

by Dheeraj Sanghi

Every summer, millions of students have a tough time selecting the right engineering college that will open doors to an exciting career. Typically, students go round about their universe of 10-odd colleges, in the hope of zeroing in on the best-known one. They enquire about the previous year's placements in terms of median and maximum salaries offered.

Everyone assumes that the answers to these two questions will help them find a college with top quality of education. Two more assumptions: (i) The college with a high brand recall provides quality education, and its alumni are successful in the real world. (ii) Employers know which colleges provide better quality education and go to those campuses for recruitment. Unfortunately, both arguments are naïve.

Brand image

While some colleges (such as the IITs) have a high brand recall because of their quality of education as is reflected by the achievements of their alumni and the research output of faculty and graduate students, other colleges have high brand recall due to advertising on a large scale. Smaller colleges cannot afford the same advertisement budgets and hence lose out on branding even if they provide good quality education.

Smaller (and newer) colleges do not attract enough recruiters either. Companies that recruit thousands of students from campuses every year would typically not go to campuses where they are likely to get just 5-10 potential employees. And companies that recruit very few students would typically not add a new college to their recruitment drive.

The parameters

So, how does one find out which college provides quality education? We list some parameters, which will help you compare colleges. Most of the information is available on the website. If not, try to get it from current students and alumni of the college. In a worse case scenario, make a personal trip. All this is not easy. But this must be done in order to make an informed choice as your entire career will be influenced by this.

FACTORS THAT DETERMINE THE QUALITY OF YOUR EDUCATION

An IIT professor suggests the appropriate questions to ask in your bid to identify the right college and branch



Illustration: Indu Harikumar

The faculty

How qualified is the faculty? Review the number of faculty members with a PhD degree. While some of the faculty members without a PhD may be very good teachers (and some even researchers), they are fewer in number. Similarly, one should see the number of

faculty members with an MTech degree. If the college hires many faculty members with a BTech or MSc, the quality may not be up to the mark.

Also, check from where the faculty members have received their highest degrees. Prominent names increase chances of a better quality of education.

For instance, if the faculty members received their highest degrees from the same institute, this reflects poorly on the quality of education. Faculty members with an earlier degree from the same institute and a higher degree from a good institute, reflects positively on the quality of teaching.

How active is the faculty in research?

A faculty member who is active in research will normally have a better understanding of the latest developments in the area, and will therefore be in a position to explain better. One need not be a top class researcher to be a good teacher but without doing any research, it is difficult to teach well. Review the list of research publications by the faculty members, and see if these publications are featured in reputed journals and at conferences. You may need some help from researchers to really judge. Also, look whether they have research projects funded externally by the industry or government-funding agencies. It shows that others value their research. Also look at college activities or those of the specific department of your interest. Are there many visitors giving seminars? Do they organise workshops and conferences regularly?

The number of faculty members. The faculty to student ratio is an important aspect affecting the quality of education. Generally, learning is better when the average class size is smaller. And that can only happen with substantial faculty strength. Also, having a poor ratio means that the teaching load on the faculty will be higher, and therefore,

they may not find time to do research. Also, they may not give as many assignments and projects, since grading them would mean a lot of work.

Next, infrastructure

This is the second important aspect. How good are the labs in the discipline of your choice? Do they have modern equipment, and in enough numbers so that students can work simultaneously as opposed to just a demonstration by a lab instructor? How good is the common

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infrastructure? How many books are there per student in the library? What e-journals do they subscribe to? How much bandwidth on a per capita basis do they have? Are lecture halls equipped with PCs, projector, screen and audio facilities? What sports facilities exist for the student body? These are difficult questions to answer from the website alone. So, you may need to talk to a current student or an alumnus you can trust, or make a personal visit to the campus.

Other factors

The followings should be given less weight than the faculty and infrastructure:

Status of the institute: a university

status typically would mean greater academic freedom for innovation.

A fully-residential campus usually provides a better learning environment. Curriculum: How often it is updated? How many courses do they teach? Note that an institute that have too many courses is in fact not likely to do a quality job of teaching.

Curriculum flexibility: How many electives does it offer? Do they actually offer a lot of choice in those electives?

What do graduates do? Do they all go for jobs, or do they also go for higher education? If graduates are going for higher education, then it shows that the institute has been successful in igniting the interest of learning in the students.

A related point is the performance of students in third party exams like GATE, CAT, etc.

Is there an active alumni association (particularly for colleges, which are more than 10-15 years old?). If the alumni don't care about this college, then why should anyone else?

Campus placement: Of course, it should be considered. Just don't consider it as the only parameter.

Accreditation by NAAC or NBA.

Student activities: You want to enjoy your four years and not just spend time in labs and the library! So make sure that there are enough extra-curricular activities on the campus.

Student participation in institute administration: Do they groom leadership qualities amongst the students?

You may think it's tough to get all this information. However, if you focus on just the colleges you are serious about, it's not too difficult. The college website should also come in handy. If the website has very little information, you should be alarmed because it implies either disinterest or unavailability of information. But there are many websites on the Internet which host fora to discuss such issues. Most colleges would have a presence on social networking sites where you can connect people from those colleges. Spending some time on research will make sure that you do not regret your decision four years later.

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