हताशा की ओर धकेलती तकनीकी शिख्रा

आईआईटी प्रोफेसर्स की आत्महत्या के कारण कोई फर्जी बात कह रहे हैं, जिसमें हमारी सरकारी सुनने को ही राजी नहीं है।

सरकार ने जितने बार बताया है कि जो कुछ भी नभाता है उसे भी लेकर जाना चाहिए।

सरकार को राज्य के मुख्यमंत्री भी याद करना है कि जो कुछ भी हार नहीं है उसे भी लेकर जाना चाहिए।

मुकेश का दोष

सरकार की ओर धकेलती तकनीकी शिख्रा की आत्महत्या के कारण कोई फर्जी बात कह रहे हैं, जिसमें हमारी सरकारी सुनने को ही राजी नहीं है।

सरकार को राज्य के मुख्यमंत्री भी याद करना है कि जो कुछ भी हार नहीं है उसे भी लेकर जाना चाहिए।

हताशा की ओर धकेलती तकनीकी शिख्रा

आईआईटी प्रोफेसर्स की आत्महत्या के कारण कोई फर्जी बात कह रहे हैं, जिसमें हमारी सरकारी सुनने को ही राजी नहीं है।

सरकार को राज्य के मुख्यमंत्री भी याद करना है कि जो कुछ भी हार नहीं है उसे भी लेकर जाना चाहिए।

सरकार को राज्य के मुख्यमंत्री भी याद करना है कि जो कुछ भी हार नहीं है उसे भी लेकर जाना चाहिए।
Common entrance launched for AICTE-approved institutes

About 3000-4000 institutes to be covered by CMAT

HT Education Correspondent
hteducation@hindustantimes.com

Registration has started for the first-ever Common Management Admission Test (CMAT) 2012 conducted by the All India Council for Technical Education (AICTE). The three-hour test will be conducted from February 20-28, 2012, in 61 cities.

Following a Supreme Court order, the AICTE launched the national test to replace state-level exams and reduce the pressure of students writing multiple exams. CMAT scores are to be used for entry to post-graduate management courses both at degree and diploma levels in AICTE-approved institutions/university departments. There are about 4000 AICTE-approved institutions for MBA/PGDBM, for four lakh seats, in the country.

“We expect all AICTE-approved institutes will take it,” says KP Isaac, member secretary, AICTE. “Most states will not have their entrance examinations, so institutes would accept CMAT scores. He expected 3000-4000 institutes to be covered by the new test.

Since this is the first year of the test, it is learnt that institutions can accept the scores from one of the following five tests – CAT, MAT, GMAT of the US and CMAT in this admission cycle.

According to Isaac, the CMAT will be mandatory for institutes to consider for admissions in 2013. He also says that now as well as even from 2013, the CMAT will exclude about 100-200 institutions, such as the IIMs, business schools of IITs and a number of Central and state universities, including the University of Delhi. “All those which are not governed by AICTE will continue with their tests,” says Isaac.

Minority institutions will conduct admissions as per the provision available for such categories.
Internet is not free of restrictions

There has recently been some controversy regarding the contents of some social network sites. In this connection I wish to state that I have carefully examined and perused the contents, pictorial and other, regarding the objectionable material. The pictures and other contents show religious figures of certain communities in a highly offensive and even pornographic manner. Such material is bound to create religious hatred and lead to most undesirable consequences.

It must be realised that India is a country of great diversity. We have a large number of religions, castes, languages, ethnic groups, etc. The only way our country can be held together is by giving equal respect to all communities. The media and all persons should take care that the religious and other sentiments of any community should not be hurt. The pictures I have seen not only hurt the religious sentiments of members of certain religious communities, but are also outrageous, inflammatory and egregious, and are bound to disturb peace and result in serious law and order problems.

I have said several times earlier that while I strongly support freedom of the media, no freedom is absolute, and all freedoms are subject to reasonable restrictions in the public interest. Thus, Article 19(1)(a) of the Constitution which provides for freedom of the media, is subject to Article 19 (2) which states that restrictions can be placed on this freedom in the interest of public order, decency and morality.

Section 153A of the Indian Penal Code makes it a criminal offence to promote, or attempt to promote disharmony, feelings of enmity or hatred or ill-will between different religious communities or groups, or do an act which is prejudicial to the maintenance of harmony between different religious groups or communities, and which is likely to disturb the public tranquility.

I have carefully perused the material in question and am of the opinion that there can be no manner of doubt that they attract Section 153A of the Indian Penal Code. Hence I am of the view that such offensive material should be removed or filtered out from the social network sites on the Internet immediately.

Markandey Katju
Chairman
Press Council of India
New Delhi
La Trobe inks MoUs with leading Indian institutes

DTU, IIT-Madras, Presidency College look at tie-ups

In a move to strengthen its presence in India, La Trobe University Australia, signed MoUs (memorandum of understanding) with major institutes like Delhi Technological University, IIT Madras, Presidency College and Bengaluru University.

Talking about the partnerships, Professor John Rosenberg says, "La Trobe University looks forward to welcoming more Indian students and building strong research collaborations with Indian institutions. The partnership will lead to collaborative research, joint student projects, student and staff exchange, study tour, internships, and articulation opportunities. Discussions are on for joint degree programmes in undergraduate studies and joint degree programmes in postgraduate studies."

Talking about the Melbourne campus, Prof Rosenberg said, "It is the second largest university campus in Australia. The university has been teaching Indian history, Sanskrit and Hindi since its inception in 1967 and also has one of the largest libraries housing books and manuscripts on Indian history and language in Australia. The University Library was opened by the then Indian prime minister Indira Gandhi in 1968."

Speaking on the collaboration with IIT Madras, he added, "The IIT-La Trobe collaboration is an extremely important one. This relationship could grow bigger with our other institutional partners, including the prestigious National University of Singapore (NUS), joining for future collaborative projects (NUS is a partner university for both La Trobe and IIT). The focus of the relationship will be to develop collaborative research projects, joint PhD opportunities etc."

Professor Rosenberg also announced a scholarship worth $5,000 for an IIT student to undertake an internship program at La Trobe University. The selected student could use this scholarship for travel and living expenses.
Pioneer ND 14.12.2011 P-10

A new IIM?

ROHIT BANSAL

When our Mecca of management recognised its very best, I thought it'll be headline news. I was wrong. It's been three days since 40 Golden Jubilee Distinguished Alumni Awards were given by IIM Ahmedabad, but try asking for all the names. News reports tell us Harsha Bhogle, Malika Sarabhai, Sanjeev "Naakhi" Bikhchandani, SB "Sintex" Dangaych, and Chandrika Varma's Tanjore made the cut. Through private channels I know that Deepak 'make my trip' Kalra, Vinayak Chatterjee of Feedback Ventures, Ashok Alexander and Ajay Satterthwaite Buna were honoured. Calls to the alumni cell resulted in a convivial chain mail, one even requesting for my name as per certificate. An unusually helpful man, one Haribaran, lobbed the ball to the Dean of Placements and Alumni Relations Ataca Ghosh, who was away. Finally, I ambushed one of the distinguished awardees. No fester till been given. All that the awardee saw was a hurried power point slide on each winter. Speeches added up to more than a few hours. But trust IIM-A to be IIM-A. The power point has just landed from Prof Ghosh: http://www.indiabest.com/golden jubilees/images/distin-
guished-alumni-final.ppt.

Cheers, sir!

At the risk of stamping on some IIM egos (and annoying a dearer entreaty into our family) the style is somewhat different in Hyderabad's Indian School of Business (ISB). Like Avis, versus Hertz, ISB is known as the second best: The Financial Times says IIM-A is 11th and ISB is 12th. Perhaps, that's why ISB tries much harder!

I was at ISB ten years and a few hours after Atal Bihari Vajpayee inaugurated a 260-acres expense of bare rock and ravine in Gachibowli. A visiting IAF commander was negotiating an air pocket with hisslides. A child decided to challenge him. The mother made no attempt to vacate the Khema Auditorium. To my surprise, the host audience looked indulgent. I wondered, as Dean Ajit Ranagekar, an IIM-A alumnus, explained "26 per cent of our students are married. They have families on campus. So, we not only allow (towards) children (in), we passionately encourage the children to express themselves...and as you noticed, they give feedback on what were saying!"

A B-school designed to house families for the entire year of its flagship management programme (ISB has a Spouses and Family Association, a special child's section in the library, and a day-care facility) attracts experienced applicants. Those practicing managers, their average work experience being 5 years plus, have insight to share in class. In comparison, work ex is relatively slim for the 2,750 students (India's 13 IIMs select annually. That's because IIMs select largely on the basis of scores in the Common Admission Test (CAT), arguably one of the toughest tests on the planet. CAT penalizes non-mathematical applicants heavi-

ly, more so in each progressive wave. So mint-fresh IITians swamp the selections. At IIM Roholz, where I recently spoke, 97 per cent of the inaugural batch of 48 were engineers, just four having 'work ex' of over three years. 77 per cent had less than 12 months of work life exposure. Quant jocks are great. It's neat that their math is so overwhelming (and their experience so little) that education here takes a number-crunching form.

Unlike ISB, the IIMs are under RTI. So, the salient option for the CAT question is to script the most difficult test and then skim the top one per cent for the first 51 per cent seats. Being privately owned, ISB enjoys flexibility. In the present class of 2012 of 373, there are 63.5% between 'rocket scientists and poets', the latter being in-house code for non-engineers. The school uses the Graduate Management Aptitude Test (GMAT) to draw a floor level, but the ultimate criteria is to recruit variety. A visible manifestation is ladies one seat in the class. The 2012 ISB class has 165 women, a healthy 28 per cent. In contrast, among my 48 friends in IIM Roholz, there are just three ladies. IIM-A has a ratio of 45:55. Only IIM-Kochbude has been selecting around 30 per cent women.

Illustratively, ISB has selected a decorated UN peace keeper for his real-life perspective. Not too long back, a very senior lady entrepreneur was a smash hit in the class not just for her sari and keds, but her wisdom too. IIMs, on the other hand, can't look at anyone outside the first 50 per cent on the merit list, the CAT score being the more determining factor. By law, they need to reserve up to 49 per cent of total seats for SCs, STs and OBCs. The entry criteria for these disadvantaged citizens is lower, with its uninitiated impact, especially when combined with low work ex. ISB seeks no affiliation, and thus has zero reservation. In fact, it features in an All India Council of Technical Education (AICTE) blacklist!

Flexible matrices help. In ISB this year, 300 student volunteers assisted the admissions committee prepare a long list from the raft of applications, reading through each essay on criteria such as coherence of career plan. Vijayalakshmi Bommaraju, before ISB an Infosys alumnus in the US, saw someone with two years of 'work ex' and a stated plan to be a CFO right after ISB. The applicant's GMAT counted for less than a competing application with a more logical career plan and a lower score of say, 700. The IIMs, even IIM-A, need to pay heed. A reform agenda authored by Murthy's RG Bhargava needs a reboot.

The writer is CEO and Co-founder, 3rd Strategy Group, Berthoud & Sources Consulting (email admin@3rdstrategy.com)
German scientists have built an engine that may just be put to work in biological systems, says s ananthanarayanan

WHILE it may be true that small is beautiful, function does not always stay unchanged when dimensions are reduced. This is particularly true about heat engines, like the steam or petrol ones. These engines work because of the force of molecules of a hot gas and the system breaks down when the moving parts are reduced to a size comparable with the movement spans of the molecules. Yet a pair of researchers at the University of Stuttgart and the Max-Planck Institute of Quantum Optics in the same city, report in the journal Nature that they have found a heat engine of the size of microns is able to work and may show the way for energy efficient machines at these dimensions.

This is a device that changes heat energy into mechanical energy. The earliest instances used steam generated by boiling water to blow things, in the place of wind, and, as the simplest developments were mechanisms that could only pump water, not versatile methods to work different kinds of machines. The early steam engines that could do this changed the face of industry, which could now be located away from flow of water as sources of motive power, and brought in the industrial revolution. While the steam engine uses heat from outside to heat the steam and drive the engines are "internal combustion" ones, it is the fuel itself that pushes the pistons and makes the motor go.

But steam engines can use any kind of fuel and are also able to work at high altitudes where other engines have issues. The principle of the heat engine is nicely described in the Stirling engine, which was developed as an air engine in 1816, as an improvement over the steam engine. The Stirling engine has two cylinders — one where the gas is heated and drives the piston to a flywheel, and the other where the gas goes to the piston via the flywheel. The complementary motion of the two pistons works the flywheel, which can be connected back to the cylinder or to a mill, a power Jonson's locomotive wheel.

The principle is that when the first cylinder is heated, the gas molecules start moving faster and push hard against the piston. This drives the flywheel. This also causes the gas to expand and then cool. In fact, it is in this cooling that the heat energy that was added to the gas is transferred as mechanical energy to the flywheel. The heat engine is random motion of molecules, in all directions. The rapid formation of the cylinder in the unidirectional motion of the piston convert the molecular motion of millions of molecules into the motion of the flywheel.

The system works smoothly because the number of molecules that strike the surface of the piston in a second is so exceedingly large that the piston feels a continuous thrust, not individual impacts. Reduce the size of the engine, the size of the piston, and the number of molecules that strike the piston. When the size of the piston goes down to molecular dimensions, then the numbers striking are no longer so large and the piston would actually receive sporadic impacts. In fact, at some moments it may be an atmospheric molecule that pushes the piston back, instead of the other way around! The result is that the smooth back and forth motion, in step with the heating and cooling cycle, is disturbed and the engine doesn't work. Quite apart from the difficulty of manufacturing components at the size of microns, this nature of the heat engine has been the limitation in revolution of the engine size.

Stuttgart experiment
But despite this difficulty— that different laws of physics are important at small dimensions — the Stuttgart team found that the principle of the heat engine stayed unchanged. They successfully decreased the size of the essential parts of a heat engine, such as the working gas and piston, to only a few micrometers and then assembled them to a "machine," says Valentin Bilecke, a member of the team. The arrangement, with a micrometer size head as working substance, can be observed in a microscope, and is itself moved by molecules of water, halfway to a heat engine that directly uses molecular motion.

Despite the intermediary of the bead, the machine works in fits and starts, sometimes coming to a stop when the movement of the bead goes out of step. But on the average, the machine is found to work at the same efficiency in converting heat energy into mechanical energy as a normal heat engine. This was not necessarily to be expected, because the machine is so small that its motion is hindered by microscopic pressures, which are of no consequence in the macro-world," says Clemens Heidrich, professor at the University of Stuttgart and the other member of the team.

Such working fits and starts in normal life, as in the case of a "pumping" engine, would be unacceptable to the everyday motorist. But in the present case, what is being done is to show that the principle of the heat engine stays unchanged at small dimensions, despite limitations of implementation. The normal heat engine, it may be, is no achiever in efficiency. Even in principle, the efficiency is limited by the higher and lower temperatures involved. If this limit is removed, the heat engine is limited by the materials available and the lower temperature cannot even come down to the ambient, it has to be not below that of condensing steam. Steam engines, or even diesel engines, are thus not more than 20-25 per cent in energy efficiency, much of the waste being in the form of "low grade heat" of the exhaust gas or condensed steam. Arrangements are thus attempted to make use of this "waste" heat so that overall efficiency improves. One method is to use the heat for domestic heating and there are ways to generate electricity from low-grade heat.

But the demand for such secondary output of the system usually cannot match the level of "waste" heat generated in large plants, where this energy has to be lost in cooling towers or in raising the temperature of adjoining water courses.

But the efficiency can be higher with a series of small heat engines and since the world became conscious of the energy crisis, there has been much work done to develop more fuel-efficient alternatives. In this context, a working, miniaturized heat engine may possess very high levels of efficiency, once implemented. The Stuttgart experiment shows that the simple heat engine is workable at micro dimensions, which would enable all kinds of applications. The writer can be contacted at simplescience@gmail.com

UPS in the human body?

MECHANICAL devices, like everyday machines, are rarely found in the natural world. The principle of the lever, of course, is there in the movement of limbs for grasping and all animal movement, but direct conversion of energy in the mechanical sense is not found. An only instance may be of the "helicopter seeds" of the ash tree (Fraxinus excelsior), which are disseminated by the wind. The seed has a screw-like wing which gives the slightest breeze sets spinning, giving the seed a "lift" that carries it long distances.

The devices placed within the body by surgical means are limited to "pacemakers" that deliver electrical signals or some that release a controlled dose of drugs. The creation of miniature motors or engines that can work and do mechanical work could function as pumps and actually drive metabolic processes where natural mechanisms have
CONTINUING SEARCH

Scientists fail to pin down ‘god particle’

By Robert Evans
feedback@livemint.com

International scientists on Tuesday said they had found signs of the Higgs boson, an elementary particle believed to have played a vital role in the creation of the universe after the Big Bang.

Scientists at the CERN physics research centre near Geneva, however, said they had found no conclusive proof of the existence of the particle, which, according to prevailing theories of physics, gives everything in the universe its mass.

“If the Higgs observation is confirmed...this really will be one of the discoveries of the century,” said Themis Bowcock, a professor of particle physics at Britain’s Liverpool University. “Physicists will have uncovered a keystone in the make-up of the universe...whose influence we see and feel every day of our lives.”

The leaders of two experiments, ALTAS and CMS, revealed their findings to a packed seminar at CERN, where they have tried to find traces of the elusive boson by smashing particles together in the Large Hadron Collider at high speed.

“Both experiments have the signals pointing in essentially the same direction,” said Oliver Buchmueller, a senior physicist on CMS. “It seems that both Atlas and us have found the signals are at the same mass level. That is obviously very important.”

Fabiola Gianotti, the scientist in charge of the ATLAS experiment, said ALTAS had narrowed the search to a signal centred at around 126 GeV (giga electron volts), which would be compatible with the expected strength of a Standard Model Higgs.

“I think it would be extremely kind of the Higgs boson to be here,” she told a seminar to discuss the findings. “But it is too early” for final conclusions, she said. “More studies and more data are needed. The next few months will be very exciting... I don’t know what the conclusions will be.”

Under what is known as the Standard Model of Physics, the boson, named after British physicist Peter Higgs, is posited to have been the agent that gave mass and energy to matter after the Big Bang creation of the universe 13.7 billion years ago.

While its discovery will cement current knowledge about particles such as electrons and photons, results of work at CERN could also prove it does not exist. Such an outcome would undermine the foundations of accepted theories of the make-up of the universe.

“If the first inklings of the Higgs boson are confirmed, then this is just the start of the adventure to unlock the secrets of the fundamental constituents of the Universe,” said Stephen Haywood, head of the Atlas Group at the STFC Rutherford Appleton Laboratory.
If confirmed, it will be the key to explaining mysteries of the universe

Scientists close in on the ‘God Particle’

Geneva, Dec. 12: Physicists said Tuesday that they had narrowed the search for the elusive sub-atomic Higgs boson particle that would confirm the way science describes the universe.

Experiments at Europe’s giant atom smashers have “reduced the window where scientists think they will find the Higgs boson,” also known as the “God Particle,” said Bruno Mansoule, a researcher at the European Organisation for Nuclear Research (CERN).

The Higgs boson is the missing link in the so-called Standard Model of physics, which explains how the basic building blocks of all matter fit together. Its existence — if confirmed — would explain in a single stroke the mystery of what gives this invisible constellation of particles mass.

Such a discovery would rank in importance with major breakthroughs of the last century, going back to Einstein’s first formulation of quantum physics.

For now, however, the Higgs boson exists only in theory. If it turns out to be a mirage, it would force scientists back to the drawing board to re-write the textbook of particle physics.

CERN reported Tuesday the midpoint results from two separate experiments that independently arrived at the same conclusion, pointing to activity within a certain range of mass that would be consistent with the Higgs boson.

The webcast presentation was made before several hundred scientists in a laboratory charged with excitement, punctuated with applause.

Taken together, the results provide “tantalising hints” that the sought-after particle is hiding inside a narrow range of mass, CERN said in a statement.

“It’s too early to draw definitive conclusions, we need more data,” said Fabiola Gianotti, head of the ATLAS experiment.

“But we have established a solid foundation for passionately exciting months ahead,” she said, adding that a definitive answer was expected by 12 months.

British physicist Peter Higgs conceived the idea of the boson — a particle that carries force — in the mid-1960s to explain why much of matter produced by the Big Bang has mass, and can therefore coalesce. Now 82, he is seen as a Nobel Prize contender.

— AFP, Reuters

‘Tantalizing hints’ of God particle recorded

No Direct Proof Yet, But Data From New Tests Narrows Down Search For Basic Building Block Of The Universe

Physicists will have to keep holding their breath a little while longer. Two teams of scientists sifting debris from high-energy proton collisions in the Large Hadron Collider (LHC) at CERN, the European Centre for Nuclear Research, said Thursday that they had recorded “tantalizing hints” — but only hints — of a long-sought subatomic particle known as the Higgs boson, whose existence is a key to explaining why there is mass in the universe.

It is likely to be another year, however, before they have enough data to say whether the elusive particle really exists, the scientists think.

The Higgs boson was postulated in 1964 by British physicist Peter Higgs as the agent that gives mass to matter in the chaos of the Big Bang 13.7 billion years ago, making possible the formation of stars and planets, and eventually the appearance of life.

Efforts since the mid-1990s to find the particle in the LHC’s Tevatron collider and the LHC’s predecessor at Cern, the LEP, and prove Higgs correct by smashing particles together and creating mini Big Bangs, have until now failed.

I think it would be extremely kind of the Higgs boson to be here... More studies and data are needed. We have not found it yet, we have not excluded it yet" — Fabiola Gianotti, director of the ATLAS experiment.

"Our results are not a discovery," she said. "The possibilities that might have been the Higgs boson are much diminished... We have not found it yet, we have not excluded it yet."
Ushering in change

The only varsity in the Capital to cater exclusively to the study of social sciences has a lot more to offer its students

Gursharan Kohli
Ag Editor, Hindustan Times

Two years ago, when Ashoka Kejriwal had to pick a college for her undergraduate studies, she was in a dilemma. Although Ambedkar University, Delhi (AUD) was not her first choice, Kejriwal felt she preferred it over Delhi University. "I was late in applying for DU admissions. AUD was very new at that time but after visiting the campus I was convinced that studying there was an equally good option. Now, after two years, I think I took a wise decision," says Kejriwal, who is pursuing a BA (Hons) with a major in economics.

The curriculum and teaching methodology at the varsity has impressed her immensely. AUD provides a welcoming environment where everyone is exposed to so many courses in the initial months that they get to choose a subject of their (real) choice. This not only widens the domain of learning, but also provides chances of exploring our interests further. The focus is on non-rote learning and the course content is very refined," she says.

Programmes: Though only three years old as a university, there are many accomplishments that its students and faculty are proud of. Eight MA programmes, seven BA programmes, apart from the MPhil and PhD programmes, are on offer through several schools.

The university has also been able to make a mark by institutionalising innovative practices in curricular design, an interdisciplinary approach, and a versatile assessment system, among other things. UDP, AUD is the only university in the Capital to cater exclusively to the study of humanities and social sciences. The university has various schools, which include those for Undergraduate Studies, Human Ecology, Human Studies, Culture and Creative Expressions, Design, Business, Public Policy and Social Responsibility, Educational Studies, law, Governance and Citizenship, and Liberal Studies. The unique aspect of undergraduate programmes at AUD is that there are multiple exit possibilities, enabling students to graduate after three years with a single major, or after four years with a double major.

Assessment depends both on continuous and end-of-course performance, with a focus on avoiding unnecessary stress on students. Tutorials and regular monitoring are considered imperative. The end-of-semester assessment in any course carries no more than 40% of the course grade. "This assessment component is in the form of written exams, term papers, term-end submission projects, viva voce or a combination of these. The progress of undergraduate students is tracked through a monitoring system involving senior postgraduate students and faculty acting as tutors and mentors," says Sadhvi Mehta, dean, School of Liberal Studies.

"It's a unique system. The Kashmiri Gate campus boasts of various labs with the latest computers and high-speed Internet. The university's website has details about the various courses, admissions, faculty, seminars, conferences and a section titled 'students zone'. "Clubs and fests: The varsity has several inter-college activities for students round the year where they interact with counterparts from DU and JNU. AUD also has an annual fest called AURicity in which several DU colleges take part. Students' say: 'I might have only been here for five months, but Ambedkar University, Delhi has allowed me to understand my interests. The set of foundational courses as well as obtaining a certain number of credits outside your majors gives you the opportunity to realise your actual potential,'" says Akhil Veeti, a first-semester student.


Statestimes ND 14/12/2011 P-11

Journey into uncharted voids

Voyager 1 is about to become the first man-made object to leave the Solar System, says steve connor

AFTER a voyage lasting more than 31 years, a spacecraft that has travelled farther than any man-made object on the verge of leaving the Solar System and entering the mysterious region of interstellar space where nothing terrestrial has gone before.

Scientists at the National Aeronautics and Space Administration and the Voyager 1 space probe, which has travelled about 11 billion miles since its launch in 1977, have entered the cosmic equivalent of the atmosphere, where high-energy solar wind streams down through the very edge of the Solar System. Voyager 1, launched within weeks of its twin probe, Voyager 2, was originally designed to explore Jupiter and Saturn. After making a series of important observations, such as active volcanoes on Jupiter’s moon Io and the interactions of Saturn’s rings, the mission was ended. Voyager 2 went on to explore the lunar landscapes of Uranus and Neptune.

However, long after the official planetary missions ended, both probes continued to drift through the faintest regions of the Solar System, while exchanging candid images captured through its Deep Space Network.

NASA scientists said they had set a new record — or, possibly, years in which a major event in the Solar System had been recorded. "We are very happy to announce that Voyager 1 is about to become the first interstellar object to leave the Solar System," said NASA's Allen Centeno.

The Voyager 1 spacecraft was launched by NASA in 1977 as part of the Voyager program, which aimed to study the outer planets of the Solar System. The spacecraft was designed to study Jupiter, Saturn, Uranus, and Neptune, and to return images of their moons and rings. Voyager 1 was the first spacecraft to leave the Solar System, and it is currently traveling through interstellar space.

The Voyager 1 spacecraft was launched by NASA in 1977 as part of the Voyager program, which aimed to study the outer planets of the Solar System. The spacecraft was designed to study Jupiter, Saturn, Uranus, and Neptune, and to return images of their moons and rings. Voyager 1 was the first spacecraft to leave the Solar System, and it is currently traveling through interstellar space.

The Voyager 1 spacecraft was launched by NASA in 1977 as part of the Voyager program, which aimed to study the outer planets of the Solar System. The spacecraft was designed to study Jupiter, Saturn, Uranus, and Neptune, and to return images of their moons and rings. Voyager 1 was the first spacecraft to leave the Solar System, and it is currently traveling through interstellar space.

The Voyager 1 spacecraft was launched by NASA in 1977 as part of the Voyager program, which aimed to study the outer planets of the Solar System. The spacecraft was designed to study Jupiter, Saturn, Uranus, and Neptune, and to return images of their moons and rings. Voyager 1 was the first spacecraft to leave the Solar System, and it is currently traveling through interstellar space.
Hazare phenomenon enters classroom discussion

Amolita Mukherjee
& Neha Panditkarna | Times

New Delhi: Anna Hazare’s crusade against corruption has united the Right, Left, and Centre in many ways. The Anna phenomenon has entered classroom discourse at educational institutions of all hues.

At Jawaharlal Nehru University, known for its leftist leanings, students want to pursue a PhD on Team Anna whereas schools like the Faculty of Management Studies (FMS), Delhi University, are studying the success of Brand Anna. Colleges in Kolkata, Mumbai and Mysore have also critiqued the movement.

“Students pursuing an MA in sociology have read presentations on the Anna phenomenon, followed by classroom debates and discussions. Some students want to do a PhD on India’s anti-corruption movement and how they have submitted their synopses,” said Armaan Khan, sociology professor at JNU. During seminar discussions on Hazare, students were allowed to express varied views on the phenomenon, he added.

Elsewhere in the city studies of marketing at FMS are through two elaborate lectures by an indigent food vendor. Anna had become a familiar face in the classrooms, discussing corruption was always at the back of people’s minds. We call it a trend. His competitors should have aligned themselves with the cause, instead of opposing Hazare. By doing so, they would have scored brownie points with consumers,” added Indira.

At Mumbai University, performance sociology classes have looked at the crusade against corruption while examining democracy and civil society in contemporary India and the manner in which Team Anna mobilized the middle-class. “It is too early to comment on the success of the movement, it is still being debated whether the phenomenon can be called a social movement,” said Ramya Kamal, sociology professor.

There is much debate on whether the Lokpal bill will be able to contain corruption. “Some felt it was a classroom discussion on whether a strong Lokpal will solve India’s problems. In a country plagued by widespread corruption, the Lokpal may itself turn corrupt,” said Amritpal, a PhD student at JNU.

At St Xavier’s College, Mumbai, the student council is organizing a public debate on corruption. The Anna phenomenon has also been criticized in the classroom. “While the movement has drawn attention to corruption, it is arguably a middle-class movement and does not tackle the great injustice being done to the poor. Those organizing the movement are middle-class and have mobilized people using the internet,” says Fr. Prasad Manimuthu, principal of St Xavier’s.

At Delhi University too, teachers have analyzed the role of the media in the movement. “We have looked at the role of the new media, such as Twitter and Facebook,” says Nirad Samadder, head of the sociology department at DU.

At Mysore University, it was impossible for the student to enter classroom discourse, as the students themselves were involved in the protests earlier this year. “My students did not attend college for a week as they were on the streets supporting Hazare,” says H.M. Vasantha, professor of sociology at the University of Mysore.

At IIT Delhi, students supported the campaign with protests and candlelight vigils on campus. “Student clubs organized lectures addressed by the likes of Arvind Arugam, an important part of Team Anna,” says Anand Poonia, a third-year student at IIT Delhi.

Anna in Academia

JNU | Students want to do a PhD on the Anna phenomenon. MA students have made classroom presentations on the movement.

DU | Studying role of media, especially new media like Twitter, in mobilizing the anti-corruption crusade. FMS held series of lectures on success of Brand Anna and his ability to strike a chord with citizens.

IIT Delhi | Students held protests and candlelight vigils on the campus. Student clubs organized lectures.

Mumbai University | Classroom discourse on Anna revolves around middle-class mobilization and democracy in contemporary India. University is debating whether the Anna phenomenon qualifies as a movement.

St Xavier’s College (Mumbai) | Anna phenomenon is being critiqued as essentially a middle-class movement.

St. Paul’s College (Kolkata) | Debating whether strong Lokpal will actually solve India’s problems, or whether the Lokpal itself will turn corrupt.

Mysore University | Came to a virtual standstill when Anna went on a fast in Aug. Issue discussed in classrooms.
Hindustan Times
Title: It's time to work on Facebook
Author: Panna Munyal panna.saroopa@hindustantimes.com
Location:
Article Date: 12/14/2011

It’s time to work on Facebook

Ankur Dahiya and Radhika Mittal, who were among five IIT students hired by social networking website Facebook earlier this month, talk about their experience and expectations.

What is your job profile at FB?

Ankur: We’re going to be software engineers at Facebook’s headquarters in Silicon Valley. They have not outlined a profile, but it will be related to infrastructure maintenance and designing new services.

Radhika: I hope we get to work directly on ideas to improve the site, which is still at a growing stage. It’ll be unfortunate if we end up doing only small modifications, while seniors get to do all the exciting stuff. I’d like to have the freedom to contribute directly to the new features.

What about the money?

Ankur: I don’t know where reports of 65 lakh come from because the final offer has not yet come through, and even when it does, I will not be allowed to disclose the sum.

Radhika: I think the figures of 75 lakh and 77 lakh are based on an approximation of the offers made by international companies last year. Even I am yet to get the formal offer letter, but I believe the minimum pay bracket is between $100,000 to $125,000 (approximately 35 lakh to 40 lakh, respectively) a year.

What was the interview procedure like?

Ankur: The course is mainly theoretical, and the questions FB asked have not been taught because they were application-based. So we had to come up with the solution and design them ourselves based on the theory we learnt at college.

Radhika: A month ago, FB gave us an online test in which we had to write a program that would compute results efficiently and quickly. The shortlisted candidates then had to write two exams and undergo three rounds of interviews on the day of the placements.

Ankur: I was given just one written test on Day 1 of placements at IIT-Delhi and then after each round of interviews, people were eliminated till it was just me. I was asked questions about algorithms and programming. They were mainly concerned with my problem-solving abilities.

Did your course help you during the selection procedure?

Ankur: The course is mainly theoretical, and the questions FB asked have not been taught because they were application-based. So we had to come up with the solution and design them ourselves based on the theory we learnt at college.

Radhika: I think the tests, interviews and even the job are all directly related to my course. What I’ve studied in the past three-and-a-half years and the projects that I’ve done will help me solve problems and come up with new solutions.

Did other companies make you offers?

Ankur: I was shortlisted by seven companies, but I could only interview with four because there was an overlap. I got offers from Google India, an investment firm in Gurgaon called Power Research and Facebook USA.

Radhika: I was shortlisted by Microsoft and IBM India Research Lab and got an offer from IBM in Delhi.

So why Facebook?

Both: It’s in Silicon Valley!

Ankur: To be able to work there is any computer science graduate’s dream come true. I feel my profile matches FB because it’s an internet startup and has only 2,000 to 3,000 employees as opposed to say Google’s 30,000.