

Flipped Classroom

A flipped classroom is an instructional strategy focussed on student engagement and active learning, giving the instructor a better opportunity to deal with mixed levels, student difficulties, and differentiated learning preferences during the in-class time. A student discovers the ideas of videos, may use them for discussions and assignments in the classroom to motivate the students to learn the concepts thoroughly.

One of the most central benefits to adopting flipped learning methods is that students are able to learn more deeply and retain material better. Because they have more ownership over the learning process and receive more frequent feedback, students are able to gain a more complete understanding of content.

Objective of Flipped Classroom:

- More participation of Students
- Versatility for students to learn in time and speed.
- Interaction instructor-student.
- Appropriate use of resources by the teacher for constructive learning methods.
- Inspire students to learn the concepts thoroughly.



Plan of Execution

- Orientation session: 20 minutes

Students are provided with the learning material (Video link, text book etc.) of the topic to be covered and a time of 4 days to prepare for the activity.

- On the day of activity, the topics are given as per their position in the classroom (the students are observed writing different topics at the same desk and 20 minutes are given to think and write about the topic.
- The scripts are collected in the chronological order (roll no.)
- Students learn the ideas of videos, and can utilize them in the class for discussions and assignments.

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Mapping of Innovative T-L Method to Subject

Name of the Faculty	Name of the course	Year & Semester	Topic	Innovative methods
Dr. Gudla Vishnu Vardhan	Radar Systems	III & II	Tracking Methods	Flipped Classroom

Dr. Gudla Vishnu Vardhan uses Flipped Classroom Innovative teaching method for teaching the topic Tracking Methods of course Radar Systems in IIIrd Year & IInd Semester. With the model of the flipped classroom, students have direct access to the knowledge. Whereas with the traditional classroom, students don't have direct access to the knowledge. The teacher stands between the students and the knowledge. With the flipped classroom students have to prepare their contact moments.

Benefits over Conventional Teaching Methods

Hence, using this innovative teaching method of a Flipped Classroom, our faculty could observe the following benefits over the conventional teaching methods:

- Teachers spend less time introducing new topics.
- Students develop independent learning skills.
- Teachers can create more engaging lessons.
- Students who are absent do not fall behind.
- Teachers can re-use the content they create.
- Students are able to build a deeper understanding.

