SAVEETHA ENGINEERING COLLEGE

AUTONOMOUS

NAAC A GRADE

Affiliated to Anna University | Approved by AICTE

DEPARTMENT OF MECHANICAL ENGINEERING

ACTIVITY BASED LEARNING

ACADEMIC 2020-21

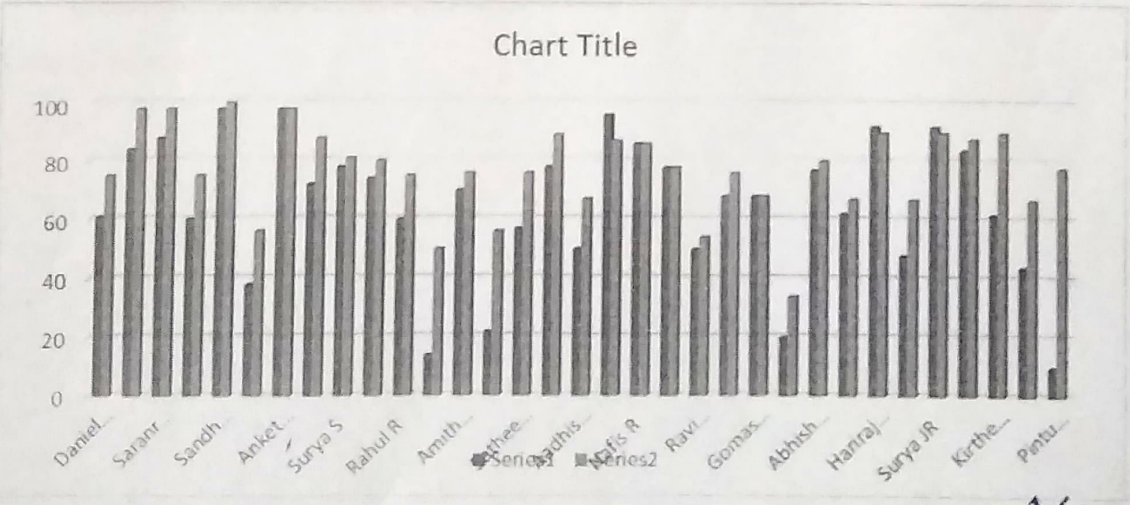
Course Code & Course Title	**: 19ME403/ KINEMATICS OF MACHINES**
Year/Sem/Branch	**: III /II/MECHANICAL**
Name of Faculty	**: FELIX PRABHU F**
Designation	**: ASSISTANT PROFESSOR**
Unit Title	**: BASIC MECHANISMS**
Topic	**: VELOCITY AND ACCELERATION DIAGRAM**
LO	**: Draw the velocity and acceleration diagram.**
Bloom's Taxonomy Level	**: APPLY -K3**

S.No.	Title	Description
1	**Concept**	Concept is to make the students, understand the various applications of Four bar mechanism
2	**Challenges Faced**	(Difficulties faced by students while it was taught in conventional method) • In conventional method, students are not free to interact with their friends. • The students become less involved in knowing about the concept. • Students doesn't get any sort of motivation.
3	**Name of the Activity**	**Flipped Class**
4	**Description of the Activity**	Open source video: NPTEL VIDEO NPTEL Video lecture was shared with students, to get additional information about the topic. • Introduction about the topic: DOCUMENT Additional document was shared to the students to give them detailed introduction about the topic. • Self-video: ➢ Camtasia - video ➢ Normal - video I personally made two videos, one I tried with CAMTASIA software and another was recorded in an empty class room. Both the videos were shared with the students Once all the materials were shared to the students, they were given two days time to prepare and take up the assessment. Students showed much interest and many turned up during their break time to clarify the doubts.

		The activity was planned in classroom, where practical mechanical instruments like links, cam and follower, gear trains, rack and pinion, differential etc. was kept. It was really a surprise factor student as they didn't expect a practical session on that hour On the day of activity, the students were really surprised to take up the practical assessment. Tachometer was given to them to find the rpm of rotating element. The activity went on well; it just prickled the inner ability in them.
5	**Feedback from Learners (Consolidated)**	**Google form** Analysis report
6	**Feedback of the Faculty about this activity**	(Previous experiences Vs Activity Based Teaching) ➢ Most of the students went deep into the topic and they came up with good knowledge. ➢ In the forthcoming classes, the student's involvement increased gradually, they were excited too. ➢ They were self-motivated and were ready to teach their friends in case of any doubts.

Analysis Report Chart.

Good marks were secured by the students in next assessment. Comparison chart of student's performance in Assessment before and after the activity is given below. The pass percentage increased from 56% to 76%.



Signature of the Course Faculty **Signature of HOD**

Evidences/Proofs (To be attached along with this document)-Mandatory

{Photos taken during activity **(or)** Documents collected from Students (Charts, Crossword puzzles, Cards etc.,)}

Fig .1. Students divided in group for activity

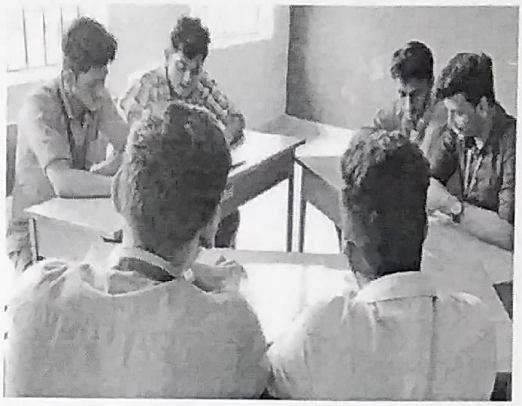


Fig.2. Students interaction

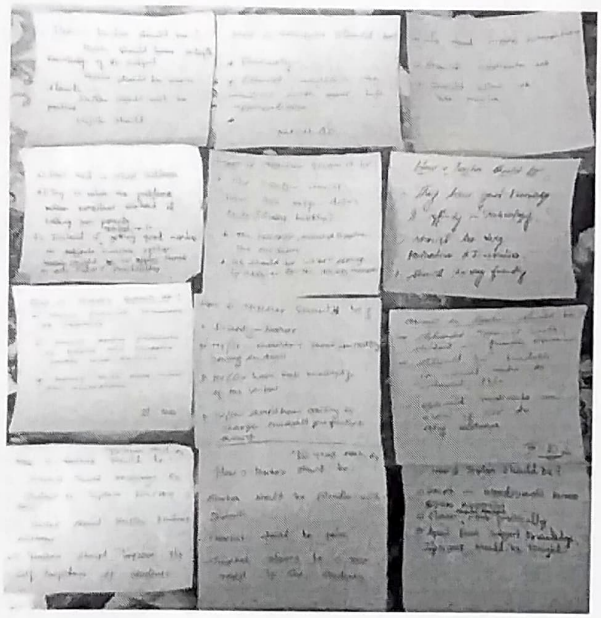


Fig.3. Students feedback