

Newspaper Clips

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Cheats use bluetooth, cell cameras in AIIMS exam

5 Arrested Include MBBS Student, Doc

Dwaipayan Ghosh & Raj Shekhar | TNN

New Delhi: Cheating in entrance exams has become sadly commonplace, but this gang took technological sophistication to another level. First, two of them scanned the question paper — for the first All India Post Graduate Medical Entrance Examination conducted by AIIMS on Sunday — using mobile phones strapped to the wrist, concealed under shirt sleeves.

The images were then transmitted to a control room and downloaded. The paper was solved, and the an-

► **Munnabhai MBBS at controls, P 2**

swers dictated to candidates who had bluetooth devices stitched near the collar and were wearing minute ear-

CHEATING GOES HI-TECH

1 Two MBA grads from Jamia & IIMT, Meerut posing as doctors sit for all-India PG medical exam conducted by AIIMS. Duo strap cellphone to wrist & capture images of question paper. Special software automatically transmits photos to an email id as soon as they are clicked



2 Printouts handed over to main accused Mohit Chaudhry, a 2nd year MBBS student. Mohit solves paper with help of textbooks and some seniors



3 Answers dictated to at least six MBBS doctors, all of whom had bluetooth device stitched in shirt collars. Device transmitted answers to micro-earplug hidden in candidate's ear. Each paid ₹30-40 lakh

phones to avoid detection.

The Crime Branch of Delhi Police has arrested five persons, including

the main accused, identified as Mohit Chaudhry, a second-year MBBS student studying in Ujjain.

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Revive Research

Fundamental changes required to boost Indian R&D

Prime Minister Manmohan Singh's candid admission at the 99th Indian Science Congress, that countries such as China had overtaken India in scientific research, can play out in two ways. The statement will be forgotten in due course, or it could spur the beginning of a much-needed scientific revolution in the country. As things stand, the quality and output of research and development in India are abysmally poor. That total R&D spending as a percentage of GDP has remained stagnant at a measly 0.9% exemplifies this point. China directs around 1.42% of its much larger GDP towards R&D. The US, the largest economy in the world, spends around 2.6% and aims for 3%. The sizeable allocations stem from an appreciation of the critical role scientific research plays in the advancement of a country. It is the failure to acknowledge this fact that has brought Indian science to this pass.

It is welcome that the PM has promised to double the percentage of R&D spending by the end of the 12th Plan period. But this by itself will



not suffice. Fundamental supply-side changes need to be made to incentivise research across the board. The peculiar system of having specialised research institutes while universities serve as factories to produce degree-holders needs to end. New data shows that India published only 2,33,027 scientific papers in 2010 compared to 9,69,315 research articles by China. In order to increase research output it is imperative to create the right ecosystem. Universities must enjoy autonomy

in hiring staff, designing programmes of study and attracting funding for research, but also hunt in packs by collaborating with each other.

To institute such a system in India, the debilitating stranglehold of the bureaucracy on the higher education sector needs to be broken first. Cleansing universities of red tape and politics should be followed by an objective system of audit that links grants to performance, with research being a critical criterion. With autonomy, universities will have the freedom to hire the best talent and work closely with industry to develop areas of research competency. Biotechnology, IT and telecommunications, pharmaceuticals and green technology can all emerge as core competencies for Indian research.

The private sector too must see the benefits in allocating greater resources towards R&D. Off-the-shelf technology might be expedient in the short term, but retaining the edge in manufacturing requires long-term investment in cutting-edge R&D. Public-private partnerships could be an omnibus through which Indian research receives a fresh lease of life. If India is to realise the goal of a knowledge economy, it must focus on laying the foundation of a quality research infrastructure.

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e-paper

Satyam sues ex-directors, PW

Chairman Nayyar Says Damages For Fraud Could Be In Excess Of \$210m

TIMES NEWS NETWORK

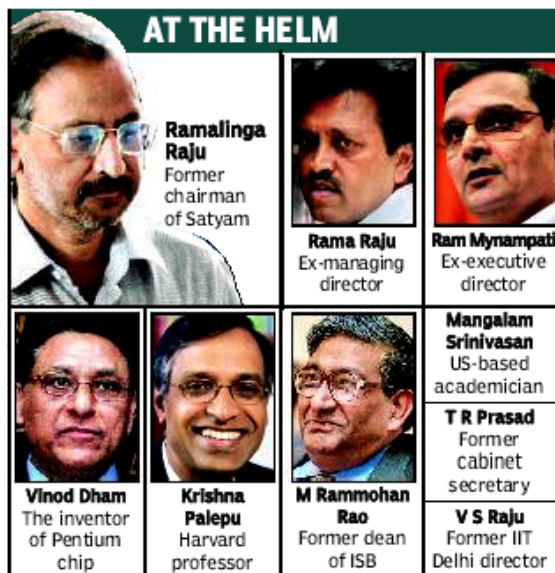
Hyderabad: Three years after the multi-crore Satyam scam first came to light, Mahindra Satyam has dragged Satyam's disgraced founder B Ramalinga Raju, along with the company's erstwhile board of directors, some former Satyam employees as well as auditing firm Price Waterhouse (PW), an arm of audit and consulting firm Price WaterhouseCoopers (PwC), and its affiliates and partners to court.

Mahindra Satyam, as Satyam is known after being taken over by the Mahindras in April 2009, informed the bourses on Monday that it had filed a suit in the city civil court of Hyderabad against the former Satyam board, some employees and PW and affiliates for perpetrating fraud, breach of fiduciary responsibility, obligations and negligence in performance of duties. The company also said that it was seeking undisclosed damages from them.

According to sources, the company has sued nearly 123 PW and PwC partners across US and India offices in Bangalore, Hyderabad, Kolkata and Mumbai along with its various affiliates including Lovelock & Lewes.

The former Satyam employees to be sued include its then chief financial officer Vadlamani Srinivas, and former internal auditor Prabhakar Gupta, who were also jailed, as well as former Satyam finance vice-president G Ramakrishna and other finance department employees like D Venkatapati Raju and Ch Srisailam.

While the company did not peg any specific number to the damages it was seeking, Mahindra Satyam chair-



man Vineet Nayyar told TOI that the figure would definitely be in excess of the \$210 million that the company had to cough up to settle its legal liabilities. These include the \$125 million US class action suit settlement, \$70 million unpaid lawsuit settlement and the \$10 million settlement with the US markets watchdog SEC.

"Though we haven't specified the damages because we don't know the exact magnitude of damages, some are known to us and easily quantifiable. And then there are damages resulting from loss of business, customers, reputation that add up to quite a bit but are difficult to quantify," Nayyar said. "Obviously we have angst against the previous management and auditors who had a fiduciary responsibility. It is only right and fair that they should compensate the company," Nayyar added.

On why it took the compa-

ny three years to get around to taking legal action, Nayyar pointed out that they had to first clear existing liabilities and also complete some formalities before proceeding with legal action, which took some time.

Of course, the company also has another sword hanging over its head — the income tax liabilities running into thousands of crores. While the I-T department has issued a notice demanding Rs 2,114-crore tax for assessment years 2002-03 and 2007-08, the company is already embroiled in a legal battle with the I-T department over a tax demand of Rs 617 crore.

When the fraud broke out on January 7, 2009, after Raju's confessions to cooking the company's books for years, he was the chairman, his brother Rama Raju was the company's managing director and Ram Mynampati was executive director.

The Satyam board then

boasted of directors of the likes of management guru and Harvard professor Krishna Palepu, the inventor of Pentium chip Vinod Dham, then Indian School of Business dean M Rammohan Rao, US-based academician Mangalam Srinivasan, former IIT Delhi director V S Raju and former cabinet secretary TR Prasad.

Currently, all the 10 Satyam scam accused are out on bail, including two PW part-

ners S Gopalakrishnan and Talluri Srinivas. The company had already stated its intent to recover the Rs 1.1 crore it paid as commission to independent directors during financial year 2008-09 because it incurred losses.

Incidentally, Palepu was paid a management consultancy fee of over Rs 65 lakh during the same year over and above the sitting fee of Rs 12 lakh that was paid to each independent director.

HindustanTimes

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HYDROGEN 3-WHEELERS UNVEILED



Press trust of India

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NEW DELHI: The world's first hydrogen-powered three-wheeler, HyAlfa, was showcased at the 11th Auto Expo here.

Part of a development project dubbed DelHy 3w, a fleet of 15 HyAlfa will run on an experimental basis at Pragati Maidan. The HyAlfa has been jointly developed by the United Nations Industrial Development Organisation, International Centre for Hydrogen Energy Technologies, Mahindra & Mahindra and IIT-Delhi, with support from the ministry of new and renewable energy.

Hindustan Times, ND 10/01/2012 P-5

After VC's visit, DU colleges get their act together

ht FOLLOW-UP

Shaswati Das

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NEW DELHI: A week ago, Delhi University (DU) vice chancellor Dinesh Singh walked into some colleges to be greeted by students loitering around the campus.

Not only had teachers refrained from taking class, timetables of most courses had not been put up on the notice boards as well.

However, within hours a notice was issued to some of the defaulting principals and other colleges had been asked to send in copies of the timetables for the rest of the semester.

It was then that the colleges decided to up their ante.

"We have received the timetables from a majority of the colleges. We are glad that colleges have taken cognisance of the matter because it is an extremely serious issue if the principals themselves are lax about conducting classes in a regular fashion. This is the semester system and it is time that colleges get

serious about things such as timetables and regular classes," said a senior DU official.

While principals of some of the colleges that the vice chancellor visited refrained from commenting but they lashed out at him for the surprise inspection on January 2.

However, some of them have been quick to respond to the notice.

"We have uploaded the timetables of all courses on our website and the hard copies of the same had been sent to the dean's office three days after we got the notice. The same was also announced in all the classes and all the students have been told about the timetable," said Rajendra Prasad, principal, Ramjas College.

SRCC principal PC Jain said, "We sent a copy of the timetable to the dean of colleges as soon as we received the notice. The government in essence employs us and we must perform as we are expected to. If we don't we are being unfair to the students. Even if the vice chancellor had not paid a visit, classes should have been going on smoothly and on time."

Hindustan Times, ND 10/01/2012 P-5

DU grants students 520 marks out of 500 in exams

Mallica Joshi

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NEW DELHI: The impossible seems to have happened at the University of Delhi.

More than 30 students of Chemistry (honours) across all colleges of the university have got more than the maximum marks that were scored on. A look at the result shows that a student has earned 520 marks out of 500.

In what is turning out to be a big failure of the software being used by the university, the total maximum marks are indicated as 500 instead of 550. Manually adding up the marks clears all confusion as it becomes clear that the marks should have been out of 550.

"The computer should have pointed out this problem. Usually a computer will point out

Usually a computer points out errors in tabulation of marks... the university should question the efficiency of the software

NAVEEN GAUR
Professor, Dyal Singh College

any errors in the tabulation of individual marks, but if this did not happen then the university should question the quality and efficiency of the software," said Naveen Gaur, who teaches physics at Dyal Singh College.

According to Gaur, teachers filled out OMR sheets to indicate the marks of each student this year.

"The university has failed at two levels. First, it did not spot that the maximum marks were

wrong and second it did not notice that students were getting more marks than the maximum marks," added Gaur.

University officials dismissed the faux pas as a minor error.

"This is a small error that will be rectified soon. It is not a big deal," said a university official, who did not want to be named.

Meanwhile, the semester results declared this year have come under fire from teachers.

While the results have proved to be much better than usual, teachers have alleged that marks were given out freely to even those who did not deserve them, to enhance the acceptability of the semester system.

It is noteworthy that three students scored 99% in the Economics (honours) first semester results that were declared at the end of December.

MICHAEL DELL
Chairman & CEO, Dell

Tablets Will Not Replace PCs

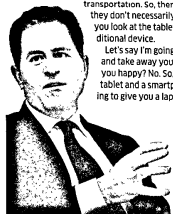
Michael Dell is transitioning tech major Dell into a services powerhouse taking on established players in a challenging environment. And India is at the core of this strategy. In an interview with ET's Jayadevan PK & Pankaj Mishra, he discusses tablets, outsourcing & India business.



On the future of computing... It is fun to think about the actual devices and that's an easy thing to do. But what happens when you think of the purpose of the device? What do they actually do? It all goes back to enabling the human potential. And if you think about it in that context, we are still at the beginning of how IT and computing really impacts the world. The computing power is more available now. We have billions of new users getting first-time access to these tools which is enabling learning and productivity. And that's changing the way everything works and opening up new possibilities and opportunities, changing all sorts of businesses. And the pace is not slowing down at all. It's a very exciting world. The IT industry itself is a \$3-trillion industry. It's a very dynamic and important part of the global economy if you think about the tremendous growth that's going on and IT is at the fulcrum of that growth. In the global economy, IT will certainly be a huge source of employment and hence a big part of India's future.

On the future of personal computing... If you are going to use a computer, it's a personal computer. Whether you have it in your pocket or carry it on your wrist, it is a personal computer.

On tablets dominating computing space... My point is that these are little personal computers. There is a tendency to believe that it might be an either/or situation. But I don't think that's the case at all. Let's say you are going off to college. All you can take with you is one device because you can only afford one device. What's the one device which you are going to take? Your choices are a portable laptop, a tablet or a smart phone. Would you take a smartphone instead of a tablet? Would you take a smartphone instead of a laptop? Will you write a paper or have your entire college experience on a smartphone? Really? I'll help you out a little bit. If you look at all the data in the world today, what it basically says is that smart phones don't replace laptops and laptops don't replace smart phones. They actually do different things. It's like having a car and a bicycle. All for transportation. So, there is some overlap but they don't necessarily replace each other. If you look at the tablet, it's basically an additional device.



Let's say I'm going to give you a tablet and take away your smartphone. Are you happy? No. So, you want to have a tablet and a smartphone. Now I'm going to give you a laptop and take away

Smartphones don't replace laptops and laptops don't replace smart phones. They actually do different things

one device. Would you give up the tablet? So for you, of the three devices, the least valuable is the tablet.

On making a similar bet now... The bet we made on the personal computer was 28 years ago. About 16 years ago, we made a big bet on servers and that's turned out very well. We have a \$20 billion enterprise business for servers and moving into services. The big bet that we are making now is how do we solve the IT challenges that our customers face. And that's causing us to grow quite a lot in our business, to evolve beyond products into solutions.

On Dell's positioning... When you look at the \$3-trillion IT industry, there is a lot of opportunity. There are about 10-odd companies in the world that have more than 1% share of the \$3-trillion market. That's \$30 billion. And no single firm really has more than 5-6% of the total. We have 2%. What you have is a really dispersed market with tonnes of opportunities. So, it is very common for companies to partner together and compete at the same time. You will see us more focused on the new way to do it. We will focus on cloud computing and the solutions business to scale up very nicely. There are a lot of growth companies in the world today. And those companies don't want the older solutions that the big companies already have. They are looking to have solutions that can start in a pretty simple way for them and grow as their business grows. Dell is a company that's very different from other older companies that grew out of the microprocessor age. We are still in the microprocessor age. Those microprocessor based machines had this scalable approach. So, it's a very different approach that we take to allow companies to grow and expand and scale.

On cloud computing... Cloud is an enabler of a new way of doing IT. Like you said, we are at the initial stages of that. And it is most easily adopted by the newer companies. That's an advantage for them. All IT has this return-on-investment curve. If I buy something, it has to create a return or else why should I buy it? The essence of IT is that we create these solutions that help companies become more efficient and if we can make that happen faster, easier and have the return on investment increased, then that's great. Cloud is the next wave of making that return easier to generate. We are building these cloud serv-

ices to allow customers to have that as an option. There isn't one cloud solution. We have the infrastructure so that companies can build their own cloud. We have data centres, software and tools to enable these clouds to work more effectively. We have been acquiring companies to provide various aspects like security. Let's say, I want to use a cloud-based service, but how do I connect the cloud to my legacy platform? We bought a company called Boom that does just that. And it's doing that now for thousands of customers and growing very fast.

On moving from products to solutions... Over the last 12 months, our EPS grew 86% on an annualised basis. Earnings are growing, profitability is improving and gross margins are growing. If you look beyond that, the services business is growing faster than other businesses. So before I was selling products, now I'm selling services, which has a longer lifecycle. It is more of an annuity revenue stream. You will see much more verticalisation of our business. So, there's a deeper understanding of healthcare, financial services, manufacturing and retail. So that we can really help customers solve the problems and challenges that they have in their businesses. You will see a lot of growth in India. Because our services business has a large part -- its core -- in India and that's going to be just great. Our focus is on emerging markets and mid-sized companies that are growing very rapidly. But our evolution as a company are under way: starting with products, going to software and solutions. If you are only focused on PCs, your market size would be quite small. Hardware including data centre and security is bigger. To that if you include software and services, it goes from hundreds of billions to trillions. And we are seeing our customers want to do more for them.

On manufacturing... Our experience has been a good in India. We have had tremendous progress in our own operations and we have made great strides. We have ex-

panded now a few times, we are exporting now to the Middle East. The operational efficiencies are pretty staggering and in many cases best in class. The challenge remains on inputs. For manufacturing in the IT sector to really take off, we need the raw materials and the ingredient suppliers and they are not here at the scale in a competitive way. I think it requires a concerted industrial policy that is a far-reaching endeavour. But we will be very supportive of that. We are not the first ones to explore the question but to have a robust manufacturing ecosystem, you need to have the suppliers.

On outsourcing... I start at the basic level and say that America has about 4% of the world's population. So, we have a desire to sell to 100% of the world's population. That means 96% of our customers are outside the United States. We say look we are going to go where the customers are. India is a huge market for us. Growing fast, great success. China is a huge market for us. We are going where the customers are. And that's a good thing.

On smartphone ambitions... We are much more than a device company. We're focused on how we can provide complete solutions to the customers. They can include the devices, the security, the systems management and the applications. I think you will see us with a broader range of products. Certainly, we are very excited about Windows 8 as it comes into the table. That's going to be a very exciting product. I think Windows 8 is going to be very successful. Smartphones are growing very rapidly. As there is a huge number of earlier-generation phones, it creates a tremendous opportunity because of the data and the infrastructure required to manage all that. Where does all the data for new phones come from? It comes from a data centre. And guess what? Dell is living in that data centre. We are supplying a large part of those servers, storage and network that's feeding all those devices.

On macro-economic trends... There are some challenges out there. But what is IT for? It is for productivity. And whether your business is doing well or not, you need productivity. Whether the economy grows a little or shrinks a little, you still need to be productive. We see the appetite that our customers have for productivity is quite strong and that's how we are able to grow our earnings 85% over the last four quarters.

On social media... We use a lot of it. We are starting to provide services to our customers and we want to have a stronger social media capability. We have a large social media listening centre where we listen to over 2 billion social media conversations a year. We find that when we engage with our customers using social media, they are buying more from us. This is a great way to stay in touch with our customers, to listen to them and understand them more effectively. Dell's services organisation is helping customers set up their own listening and command centres and taking the learning that we have in social media to tell them how to become more engaging.

On India market... We are \$1 billion-and-half today and continuing to grow. We are very impressed with what we've seen here. Very good progress. We have actually started an operation review of the business in India and a recruitment programme for innovation and people leadership.

For feedback, write to us at et.technology@indiatimes.com

Dell in India

- In April 2011, Dell got former Wipro's joint CEO, Suresh Vaswani, to join Dell India as chairman. Vaswani is pioneering Dell's services and solutions foray
- Dell's India business has grown to \$1.5 billion today from modest levels a decade ago
- Dell has a 50 acre manufacturing facility in Chennai from where it has begun exporting to the Middle East countries.

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TRIBUNE NSD 10,1,12, P-12

A re-look at private institutions

R. S. GREWAL

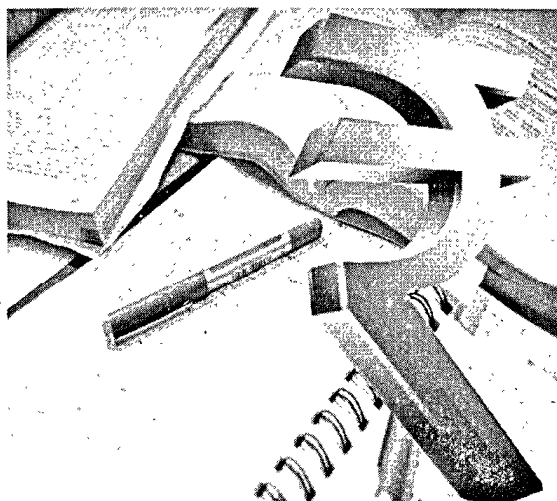
HIGHER education in India faces a major dilemma. Although the private sector accounts for 91 per cent of seats in engineering, 64 per cent in management studies, 95 per cent in pharmaceutical studies, 92 per cent in physiotherapy, 50 per cent in medicine and 94 per cent in hotel management, its role is still viewed suspiciously by many in the country.

The government has categorised elementary education as a "merit good", while the higher education is considered as a "non-merit good". The implications of this policy are that funds available for higher education are rather limited, raising serious issues related to access to institutions of higher learning. Considering the Indian demographic environment, the government has no choice but to rely upon the private sector to meet the burgeoning demand. Therefore, the privatisation of higher education in India has not come about due to an ideological commitment, but has been forced upon it.

The regulatory bodies in India have not been prepared for this sudden change and view the entry of the private sector with scepticism. They are suspicious of the monopolisation of higher education by the private sector. The entry and the conduct of some of the private sector players, who sense an opportunity to make a quick buck, further aggravate the matters. A tendency has developed amongst the bureaucrats and the regulatory bodies to paint all private institutions with the same brush. Inadvertently, a pseudo "caste system" has been created among all the public institutions, irrespective of the quality of education being provided by them, being considered a notch above the private sector institutions.

Further, government agencies, which provide grants for research and other academic activities, have framed rules and regulations that discriminate against private institutions. The emphasis is more on the "origin" of the institution rather than on the quality of education being provided by it. There could be nothing more ironical where a business school (ISB) with international standards is not recognised by the regulator but has been graced by the visit of the President and the Prime Minister of India during their convocation and annual functions. This type of environment creates confusion in the minds of the general public which is not well versed

Private education providers and regulators need to create an environment of mutual trust for the benefit of stakeholders and students



with the nuances of the regulatory mechanism pertaining to higher education existing in India. Not many can distinguish between a state private university and a deemed to be university. Rather the phenomenon of creating deemed to be universities is peculiar to India and many foreign scholars and academic administrators fail to comprehend this concept. Invariably, they feel that a deemed to be university could become a fully-fledged university after fulfilling some conditions. It does not bode well for a country which is aspiring to become a great power and which is considered as a potential education hub for South Asia.

Also, failure of bureaucrats to take timely decisions has resulted in a number of court cases that have compounded the matter further. While some of the judgements have accepted that providing education is an "occupation", others have held that it is an "industry". Some judicial pronouncements have held that establishing and administering an educational institution for imparting knowledge to students is an occupation, protected by Articles 19(1) (g) and 26(a) of the Constitution. But the courts have also been cautious enough to rule that though providing education may be an occupation and a reasonable amount of profit could be permissible, they

have been strictly against any form of profiteering. At the international level, even the WTO has accepted that provision of education is a service that can be traded and it has been included under the GATS. India, as a member of WTO, has accepted that position.

In such an environment, there is need to educate the general public about the role and the status of private education providers. There are a large number of private institutions which are rendering yeomen service to the country, but the public gets swayed by the misdeeds of some of the black sheep in the private sector. The fact that the black sheep exist both in public and private sector institutions is often ignored. Now, the time has come where the private sector needs to be given its due.

The Centre has taken a welcome step to introduce a Bill in Parliament to set up a National Commission for Higher Education and Research that will subsume the UGC and other regulatory bodies. But there are other Bills that are pending in Parliament that have some draconian features and the concerns of the private education providers need to be addressed. The governments at the central and state levels have to resist the tendency to micro manage private universities.

On the other hand, private univer-

sities have to imbibe the nuances of self-regulation if they have to earn the confidence of the stakeholders. Private education providers and the regulators need to create an environment of mutual trust for the benefit of stakeholders and students. At present, the former view the regulators as bodies out to harass them and the latter look at private education providers who are bent upon to exploit the students. An enabling regulatory mechanism, which respects the autonomy of universities, is the need of the hour.

It is a known fact that the purchasing power of middle-class families has gone up and they are prepared to pay for the education of their children. Therefore, the policies of the government should ensure adequate social returns on higher education. The middle class yearns for quality education because it is considered to be an elevator to opportunities and upward social mobility. Therefore, the government would do well to concentrate on quality rather than dissipating energies on issues like regulating fee structures. At present, the qualifications earned by students from various universities or boards lack uniformity of standards necessitating holding of entrance examinations for admissions to higher educational institutions. Could the government usher in policies that help in reducing the time and money spent by students on various competitive entrance examinations?

Now, the time has come where we need to identify the relative strengths of public and private sector institutions and help them complement each other to synergise the national effort in making India a powerhouse of knowledge.

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ADMISSION DEADLINE

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— Pervin Malhotra,
www.careerguidanceindia.com



**SANJAY G.
DHANDE**

R needs D

It is high time India developed a strong research ecosystem

THE PM's address at the recent Indian Science Congress indicated some key actions — which must be pondered by those within the scientific community and the larger society. He spoke of the need to boost research, a key driver of the socio-economic engine. The value of research is self-evident: social challenges are examined and new knowledge is generated.

A research ecosystem, which India needs, has several elements. First is the agenda of research. It must address societal needs like energy, environment, communication, water, food and infrastructure. Furthermore, specific goals help accelerate research efforts. The announcement of US President Kennedy, "By the end of this decade, we shall put a man on the moon", in 1961 set the agenda for the American scientific community for a decade and more. Once a global target is set, the agenda gets developed. The main goal is accomplished by an interdisciplinary approach. The compartmentalisation of academic and research departments are purely for organisational purposes. The agenda of research requires truly an interdisciplinary thinking.

The second step in the development of research ecosystem is the creation of infrastructure. The old culture of workshops has now been replaced by computer-controlled machines for proto-

typing work. Clean rooms, wet laboratories, sample preparation facilities and a variety of microscopes are essential for carrying out research that can compete at the international level. It is essential not only to establish these facilities but also to maintain them.

A key element is, however, human resource. Countries like the US attract talent from all over the world to ensure that the best and the brightest are available to achieve the goals of research. The best environments of research are nurtured in universities. In fact, the term research university is used for an institution of higher education with a rich infrastruc-

Indian universities need sustainable financial support to carry out long-term research programmes. Inter-university research centres are also needed.

ture and a pool of research academicians-scientists. They create the research agenda, which is funded by national agencies.

The fourth element is the system of management. The Indian government has several schemes to attract the youth towards research careers, but more needs to be done. Besides financial incentives, research offers an open, free environment. Such indirect benefits need to be highlighted. It is also desirable that India open up the world of higher education and research to foreigners with the right background and talent. Management policies should appreciate the research output —

patents, publications, process designs, algorithms, databases, books, monographs and technical reports — that brings in tangible contributions to society.

The fifth element is funding support. It is certainly low in India and needs to be increased. Besides enhanced support from Indian government, private funds should go up. The level of funding and its priority are important. Indian universities need sustainable financial support to carry out long-term research programmes. Inter-university centres of research are also needed in greater numbers.

Innovation and incubation is

the last element but not the least. Academic institutions, research laboratories and other establishments have to travel the last mile to convert knowledge they have created to some form of wealth, to incubate new ventures. Some of them will flourish and change the face of the economy. So far, India has thrived on "import" culture of innovation and incubation. It is no longer a smart strategy. Today, I&I (innovation and incubation) is an integral part of the research ecosystem.

University system is key to the overall research ecosystem. This can happen if large-scale research facilities are established and op-

erated by universities. Jet Propulsion Lab — a leading facility for space research — is operated by Caltech. Berkeley National Laboratory, Livermore lab, Argonne lab, Brookhaven lab, Draper lab are examples of large research facilities in US universities. Such a culture brings a different atmosphere of research to campuses. Indian universities need to move in this direction to develop a strong research ecosystem.

Research is no longer a national agenda. It is indeed an international landscape. Hence, comparisons and rankings become important to some extent. Asian countries have developed an impressive track record in the recent past. Europeans and Americans may have slowed down during this period. However, the size of overall research system is so large in these countries that a marginal decrease has not affected their basic competitiveness. India needs to develop a strategy unique to its internal challenges as well as external rankings. Indians enjoy high appreciation for their talent in research. However, India does not figure as a top-ranking country in research competitiveness. That is why there is a need to develop the research ecosystem.

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B vitamins may boost mental wellbeing

KERRY GRENS

OLDER adults who took vitamin B12 and folic acid supplements for two years had greater improvements on short- and long-term memory tests than adults who did not take the vitamins, according to the results of a new study from Australia.

The benefits were modest, but encouraging, indicating that the vitamins "may have an important role in promoting healthy ageing and mental wellbeing, as well as sustaining good cognitive functioning for longer on a community-wide scale," Janine Walker, the lead author of the study and a researcher at Australian National University, told Reuters Health by email.

The researchers asked more than 700 people, aged 60 to 74 years, to take a daily dose of folic acid and vitamin B12 or fake pills that resembled the vitamins. The study only included people who showed signs of depression, but were not diagnosed with clinical depression.

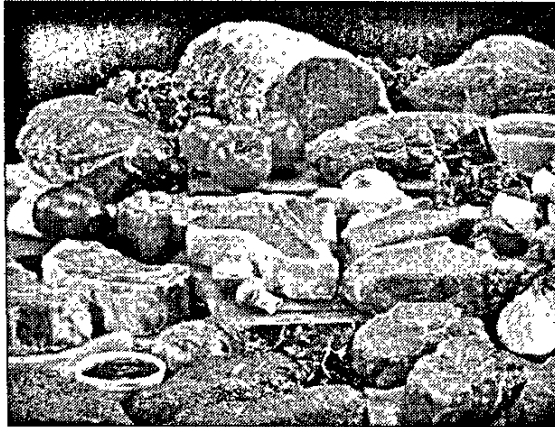
The vitamin dose included 400 micrograms of folic acid and 100 micrograms of vitamin B12. The participants didn't know which pills they were assigned to take.

"We felt that older people with elevated depressive symptoms were an important cohort to target given evidence that late-life depression is associated with increased risk of cognitive impairment," Walker said.

After 12 months, there seemed to be no difference between the groups in how well the people scored on mental tests, including memory, attention and speed.

Two years on, however, those who took the vitamins showed larger improvements in their scores on the memory tasks.

The difference in the improvements



was small, the researchers write in their study, published in the American Journal of Clinical Nutrition.

For instance, on a short term memory test, those who took the fake pills improved their score from about 5.2 to about 5.5 over the two years. Those who took the vitamins increased their test scores from 5.16 to roughly 5.6.

Short term memory is used to dial a number someone has just told you, while long term memory comes into play when you try to call that number a day or week later.

Joshua Miller, a professor at the University of California, Davis, said it's difficult to translate the memory improvements on the tests into real life benefits. He said it's likely that some people had larger memory improvements, while others benefited very little.

"For any given individual, there may or may not be an effect. But on a population level, a small increase in cognitive function can have very real ramifications on the functioning of the population as a whole and on the costs of healthcare," Miller said.

Miller said it's possible that certain subgroups of individuals might be more likely to benefit from folic acid and B12 than others. "What I believe the next thing we need to do is (study) the group that is most likely to benefit from this," Miller, who did not participate in this research, told Reuters Health. — Reuters

हायर एजुकेशन में सुधार से जुड़े तीन अहम बिल राज्यसभा में पोंडिंग संसद में बिल अधूरे, ख्वाब कैसे हों पूरे

करियर की उड़ान भरने के ऊंचे ख्वाब कहीं चूर-चूर न हो जाएं। यह सवाल हर उस स्टूडेंट को कचोट रहा है जिसके भविष्य से जुड़े तीन विधेयक संसद के शोरगुल में अनसुने हो गए। हायर एजुकेशन में बदलाव के मकसद से पेश किए गए ये बिल लोकसभा में तो पास हो चुके हैं, पर राज्यसभा की मंजूरी अभी बाकी है। सेशन पूरा हो गया, लेकिन उन युवाओं के सपने अधूरे ही रह गए, जिन्हें कड़ी मेहनत के बाद बड़ी बेसब्री से अपनी डिग्री का इंतजार है।

मंजरी चतुर्वेदी ॥ नई दिल्ली

हायर एजुकेशन में सुधार के यूपीए सरकार के अजेंडे पर फिलहाल ब्रेक लगता नजर आ रहा है। वजह है इससे जुड़े कुछ अहम विधेयकों (बिल) को संसद में मंजूरी न मिल पाना। सरकार इसलिए भी परेशान है कि इन बिलों की वजह से कई स्टूडेंट्स का भविष्य भी अधर में दिख रहा है।

फिलहाल मानव संसाधन मंत्रालय के जो तीन बिल लोकसभा में पास होकर राज्य सभा में अटके हैं उनमें आईआईआईटी बिल कांचीपुरम-2011, आईआईटी बिल बीएचयू-2011 और एनआईटी संशोधन बिल-2010 शामिल हैं। खास बात तो यह है कि इनमें से ज्यादातर बिल ऐसे हैं, जिनमें संस्थान को वैधानिक दर्जा न मिल पाने की वजह से संस्थान अपने स्टूडेंट्स को डिग्री नहीं दे पा रहे हैं।

आईआईआईटी बिल कांचीपुरम- 2011

यह विधेयक इंडियन इंस्टीट्यूट ऑफ इंफॉर्मेशन टेक्नॉलजी, डिजाइन एंड मैनुफैक्चरिंग को राष्ट्रीय दर्जा दिए जाने से जुड़ा है। बिल पास होने से इसे नेशनल इंस्टीट्यूट का दर्जा मिल जाएगा। साल 2007 में शुरू



हुए इस इंस्टीट्यूट के पहले बैच के निकलने का वक्त आ गया है, लेकिन इसे राष्ट्रीय दर्जा न मिलने से इसके स्टूडेंट्स को डिग्री नहीं दी जा सकेगी।

एनआईटी अमेंडमेंट बिल-2010

इस बिल के जरिए देश के पांच इंडियन इंस्टीट्यूट्स ऑफ साइंस एजुकेशन एंड रिसर्च (भोपाल, कोलकाता, पुणे, मोहाली और तिरुअनंतपुरम) को वैधानिक दर्जा मिल जाएगा। इस दर्जे के बाद ही ये संस्थान अपने स्टूडेंट्स को डिग्री दे सकेंगे। ये संस्थान पांच साल का कोर्स कराने के बाद भी डिग्री नहीं दे पा रहे हैं।

आईआईटी बिल बीएचयू-2011

बीएचयू आईआईटी विधेयक भी लोकसभा में पास हो चुका है। अब इसे राज्यसभा में पास होना है। यह विधेयक पास न होने की वजह से बीएचयू के आईटी को आईआईटी का दर्जा नहीं मिल पा रहा है।

आखिर क्यों अटके हैं बिल

मंत्रालय के सूत्रों की मानें तो संसद में हो हंगामे के चलते बिल लटकते जाते हैं। मंत्रालय को अब इनके बजट सत्र में पास होने की उम्मीद है।