A recent presentation at Rashtrapati Bhawan it was mentioned that the huge national knowledge network (NKN) created at an expense of hundreds of crores was lying mostly unused. This network links India’s universities with each other and makes information available with one member accessible to another partner. This fact only reflects the isolationist approach of our universities.

It is time to revisit the structure and capabilities of our higher education system. What should be the contours of the modern-day university in the Indian context which faces multiple challenges, such as: providing quantity for the young masses spread throughout the country, delivering high quality content to make students “job-ready”, and making this available at an affordable cost?

It is true that in the past decade or so, anything that could be digitised has become subject to disruption. All information-based industries and services such as banking and insurance, retail, reservation and transportation, have faced technological discontinuities. Well-established and entrenched incumbents had to give way to young, technology-savvy, and nimble players. Who could think that the world’s largest bookseller Barnes and Noble would be undercut by an upstart called Amazon, or Britannica encyclopaedia would become almost extinct? Even manufacturing and products-based industries have undergone a revolution of sorts — whichever part of the value-chain could be digitised has brought about a new industry structure and a new set of players. Typical is the case of the photograph industry where Kodak — a more than century old incumbent — went down after chemical-based films business was consumed by the convergences in digital technology.

Yet, it is remarkable (and strange) that globally, the traditional classroom-managed university education system has remained firmly entrenched. The structural contours still are almost similar to what they were centuries ago. Technology has had limited impact in the classroom or in sharing of information within the university system. Some of the famous colleges for under-graduate study of commerce and economics, unbelievably were not using computers in creating and manipulating simple worksheets and graphs. The lack of use of minimal but extremely useful technologies in teaching pedagogies is remarkable.

Universities are the best arrangement for conducting research and communicating new evidence-based research findings for bringing forth new ideas, and pushing the frontiers of knowledge. For this, a creative approach is necessary rather than a typical mechanical approach. Why are our universities not doing this? There are several reasons of which two will be discussed here.

First, the university system, as it has evolved in our country, is highly risk-averse. Faculties and departments are reluctant to experiment. There is an intrinsic structural and mental rigidity that discourages faculty members and PhD candidates to deviate from the standard. To highlight one instance, a candidate who had worked on dynamics of high-technology firms in India, on duty mentioned that out of a sample of 70 companies, there were several small units manufacturing run-of-the-mill air-cooler components at Meerut and hand-made leather shoes at Agar! Clearly, the research guides had not given adequate time to the candidate even in framing the research construct for the experiments. The research is more guided by convenience and eye on completion rather than enquiry. Such instances are common.

The second reason is lack of interdisciplinary approach in innovative research. Faculty members are usually trapped in their own so-called specialisations beyond which it is difficult for them to see. The universities can learn much from the field of medicine which has remarkably blended technology with the traditional and has adapted to the requirements of multiple specialisation by becoming interdisciplinary. This field banks on real-time results of X-ray or ECG tests, pathology reports can be accessed online by the doctors and patients simultaneously, and consultants can advise from remote locations. The practice has thrived on an excellent partnership between various players in the ecosystem such as medical equipment manufacturers, hospitals and doctors with different specialisations, pathologists and drug producers, among others.

India is a huge country in terms of infrastructure requirements and geographic spread for higher education. Some of the limitations can be overcome through web- and non-web-based technologies. The society stands democratised with ready information transforming our lives beyond recognition in just the past five years. The world is moving towards smart cities and smart campuses — one can find free wi-fi hotspots and access information on the go. Big data and cloud computing would allow more and more customised programmes to be developed according to the educational needs of the local young population.

Our state universities are the pivots around which the entire ecosystem that can maximise the advantage of us being a young nation hinges.
अब उच्चतर शिक्षा की बदलेगी तस्वीर
क्या है प्रस्ताव में

यह प्रस्ताव विश्वविद्यालय अनुदान आयोग की चेंबरसाउट पर सार्वजनिक किया गया है और इस पर राज्य मान्यता है। कॉलेजों द्वारा भी इस विषय पर परिचय और सेमिनार आयोजित कर सुझाव के प्रस्ताव देने की तैयारी का जा रहा है।

यह हुआ बदलाव
केंद्र सरकार द्वारा प्रारंभिक शिक्षा की सुरत बदलने के बदलते लाए सरकार शिक्षा अभियान का प्रस्ताव तैयार किया है।

जनवरी में करेंगे सेमिनार
उच्च शिक्षा अभियान के प्रस्ताव का आयोजन कर रहे हैं।

Panel favours council for higher education

PRESS TRUST OF INDIA
New Delhi, 9 December

A Parliamentary panel today favoured setting up of separate councils for different higher educational institutes in the country for ensuring efficient administration and overall supervision.

The National Institute of Technology, Science Education and Research (Amendment) Bill, 2013 seeks to establish a central body (the council) for institutes such as NITs, IISERs and IIESTs.

Observing that a single central body for all the three institutes is likely to be “unwidely”, the Department related Parliamentary Standing Committee on HRD suggested having separate council for each set of the institutions.

“It would be difficult for a single council to regulate as many as 36 institutions and the number of the institutions is likely to increase in near future... the committee therefore recommends to review clauses 7 and 8 and bring out amendments to have separate councils,” it said. The Bill was introduced in the Lok Sabha in the Budget Session to upgrade the Bengal Engineering and Science University, Shibpur into Indian Institute of Engineering, Science and Technology (IIEST), Shibpur and upgrading it into an institution of national importance.

On the issue of reserving seats for the locals, the Panel recommended that “reservation for students of West Bengal to the extent possible may be retained in IIEST. Similarly, students belonging to SC/ST/OBC may also be protected as per the Government of India norms”.

It felt that like in the case of NITs where special relaxation was given by having an MoU between state governments and HRD Ministry entailing reservation of seats for local students, the same has to be extended to IIEST.

It said the upgradation of the institute should not in anyway turn out to be detrimental for the interest of the student community of the state.

The observations came against the backdrop of the Ministry stating there would be no provision of having 50 per cent reservation in IIEST for the locals even as it had earlier informed the state government that admission to the institute would be through AIEEE and 50 per cent of the students would be admitted from the state.
RS adopts motion to include member in IISc Council

New Delhi, Dec 9 (PTI) A motion to elect a member from Rajya Sabha in the Council of Indian Institute of Science, Bangalore, for 2014-17 was adopted in the Upper House today.

The appointment will be for a period of four years from 2014-17.

The motion was moved by HRD Minister M M Pallam Raju and adopted amid din over various issues.


Petition on IIT admissions dismissed

Legal Correspondent

The Bench dismissed another writ petition filed by an advocate S. Raj Kumar, who challenged the new process of filtering students before giving admission into IITs. He said the condition that aspirant must be in the top 20 percentile of successful candidates in 12th exam of each Board is illegal.


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Soon, Top Colleges May Offer Degrees

UGC sets up panel to study a proposal that argues this may improve research output

OUR BUREAU
NEW DELHI

India’s top colleges may soon be able to grant degrees. University Grants Commission, the higher education regulator, has set up an expert panel to study a proposal that argues that such an initiative will help improve research output of colleges and universities they are affiliated to.

The committee headed by former education secretary RP Agarwal will look into the proposal that would require amendment of the University Grants Commission Act.

The move comes in the wake of discussions that the human resource development ministry and the UGC held in October with principals of autonomous colleges and representatives of state governments.

College and university administrators pointed out that some universities have more than 800 affiliated colleges, which require a lot of time for routine administrative tasks at the cost of research and innovation. At the same time, many of the affiliated colleges are unable to undertake research despite potential to do so because the rules and regulations do not permit it.

The ministry was of the view that upgrading colleges to “autonomous” category could help rationalise the system. This could mean that colleges with top accreditation rating or ‘A’ NAAC accreditation could be given degree granting powers. About 46 of 441 colleges are ‘A’ grade. Such a move would require the UGC Act to be amended.

The UGC has detailed guidelines for autonomous colleges to ensure the proper management of academic, financial and general administrative affairs. “If an autonomous college fails to maintain standards, the UGC and the affiliating university can direct the connected college to maintain standards or even consider revoking the autonomous status of that college,” said Minister of State for HRD Shashi Tharoor.
IIM-A to host doctoral colloquium

New Delhi, Dec. 8:

The Indian Institute of Management, Ahmedabad (IIM-A) is hosting its seventh three-day Doctoral Colloquium starting on Monday.

The event will begin with lectures from national and international professors and the second day will be marked by debates. Panels comprising acclaimed academicians and industry practitioners will debate on ‘Doing and Disseminating Meaningful Research’ and ‘Gender sensitisation and creation of women centric workspaces’.

The final day will have doctoral workshops by various professors who will equip the participants with tools and insights for research and publication.

More than 200 participants including Ph.D students, graduates, professors and representatives from the corporate sector are expected to attend the colloquium. The event will also act as a platform for over 80 doctoral candidates to present their research and engage in conversations with their peers and experts.

— Our Bureau

(This article was published on December 9, 2013)

Keywords: Indian Institute of Management, Ahmedabad, Doctoral Colloquium event
The waning of science

The young and brightest in a city once big on science and technology research have turned to IT, entrepreneurship, banking

THOUGH INDIA has seen ripping economic growth in the past decade, the country still spends less than 1 per cent of its GDP on scientific research. As a fraction of the GDP, the spending on science has been static for decades.

People who come into science do so purely for the love of it and say, I don’t care about the money. But, he adds, ‘Can a country build its science and technology on just these few people?’

The lack of economic incentive is making the country’s reservoir of brain power go untapped, he argues. Talent is only one area that is scarce in the growth of scientific and technological research, he says. Science is not central to India’s vision of economic growth and development, and it is not integral to India’s national life the way it is in even a small country like Korea, which spends 3 per cent of its GDP on science. ‘We have a national ambition deficit in the area of science.’

Though India has seen ripping economic growth in the past decade, the country still spends less than 1 per cent of its GDP on scientific research (China spends 6 per cent of its GDP). As a fraction of the GDP, the spending on science has been static for decades. Rao said that the government allocated a fifth of the funds that research projects actually need and the funds were invariably delayed. Narasima cites another reason as to why Indian science lags behind. Industry, whether state-owned or private, makes no great demand on its science and technology researchers. It is content with buying cheap technology and producing it in the country.

A group of 32 eminent Indian scientists and technologists, including Rao and Narasima, were demanding a change, and wrote in a recent appeal to the prime minister, ‘What is required is not a mere increase in investment in science and technology from the current roughly 1 per cent of the GDP to the promised 2 per cent, but also the moral and intellectual support of the society as a whole.’

Societal accolades for those offered fat salaries rankle young scientists. Suryanarayanan reacted to the core-plus salaries being offered to his peers by recruiters at IIM and IIT campuses saying, ‘When smart individuals can make high amounts of money, society pegs the status of poorly paid scientists at much lower,’ he says. But he hastens to add that he has no regrets. ‘I truly enjoy what I do; I don’t know whether those who get those salaries can say the same thing.’

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EAST ASIAN STUDENTS ARE WORLD’S BEST

LEADER

Asian nations cemented their top positions in a report on global education

Agence France-Presse

Asian nations cemented their top positions in an eagerly awaited report on global education, as their students continued to outshine Western counterparts in maths, science and reading.

Shanghai again ranked first in maths, science and reading in the three-yearly report by the Paris-based OECD, based on surveys of more than half a million 15-year-olds in 36 countries.

Singapore, Hong Kong, Taiwan and South Korea rounded out the top five in maths.

The so-called PISA report (Programme for International Student Assessment) is the single largest study of global schooling and has been dubbed the World Cup of education.

It is highly influential among education officials, with participating countries representing more than 80% of the global economy and often adapting policy.

CHINA ON TOP

Shanghai’s top rankings mean its students are the equivalent of three years of schooling ahead of their counterparts with average scores, including those of many wealthy Western countries like Britain and France.

This year’s survey focused on maths skills, with Macao-China, Japan, Liechtenstein, Switzerland and The Netherlands rounding out the top 10.

Lacking a truly national sample in China, the report only includes some of the country’s most economically advanced regions, which the Organisation for Economic Cooperation and Development (OECD) acknowledges are not representative of the entire country.

“Already strong performers in 2009, Shanghai, Hong Kong and Singapore continued to improve their performances in the three categories,” said Sophie Vayseux, an education analyst with the OECD.

OECD experts said the top scores of Asian nations were down to a strong culture of education and to teacher training.

Their education systems “ask a lot of their students. There is a culture of education: parents, children, teachers everyone is working in the same direction,” said the OECD’s Eric Charbonnier.

THE REPORT NOTED THAT GENDER DIFFERENCES REMAIN STRONG. GIRLS CONTINUE TO OUTDO BOYS IN READING AND BOYS DO BETTER IN MATH.

YARDSTICK FOR EDUCATION

Also, “every country that isn’t at the top, which has moved forward, has put teacher training at the heart of their education system,” he said.

The report highlighted Italy, Poland and Portugal for showing improvements in maths skills since the last survey but noted drops in Sweden and Finland.

Students in Britain scored the exact average of OECD nations in maths, with their counterparts in France only slightly ahead.

The United States was further down, wedged between Slovakia and Lithuania.

Peru ranked at the bottom of the list in all three categories, with its students the equivalent of six years of schooling behind students in Shanghai.

Only one European country, Finland, made it into the top five in any category, scoring as the fifth top performer in science.

The report noted that gender differences remain strong, with girls continuing to outperform in reading skills and boys showing better results in maths.

Shanghai, Singapore, Hong Kong, Taiwan and South Korea rounded out the top five in maths.

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Only one European country, Finland, made it into the top five in any category, scoring as the fifth top performer in science.

France, which has one of the strongest education brands in the world with its global network of lycees, performed poorly.
Niche Roles to Get Big Pay Hikes this Yr

Management accountants, data scientists, app developers and marketing managers in for salary surprise as cos try to retain talent

Consulting firm Mercer estimates that roles like that of experienced marketing analyst and sales representatives in sectors like automobiles, consumer durables and pharmaceuticals will continue to be on companies’ priority list.

In information technology, salary hikes will be dominated by profiles in mobility cloud and security says technology and market research firm Forrester’s VP and country manager for India, Manish Bahl. “There will be more spending on security as a skill set,” he says. With greater focus on customer experience, mid-to-senior IT roles like app development and business consulting can fetch hikes of 15% to 17% compared with average hikes of 10% to 12%, he says. Hikes in IT were in the range of 16% to 11% last year according to Forrester estimates.

Jobs in regulatory affairs in the pharma and medical devices sector are in demand and can expect hikes in the range of 11% to 30%, according to Kelly Services. “This is mainly because a lot of Indian companies have been wanting to sell in the US for which they require FDA approval & expertise in FDA filing,” says Kamal Karanth, managing director, Kelly Services.

In supply chain management and purchase in pharma and consumer goods, one can expect hikes in the range of 9% to 18% across levels, due to steady increase in exports. While last year’s hikes for roles in regulatory affairs were estimated to be at 11% to 18%, they were in the region of 30% to 18% supply chain and purchase. An increasing number of professionals are opting for specialised courses that help them cultivate niche expertise, Saritha Kameshwari, a director of finance and corporate facilities, was a chartered financial analyst and associate member from the Institute of Cost Accountants of India when he decided to enrol for the CIMA course in 2005.

To be more than just pure play accounting, a CIMA course in management accounting comprises accounting, finance and management. This year’s salary survey of 40% of CIMA India 3,600 members revealed that over the next 12 months, 56% of part-qualified students are expected to receive a salary increase of 13.6% well over the 2013 IMF World Economic Outlook on Price Inflation forecast of 10.4%.

In 2013, qualified CIMA members in India are earning an average of Rs.3.6 lakh in basic annual salary plus Rs.4.6 lakh in bonuses, totalling Rs.8.6 lakh per year. Among all its members and students, a good 37% are satisfied with their salary. “The qualification has helped me look at situations from different functional perspectives so the course is good blend of core technical, strategic and business management domains,” says Kameshwari. Apart from accounting, he adds the course has helped him in business development, in contributing effectively as a member of the company’s leadership team and board, and in influencing strategy.

DesiCollective.com
IIT Kharagpur wins Nobel quiz

THE THREE-MEMBER team from IIT, Kharagpur comprising Somsish Ghosh, Ajaya Biswanathan and Saswata Panigrahi has won the final round of Sweden India Nobel Memorial Quiz 2013, held at Jesus and Mary College, Delhi, recently. The inter-college quiz competition is organised every year as a part of the memorial week, which celebrates the spirit of Alfred Nobel, the Swedish innovator, entrepreneur and philanthropist. The winners will get an all expense paid trip to Sweden, where they will visit corporate houses, universities and museums.
AAP effect: IITians inspired to take up political armour

Vanita Srivastava
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NEW DELHI: Arvind Kejriwal’s impressive political debut has, in his own words, given “a ray of hope” to people desiring a change of guard. Additionally, it has ignited new faith among the IITians across the country.

Kejriwal has been heralded as a political star by many students of the IITs who have given serious thought to swap lucrative careers abroad for serving the country through politics. Kejriwal, who is a mechanical engineer from IIT Kharagpur himself, had earlier brought together several students and alumni - including those living overseas - of the institute to help him with his campaign.

Anil Kori, who left his masters at an IIT midway to be part of the movement against corruption, is one such example. “In Kejriwal I saw a new hope, a new vision. This attracted me. Now I work full time with his party. And yes, I would also like to contest elections in the coming few years,” said Kori.

Atal Ashutosh Agarwal, a second-year B.Tech student at IIT Kharagpur, said it all started for him with the Anna Hazare movement. Agarwal was preparing for his entrance exam into IIT when he joined in with Hazare’s fasting-style protest. “I used to go to Jantar Mantar and the days I could not. I used consider it an option.”

Bharat Choubey, a PhD student at IIT, has decided to fully jump into the Aam Aadmi Party (AAP) bandwagon once he submits his thesis. “Kejriwal has brought a change in the view of the voters, which is a positive sign,” he said.

Omeldra Bharat, an alumnus of IIT Kanpur and now a full-time AAP worker, feels the time has come for the reigns of political power to be handed over to intelligent and bright people. “India needs a political revival. Kejriwal has a good mission. At present we have people in politics ... who should not be there. We need to change that,” Bharat said adding he too has plans to contest elections in the future.

Anshul Goyal, another IIT undergrad, now feels politics can be considered a viable option after he turns 30 while Rinku Kumar, a PhD student, considers the AAP phenomenon to be...
KEJRIWAL INSPIRES IIT ALUMNI

COMRADES Former alumnus, Arvind Kejriwal sparks faith in politics among students

Vanita Srivastava

NEW DELHI: If you thought politics was not for the bright minds in India — you may be wrong now. Arvind Kejriwal has ignited a new faith in politics among the bright and young students of IIT.

Inspired by the ‘political star’, many IITians are seriously thinking of swapping US dollars and comforts with joining politics and doing something for the country.

Arvind Kejriwal, himself an IIT alumni, had earlier brought together several IIT students and alumni many settled abroad to help him campaign for his party.

MEET THE FUTURE

Anil Kori left his M Tech at IIT mid way to be a part of the movement against corruption. “This was a small beginning. I wanted to do something for the country but could not find the right path. In Kejriwal I saw hope and vision. Now I am a full time AAP member. And yes, I would also like to contest some time.”

“India needs a political revival. Kejriwal has a good mission,” says Onendra Bharat, an alumni of IIT Kanpur, who is now full time with AAP. “I would also like to contest election sometime in the future.”

Atal Ashutosh Agarwal a second year B.Tech student at IIT Kharagpur agrees. “It all started with the Anna hazare movement. I was preparing for the Joint Entrance Exam when Anna had declared the fast. I used to go to Jantar Mantar and the days I could not, I used to fast at home. Kejriwal has infused a new hope for politics. Earlier I could never have thought on joining politics but now I can consider this as an option also.”

Bharat Choubey, a PhD student at IIT feels a beginning has been made for cleaning the dirt in politics. “After submission of my thesis, I will be a full time member of AAP. Kejriwal has brought a change in the view of the voters.”

Rinku Kumar a PhD student in IIT sums up, "The campaigning changed my life. Even the beggars appealed to vote for AAP. Now I have become a part of it. At the end of day, what matters is not money but self satisfaction. I am establishing a base so that I can contest election sometime later.”

RUSH TO VOLUNTEER FOR AAP DOUBLES

Karan Singh, in-charge of AAP’s volunteer management committee, is in a celebratory mood and it is not just because of the results. Till December 3, the party had an average of 100 volunteers enrolling per day. On Monday this number had almost doubled.

“After Sunday’s results, the rush for volunteer enrolment and donations have almost doubled,” said Singh.

Pramod Kumar Mishra, a newly registered volunteer, says, “I knew that AAP would be a strong contender and the election results confirmed my belief. I joined AAP because I want to be a part of a movement which might change the face of the nation.”

Soumya Pillai

YOUНΕΝΤΕΑΤ MLA

Prakash Jairwal, 35, a Masters in Commerce from Delhi University, is the youngest member of the Delhi Assembly, “I will try to fulfill people’s expectations,” said Prakash who left his job in multinational company to join AAP. He beat Congress’ Arvinder Singh Lovely in Deoli constituency by more than 17,000 votes.
Kolkata: At IIT Kharagpur, all eyes were on Ritesh Singh on Monday. The M.Tech student of computer science and engineering was surrounded by friends and swamped with congratulatory messages from those away from the campus due to the winter break.

Ritesh has been an AAP insider for the past year—only one on campus. Arvind Kejriwal is an IIT Kharagpur alumnus of the 1988 batch.

Now that we've been able to prove our point, we'll wait for instructions on the course of action.

RITESH SINGH, AAP MEMBER

The campus was celebrating since Sunday afternoon. Students in AAP caps came out in numbers and engaged in animated conversations through the day Singh had opted out of placements last year so he could spend time in New Delhi and get to know the central AAP brass. After his formal association was cemented, he returned to IIT-K and enrolled for M.Tech. As a national executive of the party, his role was initially to monitor the party's platform and design posters. His job now is to sensitise people about the principles of AAP.

However, not many on campus showed interest in him till the Delhi results started tumbling in on Sunday. “The Delhi elections were an acid test,” Singh said. “The central party leadership had asked all of us to be low till the results were declared.

Now that we've been able to prove our point, we'll get instructions about the next course of action. Kolkata already has 3,000-plus enrolled AAP members, who too are waiting, just like me, for the future course of action.” Kejriwal is due to visit the city towards mid-January.