

Shortage of Teachers in Institutions of Higher Learning*

The problem of shortage of teachers is being witnessed at all levels in the country, and it has been there for years. Currently, the biggest challenge faced by higher educational institutions in India is the acute shortage of qualified and competent faculties. This has hit most premier educational institutions in India, and they are failing to meet the guidelines chalked out by the top regulatory bodies in the country — University Grants Commission (UGC) and All India Council for Technical Education (AICTE).

The paucity of qualified faculty is felt even more in professional and technical institutions. With the engineering students in India increasing every day, *institutions are facing a faculty shortage to the extent of 67 per cent all over the country.*

The problem grew worse in March this year when the government directed India's institutions of higher education, including IITs, to reserve 54% of seats for lower-caste students from 2007 onward.

The UN Rao committee earlier pointed out that India had a huge shortage of teachers for engineering. For instance in 2000-01, ***Indian engineering institutions required Total 60,970 teachers***, broken down into: 8,710 professors, 17,420 readers and 34,840 lecturers

In terms of professional qualifications, *what was required were 26,130 Ph Ds and 34,840 M Techs.*

What was available however, were 5,862 Ph Ds and 11,035 MTech's

That's a shortfall of around 70 per cent, a figure that's more than doubled over the decade. So one can imagine the quality of students being churned out.

Faculty Shortage in Technical Institutions

IITs

Latest survey says that the nation's seven IITs *need about 900 additional faculty members before the next academic session to counteract the shortfall.* But with 27% OBC Quota and 57% increase in the seats this will be much higher.

A string of measures - including hiring foreigners, raising the retirement age to 70, and incentive packages for new recruits - have been suggested by IIT directors. But doubts remain about whether this will "save the crown jewel of India's education system from losing its shine".

At IIT Delhi, Out of the 571 sanctioned posts, 427 were filled. (July 2006)

According to figures compiled by IIT-Delhi Alumni Association in 2004

- At the Indian Institute of Technology in New Delhi, *29 percent* of faculty positions are unfilled.
- 30 % of IIT Delhi's most experienced faculty ie about 115 - will retire in the next seven years.
- 136 are in the age bracket of 45-55 while another hundred are below 45.
- Only 15 are below 35 years of age.

* This is a Reviewed Short note, been prepared from various sources (News paper Articles, Press Releases (PIB), AICTE, UGC, AIU-University News etc) by Apeejay Stya Education Research Foundation. aserf@apeejay.edu

- The average rate of recruitment at IIT Delhi has been 25 every year, which, only takes care of the retirement and attrition rate.
- The student intake in B.Tech and M.Tech courses has substantially risen since 1994.
- Ideally the teacher-student ratio should be of 9:1 against the existing 12:1.

At IIT Bombay, where the chemistry department has about 125 PhD students and 27 faculty members, the *whole institution loses about 10 to 15 faculty members to retirement each year*. Director IIT-Bombay, says they now need to employ an extra 140 faculty members to make up the deficit.

- With students drifting away from research, there are very few good candidates available.
- As Indian Institutes of Technology (IIT) gear up to expand student intake following Parliament's nod for 27% OBC reservation in Centrally-aided educational institutions, severe faculty shortage has popped up as a huge crisis.
- According to IIT directors, *campuses will have to add about 70 faculty members per year at each of the seven IITs.*
- *Growth at 1.5 times every year is also a huge challenge if the current teaching-learning-research ambience on campuses has to be maintained."*
- Need for the alumni to join as adjunct professors as well as to locate talent through alumni and industry networks
- *IIT Campuses are functioning on a 1:11 teacher-student ratio, while the ideal ratio is 1:9.*

Even in Delhi Universitie's Delhi College of Engineering (DCE) *the faculty shortage is almost 40%. The Colleges also fails to meet the AICTE guidelines as per the faculty and student ratio. Far from the ideal 9 :1 for premier institutes like IITs and the 15 :1 for ordinary engineering colleges, the DCE has 20:1.* A shortage in teaching staff often leads to unfinished or hurried course curriculum and inadequate attention to individual student needs.

Guru Gobind Singh Indraprastha University (GGSIPU) has around 150 faculty members for approximately 2,500 students studying at the varsity's in-house schools but when it comes to its affiliated institutions, the situation is far worse.

- *Almost 17 of its private affiliated institutions do not have between 32%-75% of the required faculty strength."*
- At present, the university is scrutinising around 20-25 such institutions who have failed to have adequate teaching staff. The Univ. has asked them to make the necessary arrangements to fill the gap before the commencement of the next session.
- More than the number of total faculty members, it is the cadre ratio (***which should be a minimum of 1:2:6 for Professor : Reader : Lecturer***) in which several institutions are lacking. This is because the institutions are finding difficult to get faculty at a senior level.

While the faculty is at least present on the campus in the Indian Institutes of Technology and other reputable schools, even with the severe teacher shortage, there are a few tier-

three engineering schools where as much as 75 percent of the stipulated faculty is completely absent.

Indian academics cite two main reasons for the gap between engineering students and teachers: *A dearth of PhDs; and Very low university pay scales.*

Some initiative has been taken by AICTE in this direction. The AICTE has as an interim measure, permitted the employment of teachers up to the age of 70 in institutions that have its approval. It has also permitted the relaxation in cadre ratio for specialized subjects like bio-technology, computer science and engineering, information technology, and electronics and communication engineering.

It has sanctioned 211 new institutions for this academic year, creating 23,651 additional seats in various disciplines across the country. The relaxation in the faculty age comes in the wake of bridging the gap between shortage of faculty and the increase of seats in various institutions

Faculty shortage at IIMs

The prestigious Indian Institute of Managements in various parts of the country are facing shortage of faculty members. It is reported that the six IIMs were short by at least 100 teachers in all.

IIM Kozhikode has only 17 faculties against the sanctioned strength of 40 having **58% shortage** followed by **Kolkota with 20% shortage** and **Bangalore with 17% faculty shortage.** (March 2007, PTI)

The Indian Institute of Management, Ahmedabad (in Sep, 2007) has had to withdraw its proposal to expand seats of its post-graduate programme for executives (PGPX) because of lack of faculty.

- While the craze for management education has grown manifold, the business schools in the country are faced with an acute shortage of faculty.
- The problem is growing by the day as the business schools have to compete with their counterparts in India and abroad, in curriculum and teaching standards
- Teaching in business schools as a profession has not yet fired the passion in many due to the prevailing low remuneration
- The surge in the number of business schools in the recent past and the limited pool of quality Ph. D holders, among others, is aggravating the problem.
- The interest of reputed business schools across the world in hiring Indian faculty had added one more dimension to this problem.
- The main reason for the scarcity of faculty was the Indian universities' failure to strengthen their research base and Ph.D programmes. "There are hardly 100 new doctorates being awarded in management each year. With many preferring to join corporate Institutions need more Ph.Ds to become faculty
- Creating a talented faculty pool is obviously a long-drawn task. One needs to focus more on research-driven programmes leading to Ph.Ds. The not-so-robust Ph.D pipeline in the country would make the problem a long-term one.
- Apart from lucrative remuneration packages, there is a need for 'extra-economic incentives' to attract and retain faculty

- “Salaries have to be seen in the social and economic context. Academic salaries can never match those in industry. However, a professor has more access to resources that will give him or her intellectual satisfaction.
- Setting aside more resources for research and publication activity could improve the situation in due course. “The industry should also carve out a role for itself in this process by setting up endowments and other incentives.
- Hiring retired faculty on a contractual basis and giving them limited tenures, and allowing faculty close to retirement to continue in teaching without occupying their substantial position can be one suggestion.
- A great deal of flexibility regarding non-monetary and monetary incentives linked to additional deliverables would also be required

University Education

The Oversight Committee, which prepared the blueprint for the implementation of the 27 per cent OBC quota in higher education, reported — in 2006 — *that Indian central universities alone suffered a shortage of over 5,000 faculty members.* The problem is probably even worse at state universities and that “drastic steps need to be taken so that students are not deprived of proper guidance.” The situation has changed little since then.

- In **Madurai Kamaraj University Despite** having a sanctioned strength of 318 teaching faculty, the working strength was just 156 as on March 31, 2007. Posts of lecturers could not be filled for the past 17 years.
- **Delhi University (DU)**, is finding it difficult to cope with a huge faculty scarcity in its popular departments including Economics, Commerce, English, Law, Maths, Management and Computer Science. “If we intend to increase the number of seats and start recruiting any candidate, the teaching system will collapse in the next 30-40 years.” (Deepak Pental, VC, DU).
- **IN Jawaharlal Nehru University (JNU), against its sanctioned strength of 560, there is a shortage of 140 faculty members.** “There is a serious dearth of quality faculty thus affecting the overall faculty strength of the varsity, the most affected departments are Economics, Biotechnology, Computer Science and Law.” (B B Bhattacharya, VC, JNU,)
- Finding quality faculty in areas like computer science, IT and engineering is a serious problem. (**Jamia Millia Islamia**)
- **In Patna University** it has got only 470 teachers to teach nearly 20,000 students. This despite the fact that PU boasts of as many as 981 sanctioned posts of teachers. All the 200-odd superior posts of teachers, including professors and readers, sanctioned by the UGC during different plan periods are lying vacant for the last several decades. **Neither a single post has been created by the government since 1975 nor has any appointment been made against any vacant superior post since 1985 by the Bihar State University (Constituent Colleges) Service Commission. In fact, hundreds of posts have fallen vacant following superannuation of several working hands during last 10 to 15 years.**

Reasons/Suggestions

'Good talent has been sucked out of the academic stream and students of merit do not want to even consider teaching as an option because there are far more lucrative career options with multinationals.'

- Not many students want to join academics these days,

- A growing economy, more options and better pay packages in the corporate sector are some of the reasons why bright candidates are not opting for teaching.
- It's not merely a handsome package but also a conducive environment that can work as a magnetic force and bring quality professionals back to teaching.
- The atmosphere in the teaching profession has to be improved in a way that the young should see a bright future in it.
- In most universities and institutes, the ambience acts as a deterrent and people want to run away from teaching,"
- The IITs and IIMs are catering to the demands of the corporate world but not to the needs of the world of academics.
- They should have some research-based activities, which would help to produce good teachers.
- The concept of research be introduced so that the undergraduate level and faculty members at IIT are assisted by teaching assistants so that senior members can focus on developing a strong research eco-system.
- Research has to be made more attractive. For example there should be an opportunity to take up B- Tech immediately after getting a BSc degree which would entice students to get into research and development.
- Like in the West, academicians should be encouraged to take up consultancy projects for the industry that would help supplement their income and provide an incentive and make teaching more attractive.
- Students should be encouraged to join the profession by having more in-service programmes, travel grants and promotional avenues in the discipline.

Conclusion

A major shortfall in this direction is the inability of our institutions of higher learning to attract and retain qualified and trained faculty of high order. As the bureaucratic process of administration continues to stifle Indian academia, it will further reduce the competitive edge of Indian higher education institutions. There is, therefore, a need for institutes of higher learning, even in the public sector, to allow teaching staff more allowances, freedom to enter into consultancy arrangements and avail of attractive perks such as housing facilities in case higher salaries are not possible. Flexibility in appointment, in age limit and qualification is necessary to ensure quality Faculty especially at a time when such great expansion is taking place.

Due to wide variation in emoluments of industry and academics, private institutes face shortage of qualified and well-experienced faculty in almost all the disciplines (especially technical institutions). To improve quality the institutions should be given freedom to appoint competitive faculty. Pay structure to be comparable with that of the Industry

In some cases collaborative efforts between Indian public institutions and foreign institutions fail as India institutions do not provide for higher salaries to foreign teachers.

“Lamenting the shortage of high quality faculty for prestigious management and technical educational institutions in the country, a mechanism should be devised to enroll and retain quality faculty by providing them more incentives and research facilities. (N R Narayana Murthy). Saying that the quality of the faculty in engineering colleges was "abysmally low", he said not even five per cent of job seekers in Infosys were from the faculty in engineering colleges across the country. "They cannot even compete with their own students",. On the other hand, he said, while on an average the students of IIM-

Ahmedabad land up jobs with yearly pay package of Rs 8.20 lakh on an average, their teachers still languish on a salary of about Rs 2.50 lakh. Lauding the intake of high quality faculty during the inception of the Indian Institutes of Technology, when about 360 of the 400 faculty were foreign-trained, he said today not even five people would come from abroad to join as faculty.