. The presence of foreign education institutions will truly globalise the Indian education sector and create healthy competition, which will bolster quality of education.

THE EDUCATION SECTOR HAS A DIRECT BEARING ON THE AVAILABILITY OF QUALIFIED, SKILLED LABOUR FORCE, AND THE AVAILABILITY OF A VIBRANT LABOUR MARKET IS CRITICAL TO ACHIEVE OVERALL ECONOMIC GROWTH

Both within India and globally, the private sector has proven efficiency not just in the area of resource utilisation but also in its intent to incorporate global best practices. Over the longer run, several private colleges are expected to tie up with foreign institutions to upgrade their infrastructure, teaching practices and curriculum. Globally, the private sector has been a major provider of educational services; for instance, in the Philippines, it accounts for about 32% of secondary education and about 80% of higher education. Further, in the Netherlands, over two-thirds of state-funded schools operate autonomously.

While the regulatory bodies like the University Grants Commission (UGC), the National Assessment and Accreditation Council (NAAC) and the All India Council for Technical Education (AICTE) can enforce minimum education standards, there is a strong role of market bodies like CRISIL in providing market guidance through grading of education quality. A CRISIL Business School Grading, assigned to a specific management education programme, assesses the ability of the Institute to impart quality education and to achieve desired student outcomes through the graded programme. This grading aims to help businesses find schools that provide relevant talent pools.

Going forward, there needs to be a significant shift in the national focus towards improving enrolment and retention of school children from the marginalised social groups, to achieve universalisation of primary and secondary education. Secondly, quality of higher education needs to be dynamically enhanced, where importing global best practices and encouraging entry of foreign universities could be a strong driving force. There is a significant scope for adoption of innovative practices that promote quality education. Finally, private sector involvement in higher and vocational education needs to be incentivised, to improve reach and enhance quality.
Finding his way around
THE INTERNET MAP

LALITSH KATRIPADDA is one of the finest brains in the Internet space globally. And that is by no means an exaggeration. He is the man behind Google maps and while talking to him, he almost doesn't want you to take that fact seriously.

It was back in December 2006 that he launched Maps for India, using Map Maker. He joined his team with a hypothesis that the needs of Indians, when it comes to maps, is far more elaborate and varied compared to that of people in the US. “For starters, you cannot build a map in India without landmarks. I don't have RMIs or the Big Bazaar on Old Madras Road (in Bangalore), you have no idea of how to get there. And when we launched our maps, there were the first country in the world to have landmarks on our maps,” he says.

Google has since then adopted landmarks on maps all over the world after they watched what happened in India. They said this is useful wonder why they have it in Indian and not in the US. Lalitsh was born and brought up in Chennai. He then went on to study in Mumbai. “Most of my childhood memories are centred around Mumbai. I did my engineering in IIT Bombay. My dad was a professor there, so I grew up on campus and I got very excited by Physics very early on,” says the man whose interests include organic farming and martial arts. He was a very cut-throat youngster. “There were two aspects that were very interesting to me. How computers could control the world, and how the human body was most complex machine. So there was this debate after my 12th grade whether should I join medical or engineering, but IIT Bombay with all its strong research credentials looked a better bet.”

The year spent at IIT had a strong influence on him. Lalitsh then moved to the US for higher education. Initially, he was an aerospace student, and then he went to Computer Science at Carnegie Mellon. “That was the journey.”

One had to draw him towards the subject of privacy and its boundaries. “The aggregate of everything I do in terms of accessing information and who I talk to and see, that tells you pretty much everything you need to know about me. That is becoming more and more online, more and more connected, and that footprint is moving to the cloud. That creates a very legitimate question about how secure is this data, how private is this, who should access it, and more than anything else how transparent it is to the user. These are very important issues. And in many ways you are better off not having it if you don't have all of these things in place. I think the reason why it is now a worldwide debate is that the Internet is really coming into its own.”

If one looked at people's lives even four years ago, most of them did not do much online. “I moved to India in 2004 and around that time we had a little kid. The first three years we went to stores to buy. Today in the US when my wife goes there or whenever I look at my friends’ buying patterns, even the clothes are bought online, and my brother does not buy anything that is in stores today. He buys everything online, and that creates obviously an enormous amount of information about him in the online space, and the privacy of that information is far more important than four years or five years ago, which is just email.”

The other thing is the entertainment that people access, which used to be TV has moved online. “In the US, people don't have cable any more, they have the cable connection, but they have discontinued the cable service of subscribing to 400 channels. Whatever you want to access, you get it when you want it and how you want it, and that is a fundamental shift. It is natural that all of this boils down to privacy, which is I think is a very healthy debate to have.”

This is the time when both companies and governments are formulating policies around privacy, and Lalitsh feels it would have been premature to have this debate even five years ago. “This is a good time to have this debate because it will allow most of companies to learn how to deal with it, and that the right thing. But there will be clashes, as can be seen in many countries. It is a worldwide debate and people need to get involved.”

“Google believes that free expression is a really important aspect of any free society, and we champion and protect that right. At the same time, we cannot be blind to cultures. There is clearly free speech and then there is insightful speech, and there is child pornography which is not acceptable anywhere, and we need to draw the line. We make our best efforts to follow the local laws and be sensitive to local culture. Following the laws, is the first step. In many ways, we would like to be a company that embraces the local culture and not just follow the laws,” says Lalitsh.

India's Internet penetration still hovers around the 4% mark, and that is not good enough. “There lies the reason why I got up and came to work. Even a 5% jump in the next five years could be telling. I am betting that it is actually going to jump by 10% but closer to 10% by 2014.”

The growth of e-commerce in India is a big opportunity. “In many ways the consumption patterns of Indian is poised to dramatically shift in the next three years because of e-commerce. My brother-in-law does not have to come from a small town he lives in Bangalore, and you buy the next gadget, as he can get it sitting in his small town in Virar, and he does not have to wait for a mall to show up there, because it won't.”

It is funny that a flat screen TV is more expensive in a small town than in a big city, because there is only one supplier. Now e-commerce actually allows us to bypass all that, and you don't have to go through these massive capital expenditure on roll outs to reach everyone. Less than 10% of Indian retail is organised. The rest of it is unorganised and fragmented. The fragmentation is an opportunity, and in many ways an opportunity that I believe the Internet will bridge.”

The 100 million users we have today in India are comfortable enough with English. But the next generation users who will come online will be people who have strong preferences for Hindi, Marathi, Tamil, Telugu and so on. Now those users how will they interact with Internet? What pattern will they develop? What will they want? We don't know the answer to that. “India is unique. It is bilingual. The next wave is the local language one. You can actually see that on YouTube today; more than 70% of YouTube usage is not in English, but predominantly Hindi, Marathi, Telugu, Tamil etc. Having said that, a lot of it is Bollywood, but not all of it. So we are already seeing that pattern emerge on YouTube and we expect that to move to the web.”

Lalitsh, after his university days, had set up a company in robotic space called Studio. It was Google's first acquisition. “That's how I came in.” He has stayed in since then.
B-school rankings are incredibly imperfect

Deep domain expertise can be extraordinarily helpful in a business career.

Gokul Krishnamurthy
to joining Oxford in July last year, Professor of Finance at Said Business School, was on the other side of the world, in Mumbai, for the sixth edition of the Oxford India Business Forum. Dr Tufano took time out to speak to The New Manager. He underlines the need to view B-school rankings in perspective, with a good view of the stereotypical MBA in the present day.

Asked to compare Harvard and Oxford, he says, "There are different things. For example, it is not on a mission to move the 15-year-old Said Business School to greater heights, even while retaining the same quality. There's a lot of movement in this market. It is a market which is improving but it's not perfect. You can't teach competition and believe in competition but good say, 'It shouldn't apply to me.'"

This was a dominance of the US in the MBA market. I am not saying that's gone away completely, but it's changing. They say the world is getting flat. In many ways, it is.

"We're seeing more US students wanting to go abroad, to work in other countries doing so as well. I suspect that 10 or 20 years from now, those rankings could look even more different than they do now.

"I have travelled the world and reflect the pulse of the corporate world and the student community, is it the other way around? Do students influence the rankings?

Applicants do look at the rankings, as perfect as they are. Different rankings mean different things. For example, it is not uncommon in rankings to measure salaries offered. There's logic to measuring salary. However, what we believe is that if you go into entrepreneurship and social entrepreneurship, that ranking gets affected.

"Students may be going into jobs in all kinds of sectors, where they can have very satisfying lives. The salary score may not reflect that, at least not immediately."

Business school rankings by salary measure what they get when they step out — not much a few years down the road. The real metrics should be what your students are up to five or ten years out of school. An MBA from a top school is not just a comfort zone, it is also a different language at business schools and reality. They say they want students to go into all kinds of sectors, not just divisions of companies. But the rankings on the basis of salary encourage schools to encourage students to go only into the highest paying sectors. In the particular instance of salary, rankings can be misleading.

"But the best students, seeking admission, would want to get into schools that can get them to the best part of the world. That is part of the answer. I think students today also want to go to schools that can prepare them for the lives they want to lead.

If you want a career in Green Tech or Clean Tech, and do a two-year MBA at Oxford, with two degrees, and two networks, maybe you won't get into a consulting firm. But you'll get where you want to, and that may be the future."

"How is that comparable on metrics to a business school that's only a business school? We hope that if we're successful with the 1+1 MBA, we're going to make it much more difficult to make sense of the rankings business."

"You've spoken extensively about drawing on strengths of being part of a large university. Tell us about the 1+1 MBA, this leverages that. How will it benefit students?"

"Increasingly, there is a need for depth. Whether it's a one-year program or a two-year program, business schools are not set up to deliver depth. Because, we are individually organised, and that means we may get depth in any one of those disciplines, there is much more that we are unable to teach students.

One of the first things we launched after a month of my arrival at Oxford is a new programme, the Oxford 1+1 MBA programme. Our regular MBA is a one-year programme. The 1+1 programme is a two-year experience at Oxford.

In the first year, you get depth, deep domain expertise. The second year is the one-year MBA programme. The depth could be in one of our four Masters programmes in environment, one of the four in education, computer science, social sciences, or the Internet; or it could be in the study of contemporary India or biomedical engineering or clinical epidemiology.

"Depth can be extraordinarily helpful in a business career. And the combination of depth and breadth can only be offered meaningfully by a world-class university. At Oxford, we are blessed with hundreds of one-year Masters programmes, allowing students to specialise in any number of topics. I think this is going to be a powerful model to prepare students for the future."

"I also think this addresses the uncertainty of structural shift in the economy. I got my MBA in 1984. Finance had taken off a few years prior. It's still relevant and we have a very good finance MBA, but we also have

Dr Peter Tufano, Dean and Professor of Finance at Said Business School, University of Oxford

things that could be increasingly relevant. Whether it is a manager for science or technology — or India or China — we have the depth of experts and the breadth at Oxford to prepare them.

Even for those in the regular one-year MBA programme, we are going to take information from outside the university, draw on sources from outside the business school and bring that into the curriculum."

"How has the response been to the 1+1 MBA?"

"We just announced this a few months ago, and it is in process. The early reactions have been extremely positive. This idea didn't come out of the blue. In some sense, it was tested — it has long been a part of Oxford education, called the Rhodes Scholars programme. I also tested this concept at Harvard with CEOs and businesspeople. It resonated with them as well.

"How big is Said Business School at Oxford, in terms of faculty strength?"

"We have over 60 full-time faculty members at the Said Business School. It's a relatively small fraction of the university's broad faculty. We are a small piece and this is a good thing. It allows us to be nimble, and collaborate with various parts of the university."

"There are strategic parts of the university where I hope we can be tremendously valuable. A business school should be the bridge between the university and the business community."

Tell us something about the new project for the UK Government, with Deloitte.

"We have a BT Centre for Major Programs at Said Business School, and our researchers there work on how to manage large, complex projects — it could be infrastructures, IT, and so on. These projects involve thousands of people, and budgets could be in the range of billions. In addition, we have been putting major strides with the Department of Major Program Management for a few years now.

Earlier this year, the UK Government put out a contract, to bid to lead civil serving projects in the country. We bid for that contract along with our partner Deloitte, and we won.

This means that Oxford will be training 300 to 500 leading civil servants of the UK along with Deloitte, to manage the country's largest projects.

Our hope is that training this coterie of major programme managers in civil service, we increase the rate considerably from 30 per cent."

"If you think about these three activities, it is about research leading to teaching and to executive education that has an impact.

How diverse is the nationality spread at Said Business School?

"In our MBA programme, students come from more than 50 countries, and 25 per cent of the students are from outside the UK, and 5 per cent is from India. This makes it an extraordinarily diverse place. It is reflective of the overall Oxford postgraduate community. Our postgraduate programmes are extraordinarily diverse in a way the US schools are not. If you look at the top schools in America, including the one that I used to be at, probably fewer than 40 per cent would be international students."

"At Said, there are students from all over the world, from the US, Canada, Australia, India... I think of the students in our MBA programme, 54 are from India.

Do you see idealism vanishing from the face of students to entering B-schools?

"Absolutely to the contrary! Maybe we are just blessed to be at Said, but one of the specialties we have is social entrepreneurship. We run the Oxford Centre for Social Entrepreneurship. In March, we run the Skoll World Forum, which is the world's leading gathering of social entrepreneurs. We have a cluster of extraordinarily idealistic students. One of our students has come back to India. He runs a courier company employing dear people — Dhruv Lakra, and the company is Miraklee Couriers. My experience was far more idealistic than many others I have met. It's quite refreshing."

"gokul.k@thehindu.co.in"
Mr A. S. Kiran Kumar

ISRO's space application centre gets new chief

Our Bureau
Bangalore, April 1

Mr A.S. Kiran Kumar is the new Director of ISRO's Space Applications Centre, Ahmedabad. He took charge on Saturday from Dr R.R. Navalgund.

SAC is the 'brain' that develops payloads/technologies or innovations that go into the country's satellites.

Prior to his elevation Mr Kiran Kumar was Distinguished Scientist and Associate Director of SAC, an ISRO release said. An M.Tech in physical engineering from the Indian Institute of Science, Bangalore, and graduate of Bangalore University, Mr Kiran Kumar joined SAC in 1975.

He has worked in the design and development of electro-optical imaging sensors for early satellites to the latest — the terrain mapping and hyper-spectral imagers for the Chandrayaan-1.

madhu@thehindu.co.in
Innovating Education

ANUPAMA ARYA

Educational institutions delivering on the promise of innovation and research are increasingly under the spotlight. Can the end result of research be products that are commercialised and new enterprises that are spun out, and not just papers published in technical journals, is the point being debated. Can this change be yet another lever to energise the entrepreneurial ecosystem and impact us all as end-users, moving our industry up the innovation ladder?

Today, research rarely happens in an engineering institute, barring a few select bodies. Where it does happen it is a struggle to give it the shape of a product that can be commercialised. The market linkages are not readily available in a college or university and faculty is not adequately experienced in the methodology of productisation for end-user needs. Given this scenario, the monetary gain to the institutions from commercialisation is uncertain. An overworked and underpaid faculty also has little incentive to step into such unchartered waters where gains are unclear. So, what can be the out-of-the-box solutions that can promote innovation at educational institutions?

One encouraging trend is corporates coming forward to fund laboratories at educational institutions, bringing students and faculty closer to real-world technology. Case in point is IBM populating a technology centre at IIT Guwahati. Easy access to open laboratories where students can experiment and create new products can unleash innovations that can benefit industry, students and all others in the eco-system.

Select institutions are also creating entrepreneur development centres and innovation centres in colleges. These are few in number at the moment, and do provide physical spaces, solving part of the problem. When run with foresight and planning, these centres can provide the opportunity for student entrepreneurs to work under the same roof as alumni entrepreneurs. The latter who may be former senior industry personnel, can bring with them an understanding of end-users and their requirements, key information required to build the lab to commercialisation roadmap.

A few entering faculty members are also playing a role beyond the traditional mandate of teaching to provide expert consulting and mentoring to students and their entrepreneurial ventures. In case of IITs, they are going a step further to seed technology created by them in their labs as a base for product development in a commercial venture. These ventures with faculty and institutions as stakeholders and/ or as board members are spun out with the explicit purpose of monetisation of research and commercialisation of products. If successful, they have the potential to provide commercial benefits to faculty and institutions alike. These linkages bring in vital alternate experience for the faculty along with a much-needed incentive to research and innovate.

The sceptics think we live in a fool’s paradise if we dream big. Our first and foremost interest should be in capacity building in education and ensuring employability and better livelihood for our people. If institutions fail short on this basic promise, more effort should go into plugging that hole, instead of adding more goals to the mix. We are still working on the right model for industry-academia linkages that can generate adequate jobs, hence other aspirations such as those promoting esoteric activities like research can come later. But, if capacity-building efforts create a large number of private educational institutions that compete with each other, surely the way forward is for these institutions to build innovation and research capabilities to differentiate themselves. Else, they run the risk of students voting with their feet and going elsewhere.

There was a time when the best of India joined the teaching order as faculty. It changed to the best joining administrative services and more lately, the private sector and going abroad. Some of those going to foreign countries joined the universities abroad as faculty. It is true that very many capable people opted out of teaching. However, a recent trend is for young faculty and professionals from overseas to experiment at smart institutions in India. They are looking for autonomy at work and an enabling environment that allows them to reach out and build relationships with entrepreneurs and young companies not just in advisory/consulting roles, but as board members and stakeholders, and are willing to bet on a positive future for innovation in India.

About time we gave new-age faculty a free run and put teaching in the position where it rightfully belongs, a dignified profession that should not only be respected for its vital role in building the national human resources, but also where individuals can make adequate commercial gains, and be an active force in revitalising the innovation eco-system in India.

(The author is managing director, Mobera Group)
Govt mulls wider forest service exam ambit

REVAMPED EXAM
Environment ministry in talks with UPSC over new format for IFS exam

Chetan Chauhan
@chetan@hindustantimes.com

NEW DELHI: For lovers of forests and wildlife, there is some good news.

The new format of the Indian Forest Service exam likely to be introduced from 2013 could allow students from science and technology streams other than the conventional ones.

The environment ministry is in talks with the Union Public Service Commission on the new format, which can attract a large section of students without diluting the objectives of the paper. The modified format could come into force by next year.

Former environment minister Jairam Ramesh had initiated the process of reform in the IFS exam to attract youngsters from various fields to the forest service.

India has 3,084 IFS officers with 66% of them being direct recruits.

The remaining is promoted from state government forest cadres.

But in the past 14 years, more officers than that required were hired, resulting in reduction of promotion avenues and frustration among the cadre, a ministerial committee to review the IFS system had said in May 2011.

Through the new format, the government aims to fill vacancies and create an efficient forest service to protect wildlife and forests while looking after the needs of people dependent on forests for their livelihood.

Graduates of traditional science subjects such as botany, zoology and math were allowed to appear for national IFS examination.

The ministry is now considering including subjects such as bio-technology and social sciences in the ambit of the IFS exam.

"The current day Indian Forest Service is more exciting and challenging than ever before," said Dr PJ Dilip Kumar, director-general of forests and special secretary to the Government of India, Ministry of Environment & Forests, to the students and IFS probationers during the Foundation Day lecture at the Indian Institute of Forest Management in Bhopal recently.

In recent years, the role of forest officials has widened with increasing interface with local communities and inclusion of scientific tools in managing forests.

The environment ministry has decided to expand the eligibility criteria for IFS, started by the British in 1864, as part of an exercise to restructure the forest bureaucracy with an aim to make it modern and competitive and is seeking the UPSC's approval.

In a bid to get better quality candidates for the IFS, the ministry has worked out a test in English language and general study.

In addition, the exam will be conducted in all languages as applicable for other all Indian service examinations.

The ministry also wants the UPSC to increase the intake of IFS officers on annual basis to fill up the vacant posts.

THE MINISTRY IS MULLING INCLUDING SUBJECTS LIKE BIO-TECHNOLOGY AND SOCIAL SCIENCES IN THE AMBIT OF THE IFS EXAM.
Aakash tablet may see launch in Philadelphia

ANUBHUTI VISHNOI
NEW DELHI, APRIL 1

THE $35 Aakash tablet could soon be on its way to schoolchildren in Philadelphia if talks with an American firm that has shown interest in the project work out fine, according to highly placed sources.

Philadelphia-based Wilco Electronics, which is in negotiations with the Union Human Resource Development Ministry that is working on the touchscreen tablet along with its Canadian manufacturer Datawind, is looking to procure the Aakash tablet for use by schoolchildren and disadvantaged sections there.

Brigitte Daniel, executive vice president of Wilco, came to New Delhi late last year to personally see and understand how the tablet works and is learnt to be quite interested in the project.

"I did visit the Ministry of Human Resource Development (HRD) last year to explore the options of partnership and distribution of the Aakash tablet in the US. My company, Wilco Electronic Systems, is currently in stages of exploring a relationship with Govt of India and/or Datawind (the company responsible for distributing the tablet) and may look to pilot use of the tablets in Philadelphia," Daniel said in an email to The Indian Express.

"We will be meeting in the US with Datawind early April. We hope to nail down details about this then and see what we can do to get a pilot going in Philadelphia," Daniel confirmed.

Explaining that she was "keen on "testing the device within schools and underserved communities", Daniel said the number of tablets Wilco will procure would depend on the manufacturing rate of the tablet by the HRD Ministry. Wilco is said to be the primary cable and internet provider for Philadelphia Housing Authority projects and is focused on serving low-income Philadelphians.

Daniel is also member of the Diversity Committee of the US Federal Communications Commission and works to bridge the digital divide by providing state-of-the-art affordable telecommunication and broadband services to underserved populations.

She is of the view that Philadelphia apart, Aakash will be much in demand across the US as well. "I do believe that the Aakash tablet could potentially make impact within the US National Broadband plan to bridge the digital divide for underserved communities, schools, and low-income communities, here in the US," she added.

Incidentally, the HRD Ministry will invite bids for 5 million Aakash tablets next month and this will be an upgraded version with a better processor and touchscreen."
Law soon on ₹50L fine for discrimination in univs?

Himanshi Dhawan | TNN

New Delhi: Institutions found negligent in preventing discrimination may face a fine of Rs 50 lakh, according to a new amendment proposed by the human resource development ministry.

The ministry plans to introduce a provision in the Prohibition of Unfair Practices in Technical Educational Institutions, Medical Educational Institutions and Universities Bill to ensure that institutions will be held responsible for discrimination on the basis of caste, gender or religion. The move comes after a mounting number of complaints from colleges, including the recent suicide by a dalit student at AIIMS.

A HRD ministry official said institutes could attract a penalty — ranging from Rs 5 lakh to Rs 50 lakh — if evidence was found that the college had not worked actively to prevent discrimination against a student. The bill will have to be cleared by the Union Cabinet.

The complaints will be dealt with by an internal committee of the institution initially. If the student fails to get redressal he or she will have the option of approaching an ombudsman who will be tasked with conducting an independent assessment. “The student can approach the tribunal who will go by the ombudsman’s report, if there is a case of negligence,” the official said.

There have been an increasing number of complaints from educational institutions especially medical colleges. National Commission for Scheduled Castes chairman P L Punia said, “Earlier, people used to accept discrimination as their fate. Now, they feel there is a redressal mechanism and we have seen an increase in the number of such cases.”

Some of the complaints that the commission has received include a suicide in 2011 by a metallurgical engineering student at IIT-Kanpur. There was an instance of 25 students failing in Burdwan Medical College. Punia said that almost all the students passed when they sat for the exam the next time.
Federal grace
Sibal should swallow his pride, say yes to Nitish’s request to shift Central university to Motihari

FOR a year now, Bihar Chief Minister Nitish Kumar and Union HRD Minister Kapil Sibal have been on the outs. At the heart of the conflict is the location of a Central university to be set up in Bihar. Nitish wants the university in Motihari, Sibal insists on Gaya. Nitish’s argument is that Gaya has Magadh University; Motihari’s higher education is limited to two colleges and a Central university there would reach out to students in East and West Champaran districts, even Gorakhpur in UP. Sibal says Gaya is well-connected, has an international airport and so will attract students and faculty. A thin argument, given that today Motihari is as well-connected by road from Patna as Gaya is. But it’s not about Motihari versus Gaya. It’s about the Centre asserting authority over a reluctant state.

That’s an all-too-familiar story. Most recently, several states, including Bihar, protested strongly against the way the Centre tried to get them to fall in line on the proposed National Counter Terrorism Centre arguing that they were shut out of the policymaking process. Nitish has said that he will not “cooperate” with the Centre, a sure signal to Sibal that it may not be smooth sailing for his proposed university in Gaya. Strategy, if not sagacity, would demand the Centre not allow this matter to become the latest episode in the narrative of state rights versus a domineering Centre that is fast becoming fashionable in political circles.

The Congress has a long history of disregard for states’ rights, from the days when it wielded Article 356 against states ruled by political opponents, to the arrogance and mismanagement that has marked the Centre’s dealing with state governments in UPA 2. It’s not just opposition-run states that have a problem with the way the Congress-led government engages the states, or rather fails to; its allies, too, are visibly unimpressed. In times when power has shifted to the states, there’s a price to be paid for the failure to treat the states as equals. Overruling a popular CM’s choice for the venue of a university in his state shows how little UPA 2 is learning.
The higher education myth

Latest study: India’s enrolment ratio is still well below global average

YAMINI LOHIA

The enduring myth about India’s superior higher educational institutions was tested recently, with a report assessing the country’s labour force and its preparedness. The report, released by staffing company TeamLease, found that India is failing to properly educate its workforce, especially beyond the high school level. According to the report, India’s gross enrolment ratio (GER) — the number of students enrolled versus the number of eligible students — for higher education was a mere 13.2 per cent in 2003; it is now projected to rise to 15.7 per cent, still substantially lower than the global average, marking slow progress in the government’s goal of attaining a GER of 30 per cent by 2030. India is a laggard compared even to other developing countries, whose GER averages 36 per cent. And there are as many as 374 districts where the GER is even lower than the fairly abysmal national average.

Not only is the Indian state failing to get its youth into higher educational institutions, the college graduates it does produce are by and large ill-prepared to enter an increasingly globally integrated labour market. They lack the skills to get the jobs they trained for and are not considered employable. Study after study, such as the McKinsey-NASSCOM one in 2005, quotes employers stating their dissatisfaction with the quality of graduates. There are jobs — in the IT sector, for instance — but not enough qualified engineers to fill them. According to the TeamLease report, well over half — 58 per cent, in fact — of young Indians suffer from some degree of skill-deprivation.

The challenge for the state is threefold: first, it must get eligible students into college or provide them with some form of higher education training; second, it must improve the quality of instruction available at such institutes; and third, it has to do this in a way that is cost-effective. Although the 2012 budget increased education spending by 18 per cent, the dismal state of India’s public finances will holde any effort to seriously address the higher education deficit on both quality and quantity.

Expanding access to such institutions must be a priority if India is to reap any kind of demographic dividend from its young labour force. More than half the country’s population is under 25, and a third are less than 15 years old. The drive towards the universalisation of primary education via the Right to Education Act and a push for the expansion of secondary school education (with the Rashtriya Madhyamik Siksha Abhiyan, for which the World Bank recently lent India an interest-free $500 million) means that more and more of these young people will be eligible for — and aspiring towards — at least some college-level instruction.

Certainly, the number of universities and colleges has increased since liberalisation. A fast-growing economy needs skilled labour, and this demand was matched by people's chang- ing aspirations, leading to a sharp growth in the number of public and private higher education institutions in the country. In 1991, India had 184 universities and 5,748 colleges; by 2011, this number had increased to 537 universities and 25,951 colleges. A lot of this growth has been driven by private colleges (many affiliated to state universities). But, as a FICCI and Ernst and Young re-

If the government is not careful, our hypothetical demographic dividend will turn into a demographic disaster.

Commission for Higher Education and Research, fails to address the reasons for the structural weaknesses of current regulators.

Even if one sets aside the quality of instruction, only about 8 per cent of the labour force are university graduates; the rest enter the competitive global economy at a serious disadvantage.

Clearly, the government has to work towards both expanding access and ensuring a modicum of quality, and there are at least nine pieces of legislation in the pipeline to help improve the supply of quality universities and colleges for a whole generation of young Indians. But whether these bills will be enough to successfully reform the country’s broken higher education sector is another matter, especially given the limited availability of quality faculty.

It is easy to be hoodwinked into believing that there is nothing broken in the Indian higher education system — there are, after all, plenty of success stories of people graduating from IITs and IIMs and then going on to receive dream job offers. But those institutes serve a tiny fraction of our population, and even they do not perform well in global university rankings. If the government is not careful, our hypothetical demographic dividend is going to turn into a very real demographic disaster, with plenty of young people with paper credentials but no skills and no jobs.
Now, a computer that can spot if someone is lying to you

London: Now, you can easily spot if someone is lying to you, with the help of a computer, say scientists. A team at the University of Buffalo has developed a new software that focuses solely on the subject's eyes, monitoring the movements of the pupils, which determines if someone is telling you the truth or lying.

For their study, scientists recorded a series conversations in which a number of lies were told. And having tested their program against a trained human interrogator, they found that the software had a higher success rate. While the specially trained examiner correctly identify

THE NEW LIE DETECTOR

65% of false statements, the computer recorded an impressive 82.5% reading.

"What we wanted to understand was whether there are signal changes emitted by people when they are lying & can machines detect them?" 'Daily Mail' quoted prof Ifeoma Nwogu as saying.

Car that changes colour with mood

London: Imagine your car changing its colour as per your mood. Well, your imagination is now a reality. All thanks to French car manufacturer Peugeot which has unveiled a new car, Peugeot RCZ, that uses an innovative reactive paint to change its body colour in order to reflect its owner's emotions, be it happy, sad or anything in between.

In fact, engineers at Peugeot UK have developed this pioneering new technology by using a psychochromatic coating or mood paint, which alters the molecular structure of the paint to emit light at varying wavelengths. The driver's

EMOTION READER

moods are detected via heat sensors integrated into the steering wheel, which read their body temperature and pulse rate to change the exterior colour of the car accordingly, say the engineers.

"This really is a world first for motoring, to have developed a paint that accurately reflects the emotion of the driver, will no doubt have our competitors green with envy. Particularly as our customers can experience this innovation behind the wheel of the RCZ — a sports coupe that already inspires goose-bumps with its double-bubble roof line," the product manager at Peugeot said.
IIT-JEE is a competitive exam and includes both easy and tough questions. If you find a question difficult, remember a majority of students would feel the same.

**RIGHT REVISION**

Says Shubham Mehra, who secured a second rank at the IIT-JEE 2011, “Though you should try and keep in touch with every topic, the focus at this stage should be on organic and inorganic chemistry. Mathematics and physics are conceptual and devoting as less as an hour or two to these subjects every day should be fine. Make short notes and highlights of chapters, concepts and formulas.”

Mihir Patel, a fourth-year electrical engineering student at IIT Bombay, adds that this is the time to revise the complete syllabus starting with concepts you understand relatively well. “Don’t leave any topic. Compile your frequent errors; understand why they occur and come up with strategies to avoid them,” he says.

Additionally, solving a few problems from your notes, study material and last year’s JEE paper will be of help. Pay equal attention to all the three subjects by devoting specific hours during the day or entire days for each of the subjects. Make mental cues of all your concepts so as to help you retrieve them quickly during the exam. You may also revise chapters from your class XI books to brush up on various concepts.

**EXAM TIME**

IIT-JEE is a competitive exam and includes both easy and tough questions. So, if you find a question difficult, remember a majority of students would feel the same. Advises Mehra, “Keep the order of the subjects you are attempting the same as the one you are used to attempting at your coaching class/practice hours. This will ensure that your mind is at ease during the exam. Don’t spend more than five minutes on any particular problem. Try to complete the chemistry section within 30-45 minutes, physics within 45 minutes to an hour and the mathematics section within an hour-and-a-half.”

Says Tejas Shyam, a fifth-year metallurgical engineering and materials science student at IIT-B. “If you feel comfortable, solve the questions that carry more marks first (even among the problems you find easy). This will maximise your attempt. Do not try too much of guesswork, lest you garner negative marks.”

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As engineering aspirants across the country gear up for IIT-JEE on April 8, *Education Times* offers last-minute tips on how to crack the test.

**SUBJECT-WISE**

- **MATHS:** Draw diagrams especially in co-ordinate and Calculus-related questions. Focus on quadratic equations and expressions, complex numbers, probability, vectors, matrices in algebra; circle, parabola, hyperbola in co-ordinate geometry etc. Use method of substitution and elimination in trigonometry and conic sections if you don’t know the correct way. Try deriving all the important properties of conic sections without consulting a reference and make a comparison table to refer to on the last day. Try deriving the derivatives and integrals without consulting the reference.

- **PHYSICS:** Most of the concepts here are intuitive and difficult to forget. Follow the concept until the end. Revise modern physics, mechanics, fluids, heat and thermodynamics, waves and sound, capacitors and electrostatics, magnetics, electromagnetic induction and optics thoroughly. Avoid lengthy questions.

- **CHEMISTRY:** Organic and inorganic chemistry: In organic chemistry, focus on qualitative analysis, co-ordination chemistry and chemical bonding. Make a mapping between name of the reaction, species/functional groups that occur as reactants and those that occur as products, catalysts and reaction conditions. Understand the arrow mechanisms, in physical chemistry, pay attention to electrolytes, thermodynamics and chemical equilibrium. Beware of calculation errors.

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Questions with no negative marking must be attempted. Mark the answers on the OMR sheet after every four to five attempted questions. Remember, JEE is about quality and not quantity. You can make the cut by performing well in at least two subjects and securing the minimum cut-off marks in one.
GLOBAL ENGINEERS

Engineering degrees will soon be recognised internationally once India becomes a permanent member of the Washington Accord (WA). Vishakha Sharma reports

From June 2013, finding a job in any part of the world may become simpler for Indian undergraduate students of engineering. This will be possible when the National Board of Accreditation (NBA) in India, under the aegis of All India Council for Technical Education (AICTE), becomes a permanent member of the Washington Accord.

The NBA has decided to invite the WA to audit its accreditation system in 2013, which is crucial to become a permanent member. If India becomes a permanent member of the WA, Indian UG engineering degrees will be on a par with similar degrees provided by countries like the US, UK, Australia, Canada, Singapore, Japan, South Africa, Ireland, New Zealand, Hong Kong, Chinese Taipei, Korea, Malaysia and Turkey who are already permanent members of the WA.

Elaborating further, Dinesh K Paliwal, member-secretary, NBA, says, “The impact of globalisation in the current world scenario has necessitated trans-border migration of technologies, technicians and professionals to various countries at a much rapid pace than ever before. Therefore, it is imperative to evolve a quality assurance framework to bring the quality of technical and professional education imparted by institutions/universities of international repute to meet the global standards. The WA is an international agreement among bodies responsible for accrediting engineering degree programmes. Its membership facilitates the mobility of engineering graduates and professionals globally for employment and career advancement.”

So, how does it work? “Only after NBA accredits a particular programme being taught in a particular institution or university after a thorough inspection (checking whether the course falls into the parameters as required by the WA), the course will be recognised globally easing mobility for Indian engineers,” says Paliwal.

According to Paliwal, for example, once NBA becomes permanent signatory of Washington Accord, if a student after obtaining a degree in any programme that is accredited by the NBA, in future decides to work abroad, s/he will not be required to prove his/her credentials by doing another course and duplicating efforts. The student’s degree will be accepted internationally and s/he will be eligible for the global job market.

To acquire full signatory status to the WA, NBA has started work on creating international benchmarking for Indian institutes. “There is still a lot of work that needs to be done on outcome assessment and accreditation before applying for a permanent status. As of now around 140 institutes have applied for accreditation under the new framework,” says Paliwal.

Every member country needs to undergo regular monitoring for five years. India is currently under the status of a provisional member of the Washington Accord.
पांच पसार रहे हैं अंतरराष्ट्रीय विश्वविद्यालय

विदेशी शिक्षा प्रदाया विद्यायक धूल फांक रहा है, लेकिन अंतरराष्ट्रीय विश्वविद्यालय पैट बनाने की जुगत में

एम सरसती और
कल्पना राठौड़

अंतरराष्ट्रीय विश्वविद्यालय भारत में केन्द्रीय परिपथान
उद्योगों के कर्मचारियों को प्रशिक्षित करने तक ही समय तक, रहना चाहते थे इससे आगे की संभावनाओं पर पूरी तरह से विचार कर रहे हैं। इसी विश्वविद्यालय उद्योगों के कर्मचारियों को विश्वविद्यालय उद्योगों के कर्मचारियों को विश्वविद्यालय उद्योगों के कर्मचारियों को विश्वविद्यालय उद्योगों के कर्मचारियों को विश्वविद्यालय उद्योगों के कर्मचारियों को विश्वविद्यालय उद्योगों के कर्मचारियों को विश्वविद्यालय उद्योगों के कर्मचारियों को विश्वविद्यालय उद्योगों के कर्मचारियों को
अब सुधरेगी इंजीनियरिंग शिक्षा

एजेंसी: नई दिल्ली

देश में इंजीनियरिंग शिक्षा की गुणवत्ता को बेहतर बनाने के उद्देश्य से सरकार ने निजी गैर सहायता प्राप्त कॉलेजों के लिए विशेष परियोजना शुरू करने की योजना बनाई है। यह परियोजना भारत में विश्व बैंक के सहयोग से चलने वाले तकनीकी शिक्षा सुधार कार्यक्रम का एक हिस्सा है। इस परियोजना के तहत 500 संस्थाओं को लिया जाएगा, जिसके लिए तरीके बनाए रखे गए हैं।

पारस्परिक बैंक को योजना बनाने का निर्देशन किया गया है। बैंक के अध्यक्ष शूफु जोलिक ने इस विषय में पूछताछ की और कहा कि बैंक भारत में तकनीकी शिक्षा और माध्यमिक शिक्षा के स्तर के साथ सहयोग कर रहा है।

गौरवल्लभ शुद्र कॉलेज ने सुधार के लिए सहयोग दिया है। अभी 2002-03 में भारत सरकार और बैंक के सहयोग सुधार कार्यक्रम शुरू किया था, जिसे तीन चरणों में पूरा किया जाना है। नंदशून्य कॉलेज के निर्देशक ने कहा कि पहले चरण में परियोजना का समय समय से बढ़ता रहे हैं।
इंजीनियरिंग शिक्षा में सुधार के लिए विशेष परियोजना

नई दिल्ली। देश में इंजीनियरिंग शिक्षा की गुणवत्ता को बेहतर बनाने के उद्देश्य से संस्थान ने निजी गैर सहायता प्राप्त कार्यक्रमों के लिए विशेष परियोजना सुरू करते ही योजना बनाई है। यह परियोजना भारत में विश्व बैंक के सहयोग से चलने वाले तकनीकी शिक्षा सुधार कार्यक्रम (टीईआईयूआईपी) के समानांतर होगा।

मानव संसाधन विकास मंत्रालय के एक अधिकारी ने कहा कि मंत्रालय ने गैर सहायता प्राप्त इंजीनियरिंग शिक्षा के लिए टीईआईयूआईपी के समानांतर एक अन्य परियोजना शुरू करने की योजना बनाई है ताकि इंजीनियरिंग शिक्षा की गुणवत्ता को बेहतर बनाया जा सके।

इस योजना के तहत 500 संस्थाओं को लिया जाएगा जिस पर 2,400 करोड़ रुपए की मांग का अनुमोदन है। इसके लिए भी विश्व बैंक की मदद प्राप्त होगी। भारत की साहा पर आए विश्व बैंक के अध्यक्ष यहां जोलिक ने इस विषय में पूछे जाने पर कहा कि विश्व बैंक भारत में तकनीकी शिक्षा और मान्यताप्रद शिक्षा के क्षेत्र सहयोग कर रहा है। इस बार भी वैकल्पिक शिक्षा के क्षेत्र में सहयोग पर बात की है। गौरवलय है कि देश में 3,241 इंजीनियरिंग कार्यक्रम हैं जिसमें 90 प्रतिशत निजी गैर सहायता प्राप्त करते हैं। 2002-03 में भारत सरकार और विश्व बैंक ने तकनीकी शिक्षा सुधार कार्यक्रम शुरू किया था जिसे तीन सालों में पूरा किया जाना है।

मंत्रालय की गैर सहायता प्राप्त इंजीनियरिंग कार्यक्रमों से संबंधित प्रस्तावित परियोजनाओं में प्रतिस्पर्धा के मूल्यांकन के लिए सबसे अधिक अनुमोदन का पता दिया गया है। इसके लिए 22 गैर सहायता प्राप्त संस्थाओं को अनुमोदन पत्र दिये गये हैं।

इसका मुख्य लक्ष्य विभिन्न हियरिंग इन्स्टिट्यूट्स के जल्दी स्थापना, शैक्षिक मापदंडों को पूरा करना, प्राप्तक्रम को गुणवत्ता और मूल्यांकन की उचित व्यवस्था का अभाव, दस शिक्षकों की कमी आदि के रूप में सामने आया है। अधिकारी ने कहा कि इसके निर्माण तकनीकी कार्यों को रूपांतरण के लिए परियोजना का विचार किया गया है।