

The theory of everything

By Abhinav Singh | From issue dated June 18, 2017



Blending academic excellence with practical wisdom and social responsibility is the new mantra of good education

The lush green campus of IIT Bombay is a contrast to the sprawling metropolis of Mumbai. It is akin to a forest, rather than a college campus. And here reside some of the brightest brains in the country. Prof Subhasis Chaudhuri, who is K.N. Bajaj Chair Professor at the Department of Electrical Engineering, said 44 of top 50 students in the past year's entrance exam opted to join IIT Bombay. "We got the cream of students; our IIT is one of the most cosmopolitan in the country," he said.

It is not just the greenery; IIT Bombay has a genuinely green campus. Students walk or pedal to move from one department to the other or to the hostels. There are biogas plants and other recycling equipment and methods. And, there are innovative initiatives like using the heat generated by air-conditioning units to heat water.

IIT Bombay does not limit this approach to campus maintenance. "The cross-learning experience at IIT Bombay is unique," said Srijit Ghosh, a material engineering student. "We get to attend lectures and talks organised by other departments as well. I participated in a student satellite programme, Pratham, which helped me interact with ISRO scientists and understand the technicalities of building a satellite. Which other engineering college will give you this kind of opportunity?"

While IIT Bombay
excels in giving

THE WEEK - HANSA RESEARCH SURVEY 2017



Arts	Lady Shri Ram College for Women	Delhi
Commerce	Shri Ram College of Commerce	Delhi
Science	St. Stephen's College	Delhi
Engineering	Indian Institute of Technology	Delhi
Architecture	Sir J.J. College of Architecture	Mumbai
Medicine	All India Institute of Medical Sciences	Delhi
Dental	Manipal College of Dental Sciences	Manipal
Law	National Law School of India University	Bengaluru
Hotel Management	Institute of Hotel Management	Delhi
Fashion Technology	National Institute of Fashion Technology	Delhi
Mass Communication	Indian Institute of Mass Communication	Delhi

GRAPHICS: SYAM KRISHNAN

practical experience to its students, it is fast becoming the norm in top institutes. For instance, Tata Institute of Social Sciences (TISS) in Chembur in Mumbai, which is arguably the finest place in South Asia to study social work, wants to lay stress on practicals. Prof Manish K. Jha, dean of School of Social Work at TISS, recalled a trip a team from the institute made to the Nicobar islands after the tsunami in 2004. “The island had 5,000 inhabitants;

only 2,000 survived the tsunami. Our team stayed there for a month and tried to rehabilitate the people and also helped them get the compensation from the government. We helped them in streamlining the paperwork related to the compensation package as most of them had lost almost everything in the disaster,” he said.

Jha had noticed that many students were not able to deal with the practical aspects of the course. During a practical session at the slums in Mumbai, some students were taken aback by the conditions in which the slum-dwellers lived. “Many students could not digest the harsh reality and the inhuman conditions,” he said.

Swati Singh, who is doing a thesis on middle class activism in urban space at TISS, regularly visits slums and urban clusters in Mumbai. “I wanted to do field-based learning, and for excelling in social work, engaging in the field is very important,” she said.

Coupling up academic excellence with social responsibility seems to be new mantra of good education. Lady Shriram College for Women in Delhi ardently practises this. Recently students from its sociology department published a field trip journal after a trip to Kerala. “These girls wanted to connect to the real society through such a field trip,” said Dr Suman Sharma,

principal of the college. “They interacted with the locals and wrote about their findings in the journal. Different aspects were covered by the students such as bakery, alternative medicine, martial arts, and they even attended a cultural biennale there.”



Ahead of the curve: St Stephen's College in Delhi | Aayush Goel

LSR students regularly have sessions and workshops on various topics. Recently they had a session with children at the nearby Zamrudpur on climate change. Interestingly, such strong local engagements complement the college's international collaborations. It has faculty and student exchange programmes with King's College London, La Trobe University in Australia and National University of Singapore. “This year we had 300 internship offers and our placements have been very good. We have a non-intrusive governing body and we give a lot of freedom and space to our students,” said Sharma.

This freedom does great things for the students. Amita Yadav, who is a psychology student and president of the students' union in the college, said the college changed her personality. “We have very active societies in the college. Because of the exposure here my confidence has increased. I have become much more organised and refined,” she said.

The emphasis on the practical aspects of learning has become so important to these colleges that they often dominate the curriculum. At St Xavier's College in Mumbai, for instance, 50 per cent emphasis is on theoretical articulation and 50 per cent on experimental articulation. All students here are expected to get involved in extracurricular activities. Being an autonomous institution has also helped the college in this regard.

TOP ARTS COLLEGES | ALL INDIA

Rank 2017	College	City	Composite Score*
1	Ladv Shri Ram Colleae for Women	Delhi	483

2	St. Stephen's College	Delhi	467
3	Loyola College	Chennai	459
4	St. Xavier's College	Mumbai	452
5	Hindu College	Delhi	428
6	Miranda House	Delhi	412
7	Madras Christian College (MCC)	Chennai	406
8	Hans Raj College	Delhi	392
9	St. Xavier's College	Kolkata	356
10	Fergusson College	Pune	350
11	Ramjas College	Delhi	344
12	Christ University	Bengaluru	342
13	St. Joseph's College	Bengaluru	339
14	Stella Maris College	Chennai	337
15	Ethiraj College for Women	Chennai	329
16	Mount Carmel College	Bengaluru	328
17	Presidency College	Chennai	327
18	Jesus and Mary College	Delhi	326
19	Kirori Mal College	Delhi	325
19	Sri Venkateswara College	Delhi	325
21	Jai Hind College	Mumbai	323
22	Indraprastha College for Women	Delhi	319
23	Symbiosis College of Arts and Commerce	Pune	314
24	Delhi College of Arts & Commerce	Delhi	312
25	St. Xavier's College	Ahmedabad	310
26	Sophia College for Women	Mumbai	307
26	Gargi College	Delhi	307
28	Nizam College	Hyderabad	304
29	Kamala Nehru College	Delhi	303
29	Mithibai College of Arts	Mumbai	303
31	Daulat Ram College	Delhi	302
32	Osmania University College for Women	Hyderabad	299
33	Ramnarain Ruia College	Mumbai	297
34	Jain University	Bengaluru	291
35	Lady Brabourne College	Kolkata	290
36	National PG College	Lucknow	287
37	D.G. Ruparel College of Arts, Science & Commerce	Mumbai	278

Autonomy empowers colleges; not just in running things smoothly, but also in producing extraordinary results. “Our exams were on schedule and the results are out, and the session will begin shortly. Like this, we are way ahead of the rest of Mumbai University where the results are still awaited. We can design our own curriculum, conduct our own exams and the results are out on time. The whole system is streamlined due to autonomy,” said Dr Angelo Menezes, principal of St Xavier’s College.

The college has introduced many offbeat courses such as forensic science and crime scene processing and investigation techniques. And, even the conventional courses are updated regularly with contemporary topics. “We have always emphasised that even if history topics are discussed, there should be a blend of contemporary issues, such as ‘why Brexit?’ and ‘the results of demonetisation’,” said Menezes.

History is something these colleges are firmly rooted in. In 2019, St Xavier’s will celebrate its 150th anniversary. Miranda House in Delhi, which was founded some 90 years later than Xavier’s, still sticks to its core purpose of women empowerment. “We have believed in academic rigour and holistic education through tutorials, seminars, debates and in building strong soft skills in our students,” said Dr Pratibha Jolly, principal of Miranda House. “Our students have played an active role in disaster mapping the nearby areas of the college and we then sent a security audit report to the police.”

Miranda House encourages students to undertake regular projects and trips to broaden their horizon and get firsthand experiences. Krishna Shekhawat, a final year history student, is just back from a trip to Jodhpur, Jaisalmer and Ajmer in Rajasthan for a project on water management. “What I learnt was the rich water architecture, and traditional water conservation and management methods in Rajasthan, which has to deal with water scarcity. I learnt of ‘bowlis’, the traditional step-wells of Rajasthan, and how manmade canals were damaging the ecosystem of the area,” she said.



Class act: Hans Raj College, Delhi | Aayush Goel

The college offers a number of student exchange programmes. Chandni Jain, who is the president of the debating society in the college, recently went to Utrecht in the Netherlands as part of a programme. “I learnt that till the age of six, children in the Netherlands do not go to school and even in high school their education system is flexible, and they have a vast array of subjects to choose from. On the other hand, our education system is a little burdensome,” she said.

Many experts, however, are of the opinion that this burdensome system is not necessarily bad, and that is why Indian students do well abroad. But there is always room for improvement. Said Pankaj Baliga, who had held top positions in Tata Group: “Faculty in colleges should have regular interaction with companies that employ their students to see what would make them more employable. The faculty can take this relationship to useful levels.”

Many colleges have already taken steps to prepare their students for the real world. Hans Raj College in Delhi, for instance, strongly advocates an interdisciplinary approach. “As part of the curriculum, we keep sending our students to different labs. We also have summer internship programmes and our students have qualified for higher studies in premier institutes such as the IISc in Bengaluru and the National Centre for Biological Sciences,” said Dr Rama, principal of Hans Raj College.

Some of the best colleges in the country are regarded so highly that they have become brands on their own. “Industry people know that students being recruited from the best colleges of the country will definitely be among the best as only the cream of the students are able to get admission there,” said human resources expert Kris Lakshmikanth.

TOP COMMERCE COLLEGES | ALL INDIA

Rank 2017	College	City	Composite Score
--------------	---------	------	--------------------

1	Shri Ram College of Commerce	Delhi	533
2	Loyola College	Chennai	457
3	Lady Shri Ram College for Women	Delhi	451
4	St. Xavier's College	Kolkata	441
5	Hindu College	Delhi	428
6	Hans Raj College	Delhi	410
7	Madras Christian College (MCC)	Chennai	368
8	Christ University	Bengaluru	362
9	Narsee Monjee College of Commerce and Economics	Mumbai	353
10	R. A. Podar College of Commerce & Economics	Mumbai	342
11	Ethiraj College for Women	Chennai	332
12	Symbiosis College of Arts and Commerce	Pune	327
13	Stella Maris College	Chennai	323
14	Jain University	Bengaluru	321
15	H. R. College of Commerce & Economics	Mumbai	310
16	K.J. Somaiya College of Arts and Commerce	Mumbai	308
17	Sri Venkateswara College	Delhi	307
18	Kirori Mal College	Delhi	304
19	Mount Carmel College	Bengaluru	303
20	Ramjas College	Delhi	301
21	Sydenham College of Commerce and Economics	Mumbai	300
22	Gargi College	Delhi	299
23	Jesus and Mary College	Delhi	294
24	K.P.B. Hinduja College of Commerce	Mumbai	292
25	Sacred Heart College	Kochi	291
26	Mithibai College, Amrutben Jivanlal College of Commerce and Economics	Mumbai	290
27	Goenka College of Commerce and Business Administration	Kolkata	289
28	National PG College	Lucknow	287
29	Loyola Academy Degree & PG College	Hyderabad	285
30	Brihan Maharashtra College of Commerce	Pune	277
31	Indian Institute of Management and Commerce	Hyderabad	276
32	J. D. Birla Institute	Kolkata	275
33	Jyoti Nivas College	Bengaluru	270
34	St. Ann's College for Women	Hyderabad	260
35	Women's Christian College (WCC)	Chennai	258

The Institute of Hotel Management, Catering and Nutrition in Pusa, Delhi, is one such brand. One of the oldest hotel management institutes in the country, it has been getting 100 per cent placement year after year. The kind of exposure the students at the institute get can be gauged by a recent visit by a group of presidential chefs, including the chef of the former US president Barack Obama. They interacted with the students and the faculty and gave them a presentation.

“As the institute is under the ministry of tourism, it acts as a consultant to Air India crew members and participates in their training programmes,” said Dr Raj Kumar Gupta, dean (academics). “We also train the mess staff members from different defence and paramilitary forces and the Air Force in catering and hospitality services.”

How do these colleges continue to be at the top of their game? “There is a continuous effort to update the facilities in the institution that in turn provide the springboard for students to excel,” said Prof R. Venkata Rao, vice chancellor, National Law School of India University, Bengaluru. Established in 1988, the school was a game-changer in legal education with its focus on innovation. Teachers here have the freedom to design and develop the syllabus and the course content, keeping in view the emerging trends in law. “New programmes like public policy, cyber laws, various aspects of corporate law provide the impetus. We always offer our programmes keeping in view the diverse and varied stakeholders including industry,” said Rao.

And, where should these colleges take it from here? Baliga said the senior faculty of the top colleges should not restrict themselves to their campuses but regularly visit corporate houses and companies and understand their needs and requirements. “I feel that there should be regular conversations between the college faculty, principals and the CEOs and the board members of some of the top-notch firms in the country. Only then would they realise how times are changing and in this age of cut-throat competition what are the needs of industry. In a country which produces the highest number of engineers in the world, a majority of them are unemployable as they lack the basic soft skills which are required to survive in a corporate environment,” said Baliga.

TOP SCIENCE COLLEGES | ALL INDIA

Rank 2017	College	City	Composite Score
1	St. Stephen's College	Delhi	490
2	Loyola College	Chennai	463
3	Hindu College	Delhi	437
4	Hans Raj College	Delhi	404
5	St. Xavier's College	Mumbai	394
6	Madras Christian College (MCC)	Chennai	391
7	St. Xavier's College	Kolkata	386
8	Fergusson College	Pune	366
9	Ramjas College	Delhi	358
10	Miranda House	Delhi	356
11	Stella Maris College	Chennai	355
12	Sri Venkateswara College	Delhi	352
13	Mount Carmel College	Bengaluru	351
14	Christ University	Bengaluru	347
15	Ethiraj College for Women	Chennai	342
16	Kirori Mal College	Delhi	341
17	St. Joseph's College	Bengaluru	338
18	Ramnarain Ruia College	Mumbai	332
19	D.G. Ruparel College of Arts, Science & Commerce	Mumbai	325
20	Gargi College	Delhi	320
21	Nizam College	Hyderabad	317
22	Sacred Heart College	Kochi	314
23	St. Aloysius College	Mangalore	312
24	Acharya Narendra Dev College	Delhi	311
25	Osmania University College for Women	Hyderabad	310
26	St. Xavier's College	Ahmedabad	309
26	Mithibai College, Chauhan Institute of Science	Mumbai	309
28	Lady Brabourne College	Kolkata	308
28	Loyola Academy Degree & PG College	Hyderabad	308
30	Jain University	Bengaluru	307
30	Jai Hind College	Mumbai	307
32	The Oxford College of Science	Bengaluru	306
33	K.C. College of Arts, Science & Commerce	Mumbai	304
34	D.G. Vaishnav College	Chennai	300

One college that has taken up employability of graduates as mission is Loyola College in Chennai. It keeps restructuring the curriculum, keeping in mind the employability quotient and societal expectations. “Reform in teaching, learning and evaluation is what we have continuously initiated because of autonomy,” said Dr K.S. Antonysamy, associate professor and public relations officer at Loyola. “Periodical restructuring of curriculum, keeping the initial academic experiences of the college as the background, has taken the institution ahead and met the expectation of market needs.”

Baliga considers a seamless interaction between colleges and the industry essential for improving the employability of graduates. Regular programmes that involve the workforce of various corporates should be organised along with the top colleges, he said. “These kind of interactions will help the academia to redesign their curriculum based on the feedback from industry experts,” he said. “I have personally visited many tier-two engineering colleges but I feel, though they have technical knowledge, they are unemployable as they do not have the required soft and communication skills to excel in industry.”

No doubt the skills students acquire in colleges are a platform to look for careers. “What they may need to do is to walk the extra mile,” said Dr M. Arockiasamy Xavier, principal of Loyola College. “They should do additional courses relevant to their discipline to supplement their subject expertise. They are expected to acquire skills related to the theoretical knowledge they are provided within classrooms.”

Education no longer ends in classrooms. But how it starts has direct bearing on where it will take you. Not only are these colleges the right place to start your journey, but also they give you the wings to fly high.