Summer Schools for Internship Madness

The winter semester is usually insane for me. During this time, my mailbox is flooded by requests from students who find my area of research “exciting”, and wish to work with me during summer. Of course, the same student sends the identical e-mail to every one else in my department. And sometimes, students from a single college use a common template for these “personal” e-mails.

More than 50,00,000 students are annually admitted to some IT department or another. In that number, approximately 10,00,000 (usually the second-year students) aspire to complete a summer internship in some IT business house. That’s because, in most cases, universities make some sort of industrial training mandatory. However, it is obvious that the “industry” alone cannot handle 10,00,000 summer interns. In fact, they cannot even handle one-tenth of that number.

Perhaps keeping this reality in mind, some universities have relaxed this norm and have allowed a summer project report (obtained from any educational institution) to substitute for industrial training. With this relaxation, the concept of industry exposure has gone for a toss and people like me have started to receive the e-mails. But, it is not just me who has been affected by the changed concept of internship.

An industry has developed around it as well. If a student does not get any summer internship in any business house, and his or her university allows a project report, then professional (project report) writers are contacted. These miracle men whip out a wide array of project options—software or hardware, networking or databases. They tweak a report here and there, and present a final paper without ever setting foot inside a laboratory, library or an office.

Then there is the frugal student who wishes to save his or her cost even further. I receive several requests from such boys and girls who, after downloading a report from the online portal of a university, cannot identify the software. Thus, they need a professor’s help (sought discreetly of course) before submitting their reports.

Even genuine work experience is sometimes available at a price. A handful of companies charge for the “privileges” (internship) they accord. In exchange for the money provided, companies are happy to grant a certificate stating that the student in question did “wonderfully well”. And that had it not been for him or her (and the project report) the company’s share prices would have plummeted. (Indeed, if they did not earn a fat packet from the interns, the companies would be making losses in the market)

More enterprising (and richer) students manage twin internships during a single summer—again paying a price. Instead of an eight to ten-week internship, they complete two such internships (of four to five week duration) within a single summer. Work done!
Summer Sessions
Is there a solution to this madness? Clearly it is not possible for the industry and the academia combined to provide 100,000 IT students meaningful engagement for weeks in summer. A single faulty member can possibly handle no more than five students. An industry employee would be able to handle even less.

A possible solution is to engage students in classrooms and labs during summer. In this space, too, there is a lot of industry activity. Several companies offer summer courses—sometimes in general areas such as programming, and in many cases in specific areas such as networking, data mining and animation. This allows a useful option to those who can’t get summer internship slots, but don’t just want a certificate or a project report. However, even this model handles only a fraction of the requirement.

Universities and institutions could play a role in addressing this gap between demand and supply. Institutions could offer a vibrant optional summer term for students and teachers. Industrial training should be made an option. Teachers, too, should be given the freedom to decide if they wish to pursue personal research or teach.

A summer term is beneficial for all stakeholders in a university system. It improves the quality of education and allows students to recover from the regular semester’s poor performance. It also allows passionate teachers to earn extra remuneration. It allows infrastructure utilisation during an otherwise lean period, and creates a surplus for an institution. It allows faculty and student exchange in a natural way, thereby creating opportunities for collaborations in other spheres. Because the number of students would be less during summer, only the best teachers should be selected to teach in the summer courses. Since the term would be optional for the faculty, therefore heads of departments could seek out good teachers and improve quality.

Of course, the teachers should be adequately compensated. Institutes could also invite faculty from other colleges and universities. Whereas during general semesters institutions cannot allow faculty members to teach somewhere else, in summer, such restrictions may be relaxed. Colleges and universities should try to attract students from other colleges and universities for the summers, giving a student multiple options to choose from before finalising on a single course in any university or college. One would also like to see a system of credits and credit-transfer whereby such courses can count towards the degree requirement of their university.

Institutions should be allowed to charge a tuition fee for these courses, like they do for regular semesters. Since the incremental cost of running a summer course should ideally be low, savings may be passed on to students, while the surplus can be created to improve facilities.

IIT Example
We had started such a summer school at IIT Kanpur 10 years ago. The idea was to offer quality courses—similar to those taught in the regular semesters—to those who did not get admission.

Schedule and content was designed in such a way that a student could pursue twin courses in the first year, two in the second and two more in his or her third year. Students, who completed the six high-quality courses and received an exposure to the IIT system, were more interested in pursuing postgraduate education from IITs. They also forged lifelong alliances with IITians.

We had selected faculty members from other institutions, a move that encouraged collaborations and enabled surplus income. Hostels, classrooms and labs, otherwise under-utilised during summers were used productively.

The programme continued for three years. The first year, we had 30 students. The second year, we had 200 students, and in the third, there were 2,000 applications. We could only accept 800. Unfortunately, the programme was abandoned later on.

Dheeraj Sanghi
Dr Sanghi is the director of Laxmi Narayan Mittal Institute of Information Technology, Jaipur. He is currently on leave from IIT Kanpur, where he is a professor of computer science. He has a BTech in computer science from IIT Kanpur and an MS and a PhD from University of Maryland, USA. He can be reached at dheeraj.sanghi@edu-leaders.com