

Panel Discussion on
Teaching and Learning in Mathematics Courses
– A Concept Note –

This panel discussion is planned to be the inaugural event in a series of events devoted to discussion of teaching-and-learning-related themes. The purpose of this series is to provide a medium for continued broad-based interactions among faculty and students so that all of us can have a better grasp of reality concerning the academic culture in IITB—how it has evolved, what our experiences have been, and what values we share—so that we could devise means of enriching our culture further.

The purpose of this event

Several changes have occurred in the education environment at IITB in the last decade. To mention only a few, student preparedness in Maths on entry to IITB has changed, students' way of studying and learning has changed due to changes in student motivation and the technological environment, and class sizes have become larger.

To adapt to these changes, we need to keep pace with new developments in education methodology, and also refine and innovate to better suit our situation and needs. This event would focus on Maths teaching and learning, and also provide a snapshot of the present status.

The event is expected to cover the changes that have occurred in various aspects of maths teaching-and-learning over the last decade. A sample list of such aspects is:

- Teaching methodologies and techniques
- Teaching of math concepts
- Active learning in the classroom
- Use of audio-visual material
- Peer learning opportunities in courses
- Nature of tutorials
- Nature of exams
- Ensuring adequate learning.

It is expected that the panel will also discuss the present status of teaching methodologies in mathematics courses and the wish lists and unfinished agendas, if any. To a lesser extent it will also discuss future trends.

Format

Panelists will be drawn from Maths faculty and undergraduate students. Each panelist will be expected to focus on effectiveness of teaching and learning in Maths courses and comment, from his or her perspective, on the following:

- Important aspects of maths teaching-and-learning (see sample list under “purpose”)
- Changes in the last decade
- Present status

Each panelist will also articulate a 3-item wish list to improve the effectiveness of teaching and learning in Maths courses further, where each item is an act or action on the part of (a) Faculty, (b) Students, (c) IIT administration at large, respectively.

Intended audience and benefits

The intended audience is faculty from across IITB departments, schools, and centers; and students. The discussion and question-answer session following the panelists’ presentations will provide the audience an opportunity to share ideas, experiences, and visions, and identify common concerns across department boundaries, e.g., classroom techniques, use of audio-visual aids, peer learning techniques, and ensuring adequate learning. The students in audience will benefit from a better awareness of the various issues concerning teaching and learning, and the appropriate attitude they must develop to make their learning more effective.

What this event is not about

It is not about finger pointing, and it is not about proposing changes or finding solutions.