Minutes of the Best Teaching Practices Session

May 7th, 2024

Speakers: Dr. Anuj Grover, Dr. Pravesh Biyani, Dr. Ganesh Bagler, Dr. Vikram Goyal, Dr. Sumit Darak, Dr. Vivek Kumar

Attendees:

Dr. Vivek Kumar

Dr. Pravesh Biyani

Prof. Vikram Goyal

Dr. Ganesh Bagler

Dr. AVS

Dr. Sumit Darak

Dr. Anuj grover

Dr. Dhruv Kumar

Prof. Sujay Deb

Prof. Sanjit Kaul

Dr. Abhijit Mitra

Dr. Sayak Bhattacharya

Dr Chenekar Prasad

Dr. Debidas Kundu

Mr. Aman Samuel

Dr. Kalpana Shankwar

Dr. Nabanita Ray

Dr. Shamik Sarkar

Dr. Subhashree Mohapatra

Dr. K Sriram

Dr. Debika Banerjee

Dr. Prahllad Deb

Dr. Pragya Kosta

Dr. Rama Krishan Ghosh

Dr. Vivek Bohara

Dr. Vinish Kathuria

Dr. Sneha Choubey

Faculty members presented their teaching practices in great detail. Following is a summary:

Key Discussions

• In-depth Topic Coverage:

 Faculty members emphasized the benefits of covering fewer topics in greater detail to ensure comprehensive understanding, even if this means omitting some syllabus topics.

• Continuity Between Lectures:

 Recap of topics covered in previous lecture with an overarching goal of the current one, and finishing the lecture with future lecture topics is another great way to maintain continuity between lectures. Infact, in some cases recap may go over a very long time compared to the notion of brief recap. However, such detailed emphasis on previous lectures is shown to enrich the learning experience.

• Attendance and Engagement:

 It is well known that good attendance can boost the learning exercise, however, making it mandatory may not really serve the purpose. Such steps can easily be circumvented by timing the attendance protocol. On the other hand, with no emphasis on attendance may lead to students work in-silo and lest to highlight that depression cases are on rise these days.

Plagiarism Challenges:

Plagiarism is another major bottleneck and with tools such as Chatgpt, it has
only worsened. It would be good to share and understand which are the other
tools/mechanism that can effectively identify plagiarism cases.

Practice and Self-help Tests:

• Quite often students demand practice questions. Self-help tests/tutorial (without grading) where such questions are given are quite useful.

• Examination and Assessment:

- It is better to dedicate substantial time towards rubrics and preparing question paper to resolve any ambiguity, as in large courses there could be many queries if these points are not attended to.
- Optimal evaluation would be to have a few evaluations, perhaps 4 proctored assessments may do a good job. A related point is that while bonus assessments seem appealing, at the same time a student shall feel obligation to attempt to it even though it is optional/bonus.
- In many cases it would also help if Faculty member himself/herself conducts assessment such as viva sessions. It give a deeper understanding of how well the teaching and learning is progressing.

Support for Weak Learners:

A very pertinent point is to attend to weak learners and engage with them.
One-to-one meeting with them or in-class interaction with students is shown
to help in many ways. The students may not easily show up for meeting but
one needs to pursue the efforts. TAs may also contribute in identifying such
students.

• Use of Technology in Assessments:

 Assessments using google form may be vulnerable and students may get help form another person sitting at another location and accessing the same form.
 It is best to understand such threats before using such evaluation tools.

External Assessment Contributions:

Typically in university affiliated system, question paper is set by university while
the teaching is happening at affiliated institutes. Such mechanism may have
some merit. It was highlighted that some portion of assessment can be done
by another colleague (or TA/TF) who need not necessarily be part of the
course.

Lab Sessions and Tutorials:

 Members also emphasized that in core courses conducting labs/tutorial by Faculty members is an enriching experience. It can address the issue of dismal attendance and at the same time remove over dependence on TAs. In many IITs, this is a practice.

Lecture and Lab Recordings:

 Recording videos of lectures/lab sessions can be very helpful in reaching community beyond IIITD. It can also help in conducting flipped classroom. And in some cases students are required to go through such lectures, and focus in advanced level understanding during the lectures.

• Online and Hardware-based Courses:

 Hardware based course are often restricted within premises, however, an online version of such courses can be very impactful in multiple ways – economical, accessible, scalable, among others.

Student Engagement in Course Design:

• Students may be asked to propose questions which indirectly forces them to go through the syllabus and also prepares question bank for future batches.

• Assignment Design:

• Coupling the assignments such that the future one build on current/previous ones can resolve plagiarism issues in assignments.

• Mid-Semester Feedback:

• Mid-sem Opine feedback can give pointers to what should be improved in the remaining offering.

Pair-exercise:

 Quizzes and assignments can be allowed in pairs, helps in team building and peer learning.

Class Size:

 Large core courses deter the Faculty from reaching out to all the students. As such many students may not feel connected to the course/Faculty and eventually stop attending lectures/learning.