Education through entrance tests

Raising the standard of entrance exams for higher learning will result in improving the education and foundation of lakhs of students who cannot make it to quality institutions, say Pankaj Jalote and Adit Singh

The season for admission test to the top institutes in the country is here again. Admission tests in India are undoubtedly among the largest and toughest to crack exams: more than four lakh students are expected to sit in joint entrance examination (JEE) of which some 5,000 may be admitted. More than 10 lakh sit in All India Engineering Entrance Examination, perhaps the largest exam in the country. A similar number must be sitting for exams for medical with again accept ratios of a few percent.

The difficulty of cracking these tests have led to the booming coaching industry — it seems the vast majority of students appearing in these exams undergo some form of coaching for them. This impact of coaching has been decried by many. In academic circles, it is a common complain that coaching is allowing even average students to crack the exams, and how exams ought to be changed so that deserving students can clear even without coaching.

It should be clearly understood that the success of coaching is not due to the nature of the exams, but due to the low acceptance ratio in these exams. With these low accept rates, it is irrelevant whether the nature of exam is such that coaching will help or not.

Unless there is scientific data to show that coaching does not help, and such data will not be easy to obtain as it will require controlled experimentation, parents will easily believe the argument of coaching institutes that their coaching will improve the chances of students in the exam. Anybody who thinks that coaching can be made redundant by reforming the admission tests is living in a state of denial.

There is another aspect of coaching that deserves attention. Coaching is big business: by some accounts, coaching for IITs is bigger than IITs themselves in terms of turnover. Consequently, it is able to attract good teachers by offering high salaries. One hears about IIT/IIM grads teaching in these coaching institutes, but one cannot come across an IIT/IIM graduate as a teacher in a school — even elite schools do not have this distinction. So, in many coaching centres, the quality of education is superior to that of schools, particularly with respect to the entrance test subjects. As the business success depends on how well they help the students do in the entrance exams, their teaching, as measured with respect to success in these exams, continues to improve and they take great care to improve it.

So, we have the following situation. Coaching institutes will continue to thrive as long as the accept ratio remains small. And coaching business will ensure that its teachers and teaching processes are well-equipped to impart training to students to do better at the competitive exam.

This situation, undesirable thought it is, can, however, be converted into an opportunity to improve education. As coaching institutes focus on the entrance tests and the syllabus for them, it provides a power to these exams in that whatever they put as syllabus or as expected knowledge, the coaching institutes will ensure that students get good at that. Even for those students who do not undergo coaching, these exams are highly influential — students learn/
study for these exams with a mission and dedication that they don't show for anything else.

IF THESE large exams were to be oriented such that preparation for them will make the foundations for the key subjects much stronger and will force the students to really understand the subjects better, the coaching industry will ensure that this knowledge is imparted to students. That is, the syllabus and expectation is potentially a strong force on what students learn in the 2-3 years they prepare for the entrance exams, through coaching or on their own.

If this learning can be strengthened, then even if the students do not get through in these exams — which the vast majority will not — the preparation for them will give them strong foundations in some key subjects. This can be leveraged by other institutions. Even now, many people acknowledge that for many private engineering colleges, it is not the training in these colleges that makes their graduates decent, but the preparation they have before they entered the engineering college.

What can these exams do to strengthen the education and foundation? This is, obviously, a topic of long debates with no ready answers. But, for example, they can add testing on quantitative thinking, communication, logical reasoning, lab- and experience-based knowledge rather than just concepts, etc. These will all help improve the thinking and problem-solving capabilities of students, which will always be useful in their further education or careers. (Incidentally, such an exam is also more likely to select ‘smarter’ candidates in the exams.)

So, instead of fighting coaching by making exams like JEE harder and more theoretical every year, such large exams can leverage the competition for the larger good of improving the education and preparedness of students. If these exams are thought of as a potential tool in the armory of the country for fighting the poor education standards, rather than just for admitting students into these institutes, then they can favourably impact the lakhs of students who attend JEE, and not just of the selected few thousands who actually enter the IITs, whose skills will be upgraded anyway to top levels by the top quality education that they will be provided. By doing so, institutions like the IITs and the entrance exams they have, will be making a solid contribution to improving the workforce in the country, as they have done in creating the top-level manpower.

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