Common entrance test
Relief to students, boost to learning

The decision to replace the All-India Engineering Entrance Examination (AIEEE) and the Joint Entrance Examination with a common test for all Centrally funded technical institutes such as IITs and NITs from 2013 will foremost bring the relief of not having to take two separate tests. Besides reducing the stress and expenses, it will also lead to a more uniform assessment. The Union HRD Minister has urged the states and private institutes too to adopt the test, as students, not sure of their performance in one examination, tend to take as many tests as they can or are eligible for. A few states, including Haryana, have already accepted the proposal. Those holding out should accept it too in the interest of students and quality.

More than the common examination, what has stirred debate is the criteria to decide merit. Now at least 40 per cent weightage will be given to Class 12 score, the rest being the score in a two-part entrance test. There were apprehensions over how the varying marking patterns of different school boards would be taken into account. That has been addressed by devising a mathematical formula that takes into account the peculiarities of each. The benefit of giving weightage to board results would be a more comprehensive assessment and boost to classroom education, which was suffering under the current system. The ‘coaching centre’ culture fuelled by entrance tests too would go down, giving a more level field to poor students.

Despite the obvious benefits, concerns remain. Certain states want the common examination to be conducted in languages other than English and Hindi too. The level of education in the schools of different states may affect Class 12 scores. Clarity would also be needed on the formats of the two parts of the new examination. Given the multiple issues, and the fact that careers of a large number of students are involved, the government must ensure every aspect is completely thought through in advance, and there is no element of experimentation.
Single national engineering entrance exam to replace multiple tests draws ire of IIT faculty

Jyotna Dhanagar
Ahmedabad, Feb 23

The decision to hold a single entrance test for all centrally-run engineering institutes from next year has stirred a hornet's nest, with three blue-chip IITs writing to the Union human resource ministry opposing the proposal. Faculties of IITs in Delhi, Mumbai and Kanpur have voiced their concerns, saying introducing the test without normalising marks across state boards in the initial stage could affect current Class 12 students and lead to a bunching of candidates at the top of the rank list.

The Indian Science Engineering Eligibility Test (ISET), which will eliminate multiple admission tests including the IIT-JEE, is expected to reduce stress on students. The three IITs that have protested, along with the IITs in Kharagpur and Guwahati, are counted as the best among India’s 15 IITs.

The institutes’ primary concern is the impact on the batch of Class 12 students who appear for IIT-JEE and other exams this year. At an emergency senate meeting last week, IIT Delhi faculty members expressed concern that introducing ISET from next year will “not be feasible and will be unfair to the current class 12 students”. This is largely because while two attempts are allowed for JEE, the current batch of Class 12 is unaware that in the new scheme of things, their board scores will carry 40% weight. “If they do not make it in 2012, then in 2013 their Class 12 marks will get counted but they were not aware of this when they appeared for Class 12,” states a note prepared by the faculty, a copy of which is with FE.

IITs are also miffed over providing weightage for Class 12 examinations without specifying a formula for normalising marks from India’s 42 secondary school boards. The JEE system so far has used Class 12 marks only as a cut-off. The institutes worry that a deadline has been set to implement the normalisation, without specifying how the process would take place. Normalisation has not been tried even in 15% of the boards and even data prepared by the Ramasami Commission evaluating the feasibility of the JEE revamped have data from only four school boards.

The institutes feel there should be at least one dry run of normalisation before implementing the formula. “It would be advisable to have a dry run. Any changed system should come after the consent of the IIT senate,” says Prof Gunjan Singhvi, president of the faculty forum of IIT-Delhi. Normalisation is seen as a Herculean task involving obtaining data from all boards representing a heterogeneous mix with different levels of complexity grading and scores, and that too by the first or second week of June.

The experience of BITS, Pilani indicates that such an exercise was turning topsided in favour of a couple of state boards and hence that institute shifted to an entrance exam. IITs have also apprehensive about the methodology and reporting malpractices in some state board exams.

*Continued on Page 2*
Taking the trauma out of tests

If the common national examination that has been agreed upon in principle for admission to engineering courses in 2013 lives up to its promise, it will eliminate two major problems: traumatic stress for students taking multiple examinations, and high costs. That would be no mean achievement, considering that the number of student appearances for different entrance examinations is of the order of 3.5 million annually. The most important feature of the new test is, arguably, its design, which uses comprehension, critical thinking and logical reasoning under the “main” section, and problem-solving ability in basic science in the “advanced” section. It emphasizes aptitude assessment, which is welcome. Students can thus avoid the folly of enrolling in a technical course where they may fare badly, and choose instead a more appropriate discipline. The modalities of the scheme will become clear in the months ahead, but its potential to create a robust framework for engineering admissions is immediately apparent. There are a few hold-out States that want more time before endorsing it, but they must strike a blow for transparency and adopt it for their own admissions on merits. In any case, the States are free to give as much weighting as they deem fit to results of their Board examinations, while laying down admission requirements. What the new test will provide is just a standardised aptitude score.

An admissions scheme that gives statistically valid weighting to State Board examination results, and also uses an aptitude score can solve one of the long-persisting problems in technical education. In a “Common Entrance Test only” system, subject-based secondary school examinations get low priority among students, as they play no role in admissions other than providing a basic qualification status. This phenomenon led to the scrapping of the CET in States such as Tamil Nadu. However, that has produced the opposite problem, of a thriving guidebook-based tuition industry exerting unhealthy pressure on the examination process. It produces high scorers, many of whom — ironically — struggle through college or fail. A testing procedure such as the one unveiled provides a good balance, and individual institutions can decide on the weighting they wish to give to the score components. That the IITs, NITs and the Indian Institutes of Science Education and Research among various Central educational institutions have agreed to go with the new procedure next year, giving 60 per cent weightage to the test and 40 per cent to State Board marks, speaks to the seriousness of the effort. The task of implementing a less expensive, academically sound and student-friendly eligibility test deserves the support of all States.
Hi-end project: Virtual labs reality now

NEW DELHI

Now, students can perform experiments in science and engineering using the World Wide Web, a computer, and an Internet connection, without actually having to go to the laboratories.

In the race for implementation and announcement of a series of educational reforms and plans by HRD Minister Kapil Sibal, yet another hi-end educational project of "virtual laboratories" was launched by him on Thursday. It is aimed at providing easy and quality access to graduate and undergraduate students at their finger tips.

Nearly 91 such virtual laboratories were launched in nine disciplines under the 'National Mission on Education through Information and Communication Technology' (NMEICT), in New Delhi on Thursday. These include Electronics and Communication, Biotechnical and Biomedical engineering amongst others.

Inaugurating the system, Sibal said virtual labs would allow students to practise and learn better the science and engineering behind the experiments that they are required to perform. It would also allow the sharing of costly equipments across the country. Even in the remote rural areas, students will be able to perform experiments that they would not otherwise be able to access, he added.

Nearly 300 heads of departments, faculties, and staffs from 152 institutions have been trained across the country, for the effective implementation of the project, sources said.

The project has developed two types of virtual labs - the Simulation Based and the Remote Triggered Virtual Labs. In the former, the experiments are modeled using mathematical equations. The simulations are carried out remotely at a high-end server, and the results are communicated to the student over the Internet.

In the case of the latter, the actual experiments are triggered remotely and the output of the experiment is communicated back to the student over the Internet.

Sibal observed that these labs will be particularly useful for engineering college students who do not have access to good lab-facilities or high-school students whose inquisitiveness will be triggered, possibly motivating them to take up higher-studies.
HRD Ministry Seeks Cabinet Nod for 50 L Aakash-2 Tablets

Datawind eligible to bid in Aakash tender

OUR BUREAU
NEW DELHI

The human resource development ministry will soon float a Cabinet note to get a sanction for procuring 50 lakh Aakash tablets, that will be distributed among college students by this year end, a project which may cost over ₹110 crore.

HRD minister Kapil Sibal showcased the Aakash-2 tablet on Thursday before the media, which comes with a faster processor and a capacitive touchscreen. The procurement price of the tablets would be capped at ₹2,276, the same at which government procured the Aakash version 1.0 tablets.

"We are planning to float a tender for Aakash-2 tablets in the next two months. The tender will be for about 50 lakh tablets. The tender will be handled by C-DoT and ITI," said Sibal addressing the media.

"Existing vendor Datawind will have to supply the rest of the 1,00,000 tablets in its present contract. It can also bid for the next tender," he added.

According to sources, a Cabinet note is being prepared to get the money sanctioned from the Finance ministry, as the ₹4,000-crore five-year fund of National Mission for Education expires this fiscal.

"We will grant the contract to more vendors this time, as a capacity of 50 lakh can't be met by a single vendor. But price will be capped at a maximum of ₹2,276 per unit. Eventually we want to distribute 220 crore tablets," NK Sinha, Additional Secretary at HRD ministry said.

Only about 500 tablets have been distributed so far, Sinha added. "There were problems with battery life. So, we have improved upon the specifications in new version," he added.

The government is aiming at distributing 50 lakh tablets by this year end. "Since there is limited supply, we are encouraging colleges to distribute them as books issued via libraries," Sinha added.

Datawind, the firm supplying Aakash-1 tablets, issued a statement saying it has been vindicated from speculation that it would not be allowed in Aakash-2 project.

The minister also unveiled the HRD ministry's ambitious project of Virtual Labs, which aims to provide simulated lectures and study material from IITs on technical subjects online. The website Vlabs.co.in will also provide online simulation of complex lab experiments. Students can book a slot on Vlabs online, to conduct simulated experiments which require high computing power.
The Aakash is falling!

Lessons in fixing the wrong problem:
An open letter to Kapil Sibal

PRASANTO K ROY

Dear Mr Sibal,

I am so relieved to read in the media that Aakash 2 will cost the same as the older one. Even though I (and others who tried) could not buy a single Aakash unit for love or money, the price is nevertheless important. Just as it was for the Tata Nano, the 1 lakh car that isn’t selling at any price.

Perhaps “cheapest” isn’t quite good enough for a technology product to work in the market? But I get ahead of myself here.

I am sorry that your honeymoon with manufacturers DataWind is over. Not unexpectedly, may I add. So, the Aakash 2 will be developed and made by C-DAC and ITI. Even if those venerable organisations do not have the design experience or capacity to make mass-market consumer computing products—but that is another story.

Is it possible, Mr Sibal, that, as with your valiant battle against the evil Facebook and Google, you’re again tackling the wrong problem?

May I suggest that the problem with the Aakash wasn’t the manufacturer at all? The product itself (and perhaps the category, too) was the wrong horse to back. For it is, at multiple levels, an anachronism.

Your noble objective of “a fully made in-India” product is itself an anachronism. Nobby doesn’t win a technology product race. Not in India, the US, China, or anywhere else. You cannot build the best or most competitive products and services by artificially limiting the design pool or supply chain to national boundaries. Technology products and services today draw on a global supply chain. Get used to it, sir.

There is strategic value to a made-in-India space programme (even if it draws heavily on globally available know-how and technology, as it should) or supercomputer (ditto), Not so for a commodity mass-market tech product category.

By the way, the Aakash is an Indian-made single-malt Scotch. The one I opened featured off-the-shelf parts: Conexant system-on-chip with ARM processor, Hynix memory, standard display and touch overlay, cheap battery. But I digress.

Second, the Aakash is too limited in scope and features for its objective. Kids in government schools will have trouble using it: not least of all due to its two-hour battery life and the fact that our government schools don’t have desktop sockets (heck, most don’t even have desks). Improving battery life to six or eight hours is a non-trivial task that would take longer than the generational life cycle of such a product.

Third, where are the applications? Both Apple and Google created an ecosystem of apps along with their tablets and platform launches. You could have leveraged some of that, but your designers chose to limit the device to a phone platform, Android 2.2 Froyo, and cut off access to Android Marketplace (GetJar as a replacement doesn’t cut the mustard). Yes, one could go browse Khan Academy videos on YouTube, but I somehow don’t see basic school teachers going that far out of the box.

Fourth, it isn’t easy to build to a rock bottom price simply through sourcing and discount shopping. That shows up in the product. The Tata Nano required years of serious R&D, innovation, invention, and patents, if they didn’t want to sell a car whose fenders would fall off.

The Aakash hasn’t been through that rigour of development and testing. The touch overlay popped out, the battery is barely held into place inside, and I couldn’t put the screws back in because the threads slipped. Will it survive rough usage by kids at primary school who are not used to handling technology? I think not.

I don’t suggest that the Aakash is a write-off. Judging by the response and interest, there is a market for a sub-$99 tablet even with limited capabilities. Perhaps as a second or third device around the house, or a kid’s learning device at home if you don’t want her banging away on your iPad—given the apps. Or even as a special-purpose data capture device on the field, if battery life and ruggedness can be taken care of.

But it does not fit the bill for a device that will transform primary education in India. Frankly even I (a die hard advocate of gadgets for all) cannot suggest a device that will transform primary education, without fundamental changes in teacher training, pay and infrastructure. But if I had to put my bets on technology, I would pick for smarter classroom technology, and greater access to connected PCs. If forced to pick a product for the child to own, I’d vote for the e-book reader, which, at Rs 15,000 or so, is ragged, has a great battery life and, most of all, has ready content—every book published can be easily “ported” as a soft copy to an e-book reader.

And then there’s the question of what a government’s business should be. Designing and manufacturing products competing with Apple and Google? No, sir. I know our neighbour’s country’s military is making cheap iPad clones, but you will agree that Pakistan is no role model for India. Instead, your government could help fund, guide through policy and provide a market.

The Simputer flopped. If you pour enough money into Aakash, you can make sure that a few million units will sell—and lie around as paperweights, fading into obscurity, until a few years later when another government questions the loss of a few hundred crores to the exchequer.

Therefore, Mr Sibal, I hope you will see sense and lay off the Aakash, whatever version, and get your government back to governing.

Sincerely,
A concerned citizen and technophile

The author is chief editor at CyberMedia and can be found on twitter.com/prasanto and ph.in. Views are personal.
Skyfall
Aakash is a great idea. But the differences between its maker and its procurer are not helping, by SUNNY SEN

However, serious differences have emerged between Datalwind and the Indian Institute of Technology, Roorkee (IIT-Roorkee), over the tablet’s specifications. IIT-Roorkee was mandated by the bid document to set the criteria for end-handling procurement of the tablet.

Datalwind claims that it complied with the criteria specified in the July 2010 tender. On October 23, 2011, Ashish Chaudhary, JITender Saqal and Ved Prakash, along with the Regional Electronic Test Laboratory at Delhi, clarified the device officially.

The device is marketed under the aegis of the Ministry of Communication and Information Technology. They did so after testing it across 15 parameters, including temperature, functionality and drop tests.

The tablet runs on the Android 2.2 Froyo operating system, which is standard. It has a 256 MB of RAM, a 4.7-inch touchscreen and a battery life of four hours. It is a hardworking device, opening the Google browser, for instance, may take a while. Using multiple windows to browse is out of the question.

On January 12, a letter from the HRD ministry, Pastukh Mohandas, President of the Indian Cellular Association (ICA), highlighted the device’s shortcomings. “The use of less than 1/1.2 GHz processor in computing and tablets devices is not required,” he states. “Anything which is being launched in 2012 is primarily on Android 3.0 or 4.0 and necessarily owns a 1/1.2 GHz processor, which is essential to have a good browsing experience.” The move to an Android version that runs smoothly.

Datalwind now says it is a beginner’s device meant to provide children with an internet access. How interested a child will be in a low-speed device is anybody’s guess.

But the truth may not lie with the makers. Clearly someone messed up while drawing up the specifications. “The specs are extremely poor,” says Rajeev Kaul, founder and CEO of Dell India, which also sells tablets in India.

That for Datalwind has already delivered 10,000 units to various institutions. In all, it claims to have received 3.4 million orders (including commercial orders) for Aakash and an upgraded version of the device, shipped by the respective institutions from every quarter, including IT students who were-tested Aakash. IIT-Roorkee went the opposite extreme. It ran and the criteria demanding that the device be shock-proof, water-proof and must United from military specifications, including crash tests in vehicles.

Datalwind has cried foul, stating that it has adhered to the tender’s requirements. “If it will be impossible to make a tablet with those IT specifications at that price, then IIT-Roorkee’s standards were too high and not the specifications while writing the tender,” says Datalwind CEO Sunil Singh. Thakur says such an idea makes little sense. However, BT made several attempts to contact Professor Pranav Kataria to get IIT Roorkees’s response, without success. On February 2, media reports suggested that the
Private sector needed in higher education

C. Jayanthi

The infrastructure crunch for higher education in India has resulted in a paradigm shift. Private sector participation, once viewed with suspicion, is now a given in that sector.

As a recent news report shows, it has also led to fly-by-night “one-room universities” in no less a place than the Capital of the country.

In most developed nations including the US, over 50 percent of the population goes into higher education. For decades, India has seen a dismal figure of 10 percent of her population going into higher education, until recently. This scenario appears to have changed for the better.

ENROLMENT RATIO

The Gross Enrolment Ratio (GER) for the country for higher education currently stands at about 11.8 per cent, with western India, comprising the States of Maharashtra and Goa combined, having the highest GER of 21.3 per cent, according to the latest report on the sector brought out jointly by the Federation of Indian Chambers of Commerce and Industry, and the leading global accountancy firm, Ernst & Young.

The state of Maharashtra alone has a GER of 26 per cent, which is the highest in the country. This kind of imbalance can be corrected with higher participation of private institutions in the field of higher education. The states or central government can only increase the infrastructure for higher education to a limited extent, given that 65 percent of the country’s population is below the age of 26 years.

It is to be noted that India has over 31,000 institutions of higher learning, among the highest in the world. Central universities comprise 7 per cent of the total, state universities 46 per cent and state private universities comprise 16 per cent; deemed universities, 21 per cent; Institutes of National Importance, about 9 per cent of the total.

Overall, the number of institutions in the country has grown at the rate of 11 per cent. Rapid growth of institutions, mostly private, has allowed students in dire need of qualifications to pay the requisite sum of money and attempt to acquire them.

ELITE INSTITUTIONS

Most private institutions do not receive aid from the government, whereas 52 per cent of the grants of the University Grants Commission (UGC) go to central universities, catering to less than one lakh students.

The top educational institutions in the country, such as the Indian Institutes of Technology, the Indian Institutes of Management, among others, cater to 1 per cent of the population, making them highly elitist, whereas in several countries in Europe such as France and Germany, the elite institutions in various fields cater to 10 per cent of their much smaller populations.

Earlier, private sector participation in higher education has been in highly specialised areas such as engineering, management and medicine. However, the government’s inability to invest heavily in higher education to take care of growing needs has left the field wide open to the participation of private players in this arena.

In the future, we are likely to see a significant rise in the number of private universities in India, as universities, under one umbrella, can provide general undergraduate courses, as also specialised courses such as engineering, management, journalism, law, and art and design, among others.

SIMPLIFY RULES

To encourage greater private sector participation in higher education, the government must simplify the regulatory framework, while focusing on quality.

In India, a university must have a minimum of 22 acres of land, pushing private players to buy land in remote areas, whereas in countries such as Australia and New Zealand, smaller private universities are just a set of buildings.

They can operate close to the city centre, and develop links with industry and commerce.

In India, significantly, once the infrastructure is complete, the UGC usually conducts a field visit to check if proper procedures are followed. This can take more than a year.

This results in some confusion, as the regular teaching schedule may be on, and if the UGC so decides, it can withdraw approval, which would tantamount to playing with students’ lives and careers.

This has happened in the past, during 2004-05, when universities that were located in the main, outside Chhattisgarh region, even as far as Delhi, got themselves affiliated to Chhattisgarh University, and started dishing out degrees.

Once this kind of affiliation was declared null and void by a Chhattisgarh High Court ruling, the degrees that were issued were not worth the paper they were printed on, and students lost out on their career through no fault of their own.

No private university should be allowed to offer courses until all the regulations are complied with from day one, so that students do not end up suffering. The one-room universities allegedly found in old Delhi would be a thing of the past if rules and norms are strictly adhered to.

Notably, India’s youth population of 18-24 years is expected to increase by 13 per cent between 2005 and 2020, against the global average of 4 per cent.

Institutions, private or otherwise, would have to keep up with the growing population, so that students do not lose out on higher learning due to lack of infrastructure.

(The author is Assistant Professor, Apeejay Stya University, Haryana)
Now, outsource research work to scientists of top universities

Xerox India Research comes out with 'Open Innovation' model

T.E Raja Simhan
Chennai, Feb 23
A company that employs a number of researchers to work on a complex problem can invalidate its scientists and researchers from top Indian academic institutions to find a solution. The Xerox India Research, the youngest global research lab of the $22 billion-leading company, is doing it.

Through a concept called Open Innovation, Xerox India Research has brought together top-notch scientists, along with the company's researchers and engineers, to work on complex projects that Xerox wants to implement.

And the partnership is not restricted to the India centre, but researchers from global Xerox Research labs have access to the "best of the Indian brains" in this global hub, Ms Meera Sampath, Director of Xerox Research Centre India, recently told Business Line.

Open Innovation is today the core of Xerox India research. The centre has eight partnerships with top academic institutions, including IIT-Madras, IIT-Bombay, IIT-Kharagpur, Indian Institute of Science, IIT-Mandi and Srishti Labs.

Research partnerships cover a broad range of topics such as cloud computing, services marketplace design, multi-lingual technology development, personalisation information delivery, video-based patient monitoring and rural technology initiatives, she said.

Even before Xerox started its research centre in India in 2010, the company decided that this lab would be built on a model of 'open innovation' and started working with local universities. Xerox has such a model in the US and Europe but in India this will be the fundamental to how we operate," she said.

Ms Sampath said the India centre acts as a traditional research lab with its own researchers collaborating with colleagues in other global labs. In addition, the lab is a central hub to connect people from the Europe, US, with institutes like IIT-Madras, IIT-Kharagpur and the School of Design.

"One of the goals internally is that every researcher hired in India will not only work on their core research work, but also with one or two open innovation projects. For us, it is not the size of the people we have inside the lab, but it is the strength and size of this whole ecosystem that we are building. Every university gives an opportunity for us to work with one or two professors and three or four students," she said.

It is not just more people working for you, but also tapping in to a skill that "we may not develop as a core competency in-house". Within the company we have researchers working on cloud computing but for things like user design it makes sense to tap experts outside and leverage their expertise.

For the students too, this helps as they are working on projects that are inspired by the business needs," she said.

The writer is Founder and CEO, Oceanic Consultants

Education abroad is no more the domain of the rich in India, with middle class students expanding the breadth of their abilities by adding academic knowledge, says naresh gulati.

Education abroad is no more the domain of the rich in India, with middle class students expanding the breadth of their abilities by adding academic knowledge, says Naresh Gulati.

IN this era of globalisation, the limitations of countries are diminishing and organisations are hiring professionals beyond geographical boundaries. In such a system, every country is important for students to find the right combination of education, innovation and entrepreneurship. This, in fact, is imperative for every child going that is the ideal path to a nation's future.

India, however, still lacks quality education that is of a high standard. According to the survey, the country does not have one university that is in the global top 50, despite having the third-largest higher education system in the world. The demand for higher education in India is far more than the number of institutions imparting the quality education students have no choice but to look for other avenues — boarding overseas courses to be the top choice. Students tend to go through a transformation while studying overseas, they become self-dependent, confident and ready to face the world. Studies overseas also helps students to build links internationally and become global citizens.

From time immemorial, the thirst for global exposure has resulted in an outflow of Indian students to foreign lands. Commentators such as Rajan Krishnaswamy, Jawaharlal Nehru and Mahatma Gandhi studied in foreign universities. Most Indian business houses located in Forbes 500 on year have also studied abroad. Global education has helped students to broaden their horizons and equipped them in tackling problems of globalised business. Ranjan Ray pursued his advanced management programmes at the Harvard Business School in 1975. Mukesh Ambani undertook his MBA degree from Harvard University, USA. Rahul Bajaj went to the US to do his MBA from Harvard Business School in 1991. And Ambani did his MBA in India, as an in-service, Harvard University. Anand Mahindra graduated from Harvard College, Cambridge, Massachusetts, and completed his MBA from Harvard Business School, Boston. Ashutosh Nandy did his bachelor's and master's degrees in management from the Massachusetts Institute of Technology before joining the family business, and the list goes on.

Over the past two decades, Indian students mobility to universities abroad has become an integral part of the country's higher education landscape. In spite of the global economic recession, the number of students going abroad for studies is increasing worldwide. Education apart, a majority of the students are either required to have work permits or have to go through a job abroad, which has been discovered in a recent survey conducted by a global recruitment firm.

Overseas education is no more the domain of the rich in India, even middle-class students have been expanding the breadth of their abilities by acquiring overseas academic knowledge. Indian parents also do not measure education in terms of cost, which explains why students from this country form the largest contingent of international students in foreign universities.

With numerous choices available today, new trends are emerging in this field which has totally altered the traditional perceptions about overseas education in India. There is a paradigm shift in the choice of courses that were limited to MBA, medical or engineering. Students are keen to explore more specialised courses that are not available or are of a high standard in India, such as in science, hunting and finance, fashion design, architecture, film, health, nursing, hospitality, etc.

The awareness level has increased and Indian students are progressively seeing a new world of opportunities. Until 2010, the US, UK and Australia were the most preferred destinations for study abroad. But now Canada and New Zealand have also entered the list. International students reflect this career option, provide long-term education, progressive immigration policies, a multicultural environment, a better lifestyle and health employment opportunities, they are likely to become popular in the coming few years. Although the trend of studying abroad has become highly popular and holds immovable benefits, there are a lot of complications involved in the whole process. Of late, there have been instances of cases of visa rejection by students in various countries such as Australia and the UK, portraying the future of thousands of students. Thousands of applications from India also got rejected by the UK and Australia because of document fraud. Some students even faced a likely to illegal human trafficking. The Malta flag tragedy was a similar unfortunate case — 300 youths, including 170 from Punjab, lost their lives in the Malta Sally Channel, near Malta international waters, after their boat capsized with a ship during an illegal migration.

There is, therefore, before considering in a foreign institution, is essential for students to find out as much as they can about the accreditation and the institutions it accredits, as well as the recognition process of the foreign education reputation. They should strictly review source of fraudulent documents as a given reason behinds their dreams of studying abroad. They should also be wary of false consultants who suggest admissions in non-creditable colleges, thereby jeopardising the future of students.

International education is a valuable industry fortifying a noble cause and should not be hindered by the illegal and unethical behaviour of desperate resellers.
UGC decides to start fourth stream

Plans To Give Degree Tag To Vocational Edu

Hemali Chhapia | TNN

Mumbai: From the forthcoming academic season, colleges across the country will offer a bachelor's degree in vocational education, thus underpinning a stream that has always languished for the want of a formal degree.

Sensing the gap in the system, the move to offer the BVoc is largely in response to the hungry local manufacturing industry's requirement for top-grade workforce, and partly because several graduates from the existing traditional streams are jobless and deemed unemployable.

"Our standing committee has cleared the proposal to offer the bachelor's in vocational education and once the commission clears it, any college in India which is affiliated to a university can offer this programme," Ved Prakash, UGC's chairman in charge, said. "We need to prepare a large workforce and it is time we build capacity at the graduate level."

So far, vocational education has often been derided for attracting mostly students with poor marks. But now, industry has thrown its weight behind the UGC to change that perception and lend this course the much-needed academic might and respect.

Times View

Adding a vocational stream in existing colleges is an excellent idea. We have always held that one of the problems with our education system is that it is out of tune with the needs of a fast-changing economic environment and hence often appears meaningless. Stressing vocationalization is an obvious way of dealing with this problem. However, there are cultural issues too. Historically, Indians have tended to look down upon vocational training as somehow being below a general degree in the arts or sciences. Adding a vocational stream within general colleges rather than just setting up more vocational institutes should somewhat help in dispelling such notions.

The move was initiated by the All India Council for Technical Education, which has identified 10 sectors like entertainment, telecom, etc. that need specialized graduates. "These courses will provide vocational skills and general education, thus providing vocational graduates with multiple pathways," said AICTE chairman SS Mantha.
ISRO sets ball rolling for Indian ‘GPS’/navigation system

Our Bureau
Bangalore, Feb. 23

The first of India’s own little regional positioning satellites to better the US military-owned GPS may be put up in sky this year.

The seven-satellite constellation, called the Indian Regional Navigational Satellite System, when fully in place over the coming years, will be far more accurate than the GPS that the world depends on. It would be available to users in the sub-continent all the time come rain or shine, according to ISRO.

The space agency along with its other government partners on Wednesday briefed 250 current and potential users, planners, industry and scientists on the uses of navigational systems. The Airports Authority of India co-sponsored the first Global Navigation Satellite System (GNSS) meet. ISRO’s Director, Publicity and PR, Mr S.Satish, said GPS signals and position data received in the country are often wide of the mark. “When we have our own IRNSS, it will be equal to, if not better than, the GPS.”

An ISRO release said, “The regional navigational satellite system over the Indian region will provide position accuracy that is better than 20 metres on a 24/7 all-weather basis.”

250 USERS AT MEET

It said, “The user meet aims to link industry, users and service providers enabling them to share information to promote navigation and positioning satellite systems for transportation, disaster management, environment and agriculture.

“The meet provides industry an exposure to the infinite possibilities of using navigation signals and its spin-offs.”

Dr T.K.Alex, Member, Space Commission, and Director, ISRO Satellite Centre, inaugurated a technical meet on sat-nav opportunities and an exhibition of related products by Indian industry. Mr E.K.Bharat Bhushan, Director-General of Civil Aviation, and Mr S.K.Shiva Kumar, Associate Director, ISAC, were present.

Mr A.S.Ganeshan, Project Director, Navigation Systems, ISAC, presented the ISRO-AAI GAGAN project and the IRNSS. The users were told about the use of navigational signals for accurate positioning - as in civil aviation, transportation and other services.

GAGAN is a joint project of ISRO and AAI to augment or fine-tune the not-too-accurate GPS data obtained from the US. It will mainly benefit airlines over the country’s airspace. GSAT-8, the first satellite carrying GAGAN payload or antenna, has been beaming signals since December 15, 2011.

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Bad cable may be to blame in flawed faster-than-light experiment

By Gautam Naik

A malfunctioning cable may have been responsible for the claim that some particles may be able to travel faster than light speed, a potentially embarrassing outcome for physicists who had publicized the findings with great fanfare just a few months ago.

In September, scientists at the European Organization for Nuclear Research, or CERN, said that ghostlike particles called neutrinos zipped from a lab in Geneva to one in Italy had seemingly made the trip in about 60 nanoseconds less than light speed—a finding that garnered headlines around the world. It also induced much head-shaking among skeptical scientists who said they were convinced that the result was an error.

It turns out the only ghost may have been in the machine after all. CERN says it had identified two possible effects that could have affected the experiment: one relates to an oscillator used to provide time stamps for estimating particle speeds, and a possible glitch in a fiber-optic cable.

"If this is the case, it could have led to an underestimate of the time of flight of the neutrinos," CERN said in a one-paragraph "update" posted on its website. It plans new measurements in May.

Neutrinos are particles with almost no mass and no charge, and they can pass through ordinary matter unaffected. At any given moment, billions harmlessly stream through a person's body.

In the experiment known as the Oscillation Project with Emulsion-Tracking Apparatus, neutrinos were measured as traveling slightly faster than light on a 450-mile trip from CERN near Geneva to the Gran Sasso underground lab in central Italy. That result was based on more than 15,000 neutrino events measured.

Einstein's theory of relativity incorporates his crucial idea that the speed of light—about 186,000 miles a second—is a barrier that realistically can't be breached. In the famous equation E=mc^2 that equates mass with the energy contained within it, for example, the "c" represents the speed of light.

If particles go faster than light, things become weird. For example, it suggests that particles can theoretically travel backward in time. Not only is such an outcome contrary to nature's laws as currently understood, it would require a drastic rewriting of modern particle physics.

The light-speed notion is partly the basis for Einstein's theory of gravity, which, in turn, is the starting point for existing theories about how the universe evolved.

The speed of light calculation has also been incorporated into billions of measurements done at particle accelerators in the quest to understand how the basic constituents of matter behave. If some particles can zoom around faster than light, most of those calculations would have to be redone.

After the September announcement, some scientists were skeptical because of earlier measurements that showed neutrinos reaching the Earth from a supernova explosion and traveling at exactly the speed of light—which contradicted the CERN finding. Others had wondered whether the setup of the experiment or statistical errors could have affected the conclusion.

—wsj@livemint.com
Loose cable snaps ‘faster than light’ finding

Einstein May Not Be Wrong As CERN Suspects Flaw In GPS System Behind Startling Result

Geneva/Chicago: The world of science was upended last year when an experiment appeared to show one of Einstein’s fundamental theories was wrong.

But now the lab behind it says the result could have been caused by a loose cable.

Physicists at the CERN research institute near Geneva appeared to contradict Albert Einstein’s 1905 special theory of relativity last year when they reported that sub-atomic particles called neutrinos could travel fractions of a second faster than light.

Einstein’s theory—which underpins the current view of how the universe works—says nothing can travel faster than light, and doing so would be like traveling back in time.

James Gillies, a spokesman for the European Organisation for Nuclear Research, or CERN, said on Wednesday that the lab’s startling result was now in doubt.

On Wednesday, ScienceInsider, a website run by the American Association for the Advancement of Science, had reported that the result was down to a loose fibre optic cable linking a Global Positioning System satellite receiver to a computer.

Gillies confirmed that a flaw in the GPS system was now suspected as a possible cause for the reading. Further testing was needed before any definite conclusions could be reached, he added.

The faster-than-light finding was recorded when 15,000 neutrino beams were pumped over three years from CERN to an underground Italian laboratory at Gran Sasso near Rome. “A possible explanation has been found. But we won’t know until we have tested it out with a new beam to Gran Sasso,” Gillies told Reuters.

Physicists on the experiment, called OPERA, said that when they reported it last September that they had checked and rechecked over many months anything that could have produced a misreading before announcing what they had found.

A second test whose results were announced in November appeared to provide further evidence that neutrinos were travelling faster than light. But many experts remained sceptical of a result that would have overturned one of the fundamental principles of modern physics.

Edward Blucher, chairman of the department of physics at the University of Chicago, said the original finding would have been breathtaking if it had been true. “Maybe they should have waited a few more months,” he added.

Gillies said CERN would be issuing a full statement early on Thursday. Reuters
IT companies look beyond engineering graduates

- Only 20% of 900,000 engineering graduates joining the sector every year; automotive & manufacturing big draw

Diksha Dutta & Kirtika Suneja

New Delhi, Feb 23: An engineering degree is considered by many as the ticket to employment in the $50 billion information technology-enabled services (ITeS) industry. But the reality is a bit different. With the ITeS industry looking for niche talent in testing and infrastructure management, which do not necessarily require engineering graduates, only 20% of the 900,000-odd engineering graduates every year are being recruited by the industry.

The fresh graduates are also being attracted by the manufacturing and automotive sectors.

"It is a misconception that the IT industry employs most of the engineers that graduate each year. A significant number go to sectors like manufacturing and automotive as well. It would be safe to say that close to 20% of the engineering graduates are absorbed by the industry. And 75-90% of the talent in the IT industry would have an engineering degree," said Nasscom president Som Mittal.

While 20% of the talent in the country comprises engineering graduates, 46% are non-engineering graduates and the rest are specialists like chartered accountants, CPAs, doctors, lawyers, PhDs and actuaries, who are in high demand from the IT industry. The trend, according to both Nasscom and technology schools, is moving towards such niche talents as the industry is now offering complex and end-to-end services.

IIT Madras was approached by 175 IT companies in 2011, whereas this year the number reduced to 138. Commenting on the number of engineers joining IT companies, an official from IIT

Kharagpur said: “This year five students from our computer science branch were placed in IT companies, against 26 in other non-IT sectors. Around 15-20% of engineering students are being placed in the IT sector in the last few years.”

Analysts feel that the recent profiles that are novel in the IT industry necessarily do not need engineers and thus the matrix is changing. Today, the industry directly employs 2.77 million professionals of whom safely 60% are hardcore engineering graduates.

“Earlier IT companies hired close to 100% of their staff as engineers, now it has reached 90% and soon it will be 70% in the next two to five years. The BPO sector is emerging and there are new processes like testing and infrastructure management which necessarily do not need engineers,” said Zensar Technologies CEO Ganesh Natarajan. He added that most of these engineers, roughly around 4,45,000 from the 9 lakh, are not employable by the IT industry as well. Moreover, 20% of the engineering graduates also go for higher education every year. Thus, the ITeS sector has to choose from the residual.

“Many graduates from other disciplines (eg mathematics and computing) also opted for IT profile offered by various organisations,” said a student from IIT Guwahati where 37% of the placed students joined the IT sector, including organisations like Facebook, Google, Microsoft, Adobe and Infibeam.

“Though the employability rate in the IT industry was 25% as per our study in 2006, we believe that the situation is better now because of initiatives by tech companies who have started their own certification programmes,” said Nasscom senior vice-president Sangeeta Gupta.

An official from IIT Kharagpur said: “Chunk of the students prefer consultancy and core jobs over IT jobs. IT sector is mostly confined to students from the IT department and few others from other departments.” The demand for consultancy jobs is very high.

From the past few years, the trends show that students tend to drift away from IT jobs. Those who are interested in further studies, work in core sector for a few years and those interested in pursuing an MBA, go for the consultancy jobs, the official said.
Offbeat Courses at Top B-Schools

OUT OF THE BOX: Students get an opportunity to stretch their learning muscles, with innovative programmes and live interactions that help them understand the “real” world better and function in challenging times. Among these are programmes teaching leadership through sports, and imparting entrepreneurship skills to rural people.

Indian Institute of Management Bangalore

Programme: Learnings from Sports
Duration: Two Days
Start date: March 2012

Class Strength
150 participants

Genesis
The programme took shape when two IM-B alumni, who work for cricket and tennis-based sports companies, TSMC, suggested using sports to hone leadership skills as one of their executive management programmes. This had been done in the US before, but never in India. Participants will be guided on leadership, how to manage multiple layers, deal with being the “outfield” of a team or even “just an executive,” and coping with new growth opportunities.

Rajiv Gandhi Indian Institute of Management, Shillong

Programme: Executive post graduate programme in international business
Duration: 12 months
Start date: April 2011

Objective
To equip students with the current market requirements and dynamic corporate environment effectively.

Job Opportunities
Strategic: roles and senior positions in companies operating in emerging markets with a focus on India and China.

Content
The programme focuses on leadership skills essential for senior management positions. The curriculum is adapted from best practices from Asian universities. It is a blend of lecture management courses and specialised modules. Another aspect is the training under Myopic Management and Mind Mapping through outdoor learning camps.

Projected Class Strength
45

Targets
Professionals with at least three years’ work experience, preferably internationally. IMB has entered into an MoU with Ocean University of China to start this programme, which involves a six-month stay and internship in China.

Compensation
Annual salary could range between $36,000 and $1,20,000.

Xavier Institute of Management, Bhubaneswar

Programme: Three Continent Master of Global Management
Duration: 12 months
Start date: September 2011

Content
The Euroscoop programme, a result of a partnership between IM-B, Bhubaneswar, and the University of Brussels, has been designed to draw upon the strengths of each country. For India, it is about the pyramids and social entrepreneurship for New York, it is finance and innovation and for China, it is marketing in a multicultural society.

Objective
CREATE global managers in the true sense of the term.

Job Opportunities
IM of other centres, and almost all the roles are in global management.

Compensation
Slightly higher than the first batch is yet to be paid. But in India, it is likely to start at Rs 12 lakh onwards, and will be more in the other countries.

Genesis
This role was born when the heads of three institutes met. They felt real global managers are born when students immerse themselves in the local culture and business, and inside the experience of three continents.

Indian Institute of Management, Calcutta

Programme: PG Programme for Executives on Visionary Leadership for Manufacturing
Duration: 1 Year
Start date: August 27, 2007

Objectives
Provide skill-based training to transform mid-level managers in the Indian manufacturing industry into visionary leaders.

Content
53 weeks, classroom interaction, case studies, tutorial, laboratory sessions, project work at IM-C, IIT-M and IIT-K. The National Manufacturing Competitiveness Council plays a catalytic role, with support from the Japanese International Cooperation Agency.

Job Opportunities
Students of the first batch have been placed in leading Indian companies.
B-school hiring dips as economy holds up

By Anuradha Shukla in New Delhi

WITH the economic slowdown beginning to bite, campus hiring by corporates has gone down considerably, hiring placements and the salary packages at India’s business schools.

“We never doubt 100 per cent placement but this year the scene is not too encouraging. We do not have salary offers that make headlines this year,” a member of placement at IIM-Ahmedabad said on condition of anonymity as the placement is still on.

“The average pay package has seen no improvement this year and there are fewer global financial companies participating. However, the placement is still on and may be more exciting offers come up,” the member added.

“While overall hiring sentiment remains optimistic, the global uncertainty has certainly affected the placement at B-schools. This year the number of offers are fewer and there is no hike seen in the average pay packages," Sandeep Chaudhary, practice leader (compensation consulting) at Aon Hewitt, said.

“Apart from the IIMs, it will be difficult for the business schools to get 100 per cent placement,” Chaudhary said. Even at IIMs the number of offers has gone down, he added.

The Boston Consulting Group made the highest number of offers by recruiting 17 freshers. This year the number of offers from the financial and telecom sectors has gone down. Even students of finance & HR face tough times

when offers are there the pay packets offered are either not very encouraging or they are 15-20 per cent lesser than last year.

However, while fast-moving companies such as FMCG firms remain most preferred with students, e-commerce companies have emerged as favourites with good packages and exciting job profiles to students.

“The number of offers from the financial sector has seen a drop. But we have other sectors like consultancy, IT and e-commerce, which are coming up with good offers,” Surbhi Bhattia, member of the placement committee at IIM-Kozhikode, said.

Students of finance & HR face tough times

Queued up: Global uncertainties are hurting the prospects of B-school graduates and the institutions feel that 100% placements may not be achieved this year.

Lean days

- Average pay package has not improved & fewer global financial firms participating

- B-schools other than IIMs may not see 100% placement

- Six new IIMs are also at some disadvantage as companies prefer the older IIMs

- Number of offers from financial and telecom sectors have gone down

- E-commerce firms offering good packages and exciting job profiles emerge as favourites

Companies like Redbus, LetsBuy, Visa, Valyoo Technologies, Snapdeal, Flipkart and Paytm are all first-timers at IIM campus placements and have picked up students at salaries ranging between Rs 1 lakh to Rs 16 lakh.

"E-commerce is the next emerging field. It offers students a chance to be creative as it is a growing field. With a good salary package we find the offer more attractive than other sectors," a student from IIM-Lucknow said.

While IIM-Ahmedabad, IIM-Calcutta, IIM-Bangalore and IIM-Lucknow already have many offers in hand, the new IIMs are facing problems.

This year there are six new IIMs — Ranchi (Jharkhand), Rohtak (Haryana), Raipur (Chhattisgarh), Thiruchirapalli (Tamil Nadu), Kashipur (Uttarakhand) and Udaipur (Rajasthan) — taking the total number of IIMs to 13.

The new IIMs say they have some disadvantage as companies prefer the older IIMs, due to alumni support and only after that they come to the new campuses. Besides, they do not have a database of companies and some of them are hiring outside placement agencies.

The scenario at the general B-schools is even more difficult. Even when companies are coming to the campus, they are offering lower packages than last year and students are not happy with their job profiles as well.

"Most of the offers that are coming are of hard core sales job. Those who were in HR management and disciplines, such as finance are finding it very difficult. We are just keeping our fingers crossed," said a student with IIPM.
आखिर सिब्बल का शिक्षा एजुकेशन क्या?
शिक्षा: जब एनसीईआरटी है तो इसके काम में सीओबीईसी की घुसपेट आखिर क्या?

नेटस राजपुत

इस्तेमाल मानव संसाधन विकास मंत्री कार्टिल सिब्बल ने सबके पाठ्य के लिए बदला हो सारे चीज़ें कहीं हैं उनके सुधार को 'अधिकारीयी विकास' स्थायी नहीं देखा जा रहा है। इससे संबंधित कई नयी चीजों में स्थापना के लिए है राजस्थान के लिए कार्यान्वयन और सारांश के लिए कार्यान्वयन और सारांश के लिए है।

मई 2019 के माध्यम से संसाधन विकास प्राथमिकता में होगा तीन वर्षों की पहल है जब सुधार नयी चीजों में यह दिन नहीं होगा कि लेखिकों के समक्ष सब म्यूज़ियम के लिए सरकार को स्थान दिन से संबंधित करता है। इस लेखा का बारहवें साल रहता है जो राजस्थान के लाभार्थी अपने अधिकारीयी विकास की पहल पे कर्तव्य से देखा है। इस में शामिल है और उपमंत्री के लिए नयी चीजों में यह पहला दिन रहता है जो सरकार के सभी अधिकारीयी विकास की पहल पे देखा है।

इसके अन्य समय के लिए अपने अधिभाषकों का परीक्षण करने के लिए इस्तेमाल करने के लिए है और उसने उनकी बीमारी तंत्र तथा अन्य चीजों के सम्बन्ध में संबंधित करता है।

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पार्श्व पुस्तक का काम पूरी तरह राज्य सरकार के विनिंग्जॉन में रहना चाहिए। इससे संवेदनाशील नृत्य के साथ कर्तृत्व का तालमेल रहता है।

केंद्रीय मानव संसाधन विकास मंत्री को कुछ राज्य सरकारों पर नहीं हैं इसलिए मोज़हुर व्यवस्था को ध्यान नहीं किया जाता चाहिए।