

Maintaining Minimum Standards for teachers and students

H.Narayanan (Feb 2013)

This note is about immediate steps to be taken to improve the academic atmosphere in the institute. It is believed that the picture that is presented is realistic and the steps, practical and implementable.

First, we need to recognize that there is wide disparity in skill level and motivation of students.

Tentatively we may divide the students into

1. Highly motivated, fascinated by technical subjects. (10-15% of the population, not necessarily at the top).
2. Hard working disciplined students who will ultimately like and become good at academics (5%).
3. Interested in learning but not necessarily in technical subjects, not sure what they want to do (say 5%).
4. Excessively career oriented with no special motivation for learning, but acceptable exam skills (50%).
5. Students with poor working habits who tend to pick up FRs (15%).
6. Extremely ill prepared students (10%).

We should take very good care of type 1 and type 2 students and expose type 3 students to the attractions of academics through various means including extra curricular activities.

We should do our best for rehabilitating type 5.

The mentorship programme should be effectively used for this purpose. Students of type 6. need remedial programmes. But some of them might even have to be sent out early. The majority who are of type 4., should be made to maintain minimum standards of regularity, academic skill and integrity. Beyond that they should be free to do what they please as long as they do not disturb the academic atmosphere in the institute. (For instance, extracurricular activity in the institute should not exceed some threshold, which could be periodically reviewed. Freshers should not be bullied into keeping awake and working for PAFs when they are reluctant to.)

While I agree with the trend of the discussions about the change in student behaviour/aspirations over the years, I feel we are mostly talking about type 4. students here. But I feel our first priority should be to not allow 'minimum' standards of behaviour for students and teachers to become unacceptable rather than aim at academic excellence from everyone. Raising minimum standards is usually not hard and is clearly a step in the right direction.

The minimum requirement

Students should come to class essentially 100% of the time (except for illness and emergency) preferably with a minimum preparation to understand say 30% of the lecture. They should have up to date notes. Finally, this is hard - they should not indulge in unethical behaviour.

Teachers should CARE about teaching and about students, particularly type 1. and type 2.

Students: improving the situation

1. Use the mentorship programme more effectively. Get more students involved in teaching their own class mates. Many students find this (teaching) activity attractive since it raises their self esteem. Weak students are less shy in talking to their class mates and would benefit enormously.
2. Force them to have good routines. We should discourage all non academic

activity beyond some hour say 1.30 AM (the present LAN ban time). For instance, canteens should be closed by say 1 AM, hostel computer rooms should close by 1.30 AM.

3. Use summer projects with student mentors and show that there is more to academics than evaluation.

4. When they are disturbed counsel them. Don't use only punishment for controlling. Treat them also with respect. Try to improve the morale of weak students. Strategies to do this have been adopted by ARP mentors and have proved moderately successful.

5. Break up bad wings. Presently, there are a number of wings dominated by senior students with bad habits and backlog courses, who stay on for long. A new student entering such a wing is in danger of picking up bad habits from such senior students with the result that the habits don't die out of the wing when the concerned senior students leave. It is better therefore that academically weak senior students with bad habits do not continue in the same wing for long.

Faculty: improving the situation

Young faculty nowadays, are very ambitious researchwise, which is good, but think of teaching as time away from research.

A (very) few are positively scared of facing the class.

Many of these persons haven't done serious teaching before they came into the institute and don't appreciate how invigorating it can be after the initial years of learning the ropes. So they need mentoring for a couple of years the way students need it.

There should also be colleague feedback for every faculty member no matter how senior. For instance, these questions should constantly be asked and effectively answered: Are the lectures being taken with interest?

Are basic precautions being taken? (speech audible, punctured periodically with questions, silences, slides with minimum words, boardwork clearly visible and readable ..) Are the slides being gone through at reasonable speed? Is there a chance for every student to get involved no matter how slow? When a student asks a question is an attempt being made to involve the entire class? If assignments are given are any precautions being taken to prevent cheating? Is credit being given to regularity of effort - eg take attendance (20% at random), TAs examine notes (20% every week at random, can be returned same day)? Is the invigilation seriously done? Many faculty carry work to examination hall. Are the examination papers reasonable? Is the evaluation process error free? Are the TAs monitored carefully (many are quite ignorant of the subject but can still be effectively used) when they correct papers/assignments). Is the grading done with care? Is it too harsh? Or too lenient?

The above can be achieved by having course associates for every course. The duty of the associate could be:

1. attend 3-4 lectures of the instructor spaced appropriately during the semester, give feedback to improve teaching effectiveness.

2. comment on the quality of tutorial sheets/examination paper. (Examinations should neither be too hard nor too trivial.)

3. comment on the manner in which TAs are used - if they correct papers, is it monitored?

Is there a possibility for favouritism being shown?

Are the answer books always under the control of the instructor.

4. comment on the fairness of grading.

Many subtle benefits accrue when routine 'mechanical' precautions are observed. The recent introduction of biometric attendance registering has improved regularity among I year students and made them more connected with academics. It is hoped that the elementary steps outlined above would yield similar benefits.