UK teen of Goan roots ‘beats’ Einstein’s IQ

Karsten Miranda | TNN

Margao (Goa): With a Mensa IQ score of 162, a 15-year-old London teenager with Goan roots has beaten Albert Einstein and Stephen Hawking. Fabiola Mann’s IQ has put her in the top 1% of intelligent people in the world, two points over the 160 scored by the scientific greats.

Mensa, founded in 1946 as a society for intelligent people, awarded Fabiola her membership certificate in August this year. The Harrow-on-the-Hill-resident, who wants to study medicine at Cambridge University and become a surgeon “because I like the idea of helping people”, told STOI from London that she wasn’t expecting the score.

“I had heard about Mensa and so decided to take their test,” Fabiola said in an email. Being “always interested in puzzles”, she “begged” her parents to apply for the test and paid the fee.

On July 30, the Northwood College DOC IS IN? Fabiola wants to be a surgeon ‘because I like the idea of helping people’

School pupil sat down for a formal, supervised, three-hour test at the London UCL medical college. “The questions were slightly more confusing (from the practice IQ tests online) and we did not have much time to do them, so I could not really tell how I was doing,” said Fabiola.

She had to wait for a month for her scores instead of the customary two weeks as the results were lost in transit. “We went on holiday soon after (the test), and it was a month before I finally got a letter through post telling me that I had an IQ of 162 and was invited to join Mensa. I was thrilled,” said Fabiola.
Hot degrees fetch Young India lukewarm jobs

Charu Sudan Kasturi
m_charu.kasturi@hindustantimes.com

NEW DELHI: Amitesh Kumar is still getting used to perplexed looks from colleagues every time he talks of his alma mater IIT Guwahati at his workplace, a Gurgaon call centre.

It's not exactly the job the 24-year-old son of a clerk from Darbhanga, Bihar, had dreamed of after an engineering degree. But four months after losing the consultancy job he landed immediately after graduating, Kumar is still looking for better work than managing IT services for a call centre.

"This isn't what I was supposed to be doing," Kumar says. "But I don't have a choice."

This is the reality confronting an increasing number of young Indians. A growing gap between the demands of the market and the education and skills that universities offer is spawning a generation of overqualified but underemployed youth. Among urban, salaried Indians, 8% men and 6.5% women were seeking a better job in 2004-05. The numbers of the "invisible underemployed" — as this set is called — have risen to 4.4% of men and 5.2% of women, according to the National Sample Survey Organisation (NSSO) statistics released in 2011.

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In rural India, the increase is sharper: from 3.1% for both men and women to 8% for men and 5% for women.

While some, like Kumar, are waiting for better jobs, others, like Mumbai-based MBA graduate Ravinder Singh, are slowly giving up on their dreams.

Singh graduated from Vellore Institute of Technology (VIT), and has spent the last six months applying for consulting jobs at Indian and global companies. "I've only heard 'no'," Singh, who works at his father's export business, says. "I've accepted that my MBA doesn't guarantee a job."

It's a crisis that industry chambers have been warning the government about for a few years now. Repeated studies have shown that a majority of the country's graduates aren't equipped for jobs befitting their qualifications.

"MBAs may have an understanding of management practices learned in classes, but they can't get work done in the real world," says Pooja Gianchandani, director and head of skill development at FICCI.

The UPA government has recognised the skill deficit that threatens a country where over 60% of the population is under 30. The National Skill Development Mission, headed by PM Manmohan Singh, aims to train 500 million people in skills ranging from plumbing to industrial technologies by 2022.

But many programmes under the mission are yet to take off, and the industrial training institutes, started in the 1960s, are stuck with outdated curricula.

Part of the problem, according to experts, is cultural. Unlike the West, hands-on service sector jobs are looked down upon in India. "There's no social appreciation for skilled labour like, say, a plumber," says Gianchandani.

An explosion of professional schools — mainly engineering and MBA institutions — trying to cash in on India's growth story is equally responsible for the underemployment crisis, says Bakul Dholakia, former IIM Ahmedabad director.

Engineering schools in India offered a total of 8,25,791 seats at undergraduate and postgraduate levels in 2007-08. Today, that number has more than doubled to 19,05,802. From about 2,000 B-schools — public and private — offering MBAs or post-graduate diplomas in management at the turn of the century, the country today has 3,844 such schools. B-school seats have risen from 1,14,803 in 2007-08 to 3,18,920 seats in 2011-12.

Many of these B-schools run predominantly with visiting faculties. "These visiting lecturers relate their experiences to students," Dholakia says. "That can't substitute for actual B-school case studies."

Professional schools "are all about getting students jobs" and those that don't should be shut down by the government, says Dholakia. "Right now, shoddy B-schools are giving a bad name to the whole of management education in India. As a country, we need to get our act together quickly," he adds.
A NOBEL FOR TEASING OUT THE SECRET LIFE OF ATOMS

With the two physicists' work, super computers and accurate clocks are a distinct possibility

DENNIS OVERBYE

Two physicists who developed techniques to peer in on the most intimate relations between light and matter won the Nobel Prize in Physics on Tuesday. They are Serge Haroche, 68, of the College de France and the Ecole Normale Superieure, in Paris, and David J. Wineland, also 68, of the National Institute of Standards and Technology and the University of Colorado.

Their work, enables scientists to directly observe some of the most bizarre effects—like the subatomic analogue of cats who are alive and dead at the same time—predicted by the quantum laws that prevail in the microcosm, and could lead eventually to quantum computers and super accurate clocks.

On the smallest scales of nature, the common-sense laws of science are overthrown by the strange house rules of quantum mechanics, in which physical systems are represented by mathematical formulations called wave functions that encapsulate all the possibilities of some event or object.

Light or a subatomic particle like an electron could be a wave or a particle depending on how you want to look at it, and causes are not guaranteed to be linked to effects. An electron could be in two places at once, or everywhere until someone measures it, courtesy of the Heisenberg uncertainty principle, which caused a cranky Einstein to grumble that God did not play dice.

Erwin Schrodinger, one of the founders of the theory, as was Einstein for that matter, once complained that according to quantum principles a cat in a box would be both alive and dead until somebody looked at it.

Until recent years this was all philosophy, and physicists could comfort themselves with the realisation that quantum mechanics works so spectacularly well—every time you turn on your computer, for example—that for some of them the real problem is why the ordinary world does not work that way; why, for example, your sunglasses are not simultaneously in the car, back at the summer cabin or on the shelf when you want them.

Haroche and Wineland, who have been good friends for 25 years, have approached the dance between matter and light from opposite sides. Haroche traps photons in a mirrored cavity whose walls are so finely polished that one photon will bounce back and forth for a tenth of a second before leaking out or being absorbed. Then he sends in a single atom to interact with the light.

In 1996, Haroche and his colleagues raised Schrodinger's cat from the undead by putting their boxed photon into a "cat state" in which one photon is out of phase with itself, essentially oscillating in opposite directions at the same time. Then by sending in their spy atoms, they measured how long it took for the "cat state" to decay and the photon to oscillate in one direction or the other.

In more recent experiments, they have developed feedback techniques to keep the cat state going longer. Such techniques are crucial for the dream of quantum computers, which manipulate so-called qubits that are 1 and 0 simultaneously to solve problems like factoring gigantic numbers to break codes beyond the capacity of ordinary computers.

Wineland's work has focused on the material side of where matter meets light. Atoms of any particular variety vibrate and emit light at very precise frequencies, and the colder those atoms are, the less the frequency of that light is blurred by atomic motions. As a result, Wineland and his colleagues have used their trapped ions to make the world's most accurate clocks.

Modern-day atomic clocks are based on cesium atoms, which vibrate in the microwave range of frequencies, but-visible light waves vibrate much faster than microwaves—every oscillation being a tick of the perfect clock. A new optical clock based on aluminium ions that emit visible light is about 10 times better than the cesium clock, Wineland said, and would be off by only five seconds over the whole course of cosmic time—13.7 billion years.

In 1995, Wineland's group used trapped ions to carry out a computation using a pair of ions as qubits. Recently researchers have done it with as many as 14 qubits, but a lot of work remains to be done, scientists say, before serious quantum computers are a reality.
UGC nod for 1-yr LLM from 2013

Lucknow: The University Grants Commission has agreed to make the masters degree programme in law (LLM) of one-year duration instead of two to prevent students from going abroad. Vice-chancellor of Dr Ram Manohar National Law University (RMLNLU) Prof Balraj Chauhan welcomed the move.

"It's been seen that best students don't study LLM at various reputed universities in India. Reducing the duration of the course to one year will help us retain talent," he said.

The curriculum must be modified, too. "The fundamentals would have to go out and specialisation should be the focus, since both can't be taught in such a short time," said Chauhan.

Currently, a student spends at least seven to eight years on a masters degree in law. India, Bangladesh and Pakistan are the only countries that run two-year LLM courses. Everywhere else, it is a 1-year master's course. So, Indian law graduates go to the West for post graduation.

Two years ago, UGC set up a committee headed by the founding vice-chancellor of National Law School of India University, Bangalore N R Madhava Menon. The committee was asked to examine the proposal to reduce the LLM course to one year. Recently, the committee endorsed it and submitted its report to the UGC.
ON A DIGITIZATION MISSION TO RESCUE RARE BOOKS

Two academicians have been collecting rare journals, census reports, gazettes & books on South Asian history for the last 8 years to digitize them for easy access.

For the last eight years, a group of academics have been on a rescue mission. Finding precious material for research is a herculean task during their own fieldwork, two research fellows started gathering rare books and documents on South Asian history with the intention of digitizing them for easy access to researchers. They collected books from waterlogged homes, dusty government shelves, even bathrooms and on November 7, the South Asian Research Foundation will launch the digital archive containing completely searchable digitized versions of five million pages.

The first batch of two-lakh pages was purchased from the stalls of half-a-dozen rare book dealers at the 2005 Kolkata Book Fair. Boria Majumdar and Sharomitha Goopu were collecting material "randomly" till they formed the foundation in 2008 and got more organized. These included many 19th century Bengali journals, government censuses from the British era and gazettas. The online library will include early editions of William Jones’ works and of the Asiatic Review (from 1788). Full sets of law reports from 1800s, film ephemera, film pamphlets with synopses of films and songs from the 1930s and 40s, about 200 journals, census reports, medical histories and government reports. The colonial government was in the habit of producing reports,” says Goopu. There are reports on increasing the number of "public intinaxes" in Boraboy on sale of rotten fish in Kolkata, statistics of cholera epidemics and problems of urbanization and housing in Bombay — all from the early 20th century. They've been painstakingly gathered from government offices, private collectors and rare book dealers. About 15% of the documents are in Bengali — more languages may be added later — and series of documents will come with an introductory note from the editors.

And because bibliophiles don't really know where to stop, the duo have found documents being stored in unlikely places — the most extreme case being that of a Habibganj (Kolkata) collector who'd stacked on a platform of bricks, a lot he couldn't accommodate in the rooms. In the damp bathroom. The foundation’s project manager spent an entire day in the bathroom sitting through the material and found in it, records of proceedings of the Governor General in council and Lieutenant Governor in council, starting from the 1910s. In 2006, Majumdar had discovered journals of the Botanical Society in a private residence in Dum Dum. “It was marred, there was waterlogging inside the house and there. In heavy rains, water would find its way up and in the following years, the papers would remain wet and the pages would yellow. Pest control treatments every month keep the worms at bay.

The archive building is not air-conditioned and the cost of maintenance is high. We will donate the entire archive to the government, and the RIDB ministry has been very cooperative and has agreed to set up a library and call it South Asia Archive,” says Majumdar. United Kingdom-based publisher Routledge is funding the digitization process and will also take care of marketing to educational institutions outside India. Within the country, the team has received support from the University Grants Commission. Majumdar assures that the material will be available at a reasonable price to institutions and individuals.

On their collection drives, they have encountered dealers for whom rare books are purely a business proposition and genuine collectors who've dedicated a lifetime of work — and large sections of their homes — to them. "They don't possess degrees and are humble backgrounds but have a great appreciation and respect for learning. If they make Rs.1,000 in a month, they spend Rs. 500 on cats. That's the typical profile," says Goopu. They found one of the earliest English commentators on the Upanishads from such a collector in Bardhaman. "His books had taken up an entire room in a small house," says Goopu. "His wife was happy to see them go."
Programming skills

Nikhil Garg, a student of IIT-Delhi and a member of the team ‘Proof,’ which advanced to rank 18th in the final rounds of the International Collegiate Programming Contest, shares his experience with Education Times

Participating in the International Collegiate Programming Contest (ICPC) run by Baylor University, US and the Association of Computing Machinery (ACM), for me, was more of a chance rather than a choice. My rendezvous with ACM-ICPM began towards the end of my first semester at the Indian Institute of Technology (IIT), Delhi. At that time, I didn’t realise that it was one of those defining moments that would shape the next several years of my life.

Pradeep George Mathias, a batch mate of mine, approached me one day with some exciting news on the ACM-ICPC — the oldest programming contest globally. Owing to the lack of adequate training, we never really had sufficient exposure to professional coding and programming. The thought of getting to learn from the best in the industry was extremely exciting and hence without wasting any time, I decided to participate at the ACM-ICPC.

We made it to the regional round without much preparation and as expected were unable to solve a single technical problem. However, we were determined to make the most of this opportunity. There was buzz on campus that Directi (India’s web products company) had announced India’s online programming platform, CodeChef, for Indian software developers. The platform encouraged teams to interact with peers and to test and hone their programming skills. On further enquiry, we were told that it had also launched an initiative to support an Indian team to excel at the world finals of the ACM-ICPC. It had pledged a yearly support of US$ 70,000 to nurture teams that could excel in the contest.

We were now very serious about competitive programming. I named our team ‘Proof,’ inspired from a song by Eminem. The first serious programming competition in which we participated was CodeChef’s September 2010 contest. Starting that September until December, we worked extremely hard. We virtually skipped all our classes, spent most of our day solving algorithmic problems and programming their solutions, reading up on new algorithmic theories and going through various tutorials.

We qualified for the world finals of the ICPC and realised that we faced stiffer international competition. But, we didn’t lose hope and moved ahead by working on our weak links.

In May 2012, we were back to represent our country. This four-year long journey opened countless new avenues for us. Though we missed getting a medal by a whisker, I think the badge of India’s best performance ever is something we are happy to settle with for now.

- As told to Vishakha Sharma
Now, IIT-B to clean sewage water the natural way

Nikhil M Ghanekar

MUMBAI: At the Indian Institute of Technology - Bombay (IIT-B), soon sewage water will be cleaned naturally and re-used on campus.

No fancy apparatus or technology is required, just a sandbox planted with selected reeds and plants will make dirty water clean. The method, called sub-surface constructed wetlands (CW) process, was originally developed in Germany. It will be improved at IIT-B for better results.

“A constructed wetland bed is a natural treatment system that does not need energy to clean water. It also traps the foul odour below the wetland bed and treats sewage in a continuous process once the wastewater is released into the wetland beds,” said Professor Shyam Asolekar, who is heading the pilot project on campus.

A CW acts as a biological filter that removes organic matter, nitrogen, pathogen and fecal coliform from the sewage with the help of aerobic reactions. The research project, Saph Pani, costing over Rs 2 crore is being carried out by the Centre for Environmental Science and Engineering (CESE), IIT-B. It is being co-funded by the European Commission and IIT-B with a focus on enhancing natural wastewater treatment systems in India.

The first pilot-scale CW research facility is being built on half an acre area adjoining sewage receiving-cum-pumping sump on IIT-B campus. It will treat wastewater generated by about 250 students. The plant will treat nearly 100 litres sewage per person per day. The other two research stations will be located near the Student Activity Centre and the Devi Temple inside the IIT-B campus.

“The purified water can be used for gardening, flushing toilets, washing clothes and even irrigation. Our research will focus on how such desirable results can be obtained from the natural treatment system. The first plant will be fully functional by March next year,” added Professor Asolekar.
UGC to ease rules to appoint VCs

TIMES NEWS NETWORK

Chennai: The University Grants Commission (UGC) has decided to relax norms for selection of vice-chancellors in state universities. UGC chairman Ved Prakash said on Sunday the move followed requests from several state governments to ease the standards.

There has been speculation for more than a month now that selection norms would be relaxed, Prakash said. From now, selection norms prescribed by the UGC will not be mandatory for the state-run universities. Speaking at the 75th convocation of Dakshina Bharat Hindi Prachar Sabha Madras in Chennai, he said that it was the responsibility of the state to maintain quality and transparency in the VC-selection process.

The present UGC norms insist that a vice-chancellor candidate should be an academician with a minimum of ten years experience as professor in a university system or 10 years of experience in an equivalent position in a reputed research and/or academic adminis-

IGNOU's UG, PG courses for hearing impaired

New Delhi: The Indian Sign Language Research and Training Centre (ISLRTC), IGNOU, will start undergraduate and postgraduate programmes along with BEd from January 2013. These will be the first of its kind of programme by any Indian varsity for hearing impaired.

At present, the country needs around four lakh sign language experts. IGNOU announced the launch of these programmes on Sunday.

The programmes are open for hearing impaired aspirants. Gopinath Pradhan, vice chancellor, IGNOU, said, “While introducing such programmes, we are aiming to improve the skills of the hearing impaired community in the country and also uplifting a particular section in the society by imparting training to them.”

Manash Pratim Gohain

trative organization. With the recent move, these norms would no more be mandatory.
UGC wants you to know your rights

By Ritika Chopra in New Delhi

Not too many students are aware of their 'right' to access answer scripts after the declaration of results, or their entitlement to get their degree within 180 days after the results.

Starting next academic session, such little-known rights will be disclosed to all university and college freshers through a charter of student entitlements prepared by the University Grants Commission (UGC). This effort is UGC's bid to democratise higher education and ensure that students make their teachers and the institute accountable. The obligations mentioned in the document will apply to all colleges and universities and will have to be printed in their prospectus.

For instance, the charter allows students to demand information, such as the legal status of the institute, its affiliation, physical assets and amenities, in order to make an informed choice at the time of admission. The UGC has gone to the extent of allowing students to access the minutes of the meetings of organisations such as the academic and executive council, and enquire about the sources of income and the financial situation of the institute.

Institutes to get final draft of guidelines

Under the charter, students are entitled to get their degrees within 180 days of the declaration of results, and research scholars have the right to get their dissertation/thesis evaluated within 180 days of its submission. The document lays down student entitlements (see box) under seven heads — admission, quality of education, fee and financial aid, infrastructure and service, discrimination, representation and grievance redressal.

The document also empowers students to approach the grievance redressal committee or the ombudsman, if any of these obligations are not fulfilled. In case of persistent violation, the students can approach the UGC, a UGC official said.

So if the college or university does not fulfil the obligation of holding regular classes or utilise the specified number of teaching days, students can approach the ombudsman or the UGC against the institute's administration. The basic objective is to curb existing student entitlements from different UGC regulations, add a few new rights, and provide an all-in-one consolidated document.

I think this will make a difference as students will be able to get their grievances redressed with a sense of entitlement, UGC member Yogendra Yadav said.

Ankita Mishra, a second-year DU student, agrees: "Although we know that teachers are expected to teach for a specified number of hours, enforcing this is usually seen as the principal's or vice-chancellor's duty. But if this is also made a student right, even we can ensure this obligation is fulfilled.

The final draft of the guidelines on student entitlements still awaits comments of UGC members and will be dispatched to all UGC-recognised institutes.

**LITTLE KNOWN RIGHTS**

- Presence of qualified teachers, utilisation of specified number of teaching days & contact hours for each course
- Know the minutes of the meetings of organisations like the academic and executive council, and the sources of income and financial situation of the institute
- Know the legal status of the institute, its affiliation, accreditation rating, physical assets & amenities
- Entitled to get copy of answer scripts after results
- To be awarded a degree within 180 days of the declaration of results. A research scholar is entitled to the evaluation of his/her research dissertation/thesis within 180 days of its submission
- Rights to be disclosed to all freshers
Hybrid course to begin in 2013

Delhi University (DU) and Jamia Millia Islamia (JMI) will be offering a joint degree programme from January next year. Vatsala Shringi reports

A joint degree programme initiated by Delhi University and Jamia Millia Islamia (JMI) under the Meta university concept is going to start next year. The programme — MA in mathematics and mass communication — approved by the academic councils of both the universities is ready to be launched. The course is set to commence from January 3, 2013, with the jointly designed entrance test to be held on December 2 of the current academic session.

SM Sajid, registrar, Jamia Millia Islamia says, "We have been discussing the modalities of the course with DU authorities. The entrance test is scheduled for December 2, and the course is to commence from January." According to DU officials, the details of the course including the timetables, etc., are being worked out, so that a formal announcement could be made for inviting applications for the entrance test. The classes will be jointly held on both campuses. While JMI will be taking care of the mass communication course, DU will be conducting classes for mathematics. The course is equivalent to MSc in mathematics education.

"Committees from both the universities are meeting to finalise the details of the course. A series of dates including submission of applications, etc., have to be fixed for the programme to begin. The formal schedule will be announced very soon," says Malashri Lal, dean, academic activities and projects, DU. She further says that it is an interesting course, with 20 seats to begin with. However, students who have already enrolled in a Master's programme either at DU or Jami are also eligible to apply. Also, students who have a background in mathematics or who have cleared two math papers of 100 marks or those who have had one subject as math in their graduation would be eligible for the course. The fee for the course will be approximately Rs 5,000.

‘Diamond’ scientist feels India has space for astronomy

Vanita Srivastava

NEW DELHI: Indian scientist at Yale University, Dr Nikku Madhusudhan, who recently led a team of scientists which suggested that a rocky planet orbiting a nearby star is a diamond planet, feels that astronomical science in India is vibrant and has sufficient scope for youngsters.

"India is very actively participating in several large collaborations in astronomy. So there is ample scope for young people to participate in these new ventures in India," he said.

On the other hand, there are some areas in astronomy where India is yet to catch up, such as extrasolar planets," Madhusudhan told HT.

Explaining his finding, he said: "This is our first glimpse of a rocky world with a fundamentally different chemistry from earth. The surface of this planet is likely covered in graphite and diamond rather than water and granite."

The planet — called 55 Cancri e — has a radius twice earth’s, and a mass eight times greater, making it a "super-Earth."

The 32-year-old former mining engineer from IIT-BHU said he always wanted to become a scientist. "Astronomy may not have been in my mind, but I have always wanted to be a scientist."

After completing his engineering, he did his MS at the Research Laboratory of

Dr Nikku Madhusudhan

Electronics at MIT, followed by a PhD in physics at MIT. Following this, he pursued two one-year post-doctoral positions at MIT and Princeton University before moving to the Yale University where he is working as a post-doctoral fellow.

Observing that there was a somewhat higher level of societal acceptance and more active efforts by the government and media in promoting science in some Western countries, Madhusudhan said: "Young people in India tend to be highly motivated to pursue professional degrees such as engineering, medicine, and business rather than basic sciences due to societal pressure. I think the government, corporations, and media can play a greater role in charging this scene."
Bogus varsities prey on Indian students

NEW DELHI: Three years ago, Harish Kumar left his Jalandhar home for a Canadian MBA degree. Two years after graduating from University Canada West (UCW) with an MBA in hand and $20,000 Canadian dollars ($1,078,150) in debt, he stands behind a Vancouver pizzeria counter, taking orders from customers.

“My degree was useless,” says Kumar (name changed). “I feel cheated.”

He is not alone. With just eight classrooms on one floor of a corporate building in downtown Vancouver, UCW is owned by the Eminata for-profit group of educational institutions.

Group chairman Peter Chung was convicted in 1993 in California for defrauding students at a computer school he ran. And though UCW is recognized by the provincial government, more than 30 students, graduates and teachers interviewed by HT over the phone and email alleged that it is a university only in name - charges that the varsity has denied.

Some graduates are working

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Bogus varsities play on Indians

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But UCW is merely a symptom of a widespread disease.

Government and education advisers estimate that thousands of Indians get trapped in educational institutions in Canada, US, UK and Australia every year. In cases like California-based Tri Valley University (2010) and Herguan University (2012) - both run from single buildings like UCW - Indian students risk facing criminal cases. In the London Metropolitan University case (2012), students faced the threat of deportation.

A complex web of dubious education agents, poor monitoring, a carefully crafted strategy and weak regulations allow such institutions to flourish. These varsities often admit a large numbers of Indians.

Indians form 10-15% of students at top western universities even in popular courses. But at Tri Valley University and Herguan University, over 90% students are Indian. They also constitute 90% of UCW's Vancouver classroom students, say teachers and students.

Tie-ups with reputed Indian institutions help varsities build credibility. In 2010, UCW signed an MoU with Jawaharlal Nehru Technical University Kakinada (JNTUK) for an MBA exchange programme.

But when JNTUK vice-chancellor G Tulasi Raman Das - who took over in 2011 - tried to implement the agreement, he could not. “I tried calling, emailing and faxing them many times,” says Das. “I got no response.”

Ben Thapa, UCW's regional director for international marketing, claims varsity officials tried contacting JNTUK in 2011 but were unable to. But Das has convinced his students to complete their MBAs at JNTUK, instead of going to the “dubious” UCW.
Making education meaningful

OPEN BOOK EXAMS If the CBSE's plan of holding open book exams works out, it has the scope to bring about far reaching, and much needed, reforms in high school education, says Vatsala Vedantam.

The Central Board of Secondary Education (CBSE) plans to introduce open book examinations for Class X and XII from next year. The IRIS ministry has initiated the process to make high school education more student-friendly. So far, so good. If this plan works, and teachers across the country accept it too, it will be a far reaching reform. I have mentioned teachers in particular, because this new system will impose greater responsibility on them to make the classroom environment also more student-friendly. No more "finishing the portions" in time for the exams. No more lecturing down to students from a platform. In fact, no more lecturing at all. They have to make sure that their words have grasped the essentials of the subject, because there is no question of learning something by heart, and regurgitating the same in the exam hall. An open book exam expects something more tangible from students and teachers.

The name conjures visions of examinations being a cake walk hereafter! The prospect of taking a test into the exam hall, and looking up all the answers with no inspector peeping over your shoulder, is too good to be true. Yes, provided you know what to look for, where to find it and what to make out of it. If this is mere "copying" with official sanction, what does one copy? It is not like that. The student should know all about the friendly teacher who wrote all the questions on the blackboard, and is familiar with all the answers from the blackboard. At the same time, it is assumed that the student has read and understood the prescribed texts in the first place. There are no quick or easy answers just because she has the textbook open before her in the exam hall. Unlike the known where to find the correct answer -- which means being very familiar with the text -- the open book is in front of her will have no significance.

An open book exam also means more commitment from teachers and students. Firstly, the question paper format itself will have to change. It must no longer test the memorising powers, but challenge the student to think, analyse and come to logical conclusions. For example, if the examiner merely asks a student to quote the opening lines of Shakespeare's "Hamlet," the open book comes in handy. But, if asked to analyse and explain the conflict in Hamlet's mind, not even the complete works of Shakespeare will help! The same will be true for any other subject. An open book does not mean transferring the information from the book to the answer sheet. It means filtering the information in the book by reading, examining, questioning and finally arriving at a conclusive answer. Each student's conclusion may differ, depending on how she saw the picture. This makes the examiner's task much more difficult, as there are no "right" answers or "wrong" answers. The open book exam not only tests a student's ability to analyse, rationalise and come up with a creative answer. It also tests the examiner's capability to recognize his ward's mental and creative faculties -- which means that the examiner must also have the ability to judge the merit of a student in this type of examination.

Expect major changes
So, if implemented correctly, the open book type of exam will change the very face of teaching and examining in schools. The classroom will have to undergo major changes too. No more dictating some obsolete notes or writing information on the blackboard for students to copy and memorise. No more marking it right only when the student has repeated all this faultlessly in the class tests and exams. No more striking out passages which the teacher did not dictate in the classroom, or marking it all wrong when the student has come up with an original answer. The open book format is to encourage original thinking in young minds. The teacher must encourage high school students, who are on the threshold of higher learning, to think, question, analyse and then come to a conclusion. In this system, there will be greater scope for library study, independent project work and innovative teaching and learning methods.

A child's schooling need not be a drab or fearful experience. There is no joy in exploring and learning that, at the end of it all, the exam should become a means of testing whether the TEACHER has succeeded in making it so. This is the reason I mention the teachers' role in making this proposal come true. The open book examination will become relevant only when our teaching methods undergo a sea change. It will succeed when teachers recognize that education is a process of learning how to think for oneself. That ancient story from the Upanishads where the teacher utters one syllable to the pupil and asks him to return after thinking about it for a whole year, describes education in a nutshell. It is a simple process of teaching a student to contemplate rather than learn quickly. It is also a process where the teacher encourages the desire to learn so that a student asks for more. The present day system of "teaching" students inside and outside the classroom to ensure a first class in the final examination is not education at all. It is drudgery that kills rather than kindles a love for learning. The school must become a place where minds are shaped, personalities are developed and thoughts are stimulated. This truth must be recognised by all educators.
Use of cell phone for more than 30 minutes a day is dangerous: expert

Neha Arora
letterschd@hindustantimes.com

JALANDHAR: If you attend calls for more than 30 minutes a day on your mobile phone, it is dangerous for your health, said Amarjot Dhami, physics lecturer at Lovely Professional University (LPU), who is doing research on the ill-effects of cell phone radiations on human tissues.

An IIT Kharagpur alumna, Dhami, along with one of her students, Deepak Basandrai, presented her papers at 3rd Bhartiya Vigyan Sammelan held at LPU.

Talking to Hindustan Times, she said that the duration of a call should not be more than 6 minutes as cell phone radiations have several adverse effects especially on eyes.

“The radiations associated with mobile phones and mobile towers are potent health hazard. Eyes are more sensitive to these radiations due to thinner tissues. The ill-effects of the radiations gets amplified when used inside a car as the car’s body doesn’t radiations to dissipate. The radiations are 313% more when bluetooth is on,” Dhami said.

“The radiation from the cell phones can heat up the tissues, leading to some kind of tumor. The studies also indicate that cell phone radiations can be one of the causes behind increasing number of cataract cases,” she said, adding that one could also suffer from high blood pressure, brain tumor and headache.
A new era for NASA dawns

KENNETH CHANG

A ROCKET launching Sunday night inaugurated a new era for NASA in which private companies ferry people and supplies to the International Space Station.

The company behind this effort is Space Exploration Technologies of Hawthorne, California—SpaceX, for short—which launched its Falcon 9 rocket at 8:35 p.m. Eastern time from Cape Canaveral, Florida.

The rocket is carrying a cargo-only capsule called Dragon that contains about 1,000 pounds of food, clothing, equipment and science experiments, including 23 designed and built by students. The cargo also includes a freezer that can store laboratory samples at temperatures as low as 300 degrees below zero. The goods are scheduled to reach the space station Wednesday, and the capsule would stay docked for a few weeks.

"It actually marks the beginning of true commercial spaceflight to take cargo to the International Space Station for us," Maj. Gen. Charles F. Bolden Jr., the NASA administrator, said during a video chat on Friday.

SpaceX successfully launched a capsule to the space station in a test flight in May, but Sunday's launch is the first of a dozen flights under a $1.6 billion contract with NASA.

The student projects come through a program run by NanoRacks, a company that arranges for experiments to fly to the space station, and the National Center for Earth and Space Science Education. They include one from middle school students in Santa Monica, California, who want to know whether Silly Putty—a non-Newtonian dilatant fluid, in scientific terms—has different properties in the weightlessness of space than it does on Earth.

Under the plans, the SpaceX spacecraft will return to Earth near the end of October and splash down about 250 miles off the coast of Southern California. A successful mission would restore some of NASA's ability to bring back items from the space station, which it lost with the termination of the space shuttle program last year.

A second company, the Orbital Sciences Corp., is preparing its rocket for a test flight this year from Wallops Island, Virginia, and hopes to begin cargo runs to the space station next year.

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