2 Collaborative Learning:

TLP Method Followed: Think-Pair-Share

Description: Think-Pair-Share (TPS) is a collaborative learning strategy in which students work together to solve a problem or answer a question about an assigned reading. This technique requires students to (1) think individually about a topic or answer to a question; and (2) share ideas with classmates.

Conclusion: Teacher can understand the different thought processes of the students while listening to the pairs and when the students share their view at the end.

The interaction with students at personal level is intended to motivate those students who may not be generally interested in the topic.

The students were divided into 20 groups each group of 3 students.

The students were evaluated on their presentation skills and how well they shared their ideas and answered the questions posed by their classmates.

Photographs:

Fig   : Students in activity

2.3 Case Studies:
- Created four to five case studies of similar difficulty.
- Students were asked to form groups of four or five to work through & analyze their case study.
- Provided adequate time to work through the cases.

- Call on groups randomly and asked the students to share their analysis and continued until each case study has been addressed.
- The case studies are evaluated based on a Rubric prepared consisting of 8 Criteria s and several performance indicators in each criteria as shown below
- The given case study may be falling under one or more criterias

2.4 Group Problem Solving:
- Given the students with a problem exercise.
- Provided some structure or guidance toward solving the problem, then students will work together to solve the problem.

2.5 Jigsaw Method:
Key points of the Activity:
- Created Home Groups of consisting of 5 members in a team
- Set of questions displayed to all the groups.
- Each member in a group will take up a question from all the set of questions
- The home group members will be preparing their answers individually
- Then all the members from each group who received similar questions will be formed as master groups
- Then the members of the master group will be getting expertize on the question that they received
- Later the master group will be dissolved and all the members moved back to the home groups.
- Then the faculty will be asking a question and getting responses from each group as to award marks. This will be continued for all the questions .
- Three Levels are fixed based on the answer **:**
  - 3 - Answer is perfectly correct
  - 2 - Answer is relevant and Satisfactory
  - 1 – Answer is relevant and not satisfactory

Topics :
- E-R Model
- Database Applications
- Inner Joins and Outer Joins
- Relational Algebra operations
- Normal Forms

2.6   Project Based Learning:

Name of Subject: Engineering Chemistry

Description: In this practice, the students of the class are divided into teams of 5-6 members each. Each team is given a topic in EC subject. For the given topic all the students of respective teams should prepare and present a working model in the classroom. Each team should complete the presentation in 10 minutes duration. At the end of completion of all the presentations announcement of best presentation is being done and followed with the suggestions for improvement. Best project given on the basis of following guidelines.

--Working/non-working model.

--Explanation of principle.

--Presentation.

--Percentage of result.

Conclusion: It is helpful to promote the learning through working model. By this learning students will understand the working principle of various topics and they will also improve their knowledge and skills.

Photographs

Fig 1: Construction of Dye Sensitised Solar Cell(DSSC).

Fig 2:   Students explaining the principle of DSSC cell.

Fig 3:   Preparation of Bio Diesel from Waste vegetable oil

2.7 Video Play

Name of Topic: Synchronization: Dinning Philosophers' Problem & Round-Robin Scheduling

Description: video clips can be very useful in understanding a topic easily. The video lecture is often seen as the key ingredient in the flipped approach, Dinning Philosophers' Problem topic is actually difficult for the students to understand. This video helped my students remember the topic thoroughly. Because video explained the topic by role play. For Round-Robin Scheduling algorithm played animation video. The TLP is to focus mainly weak students in the class.
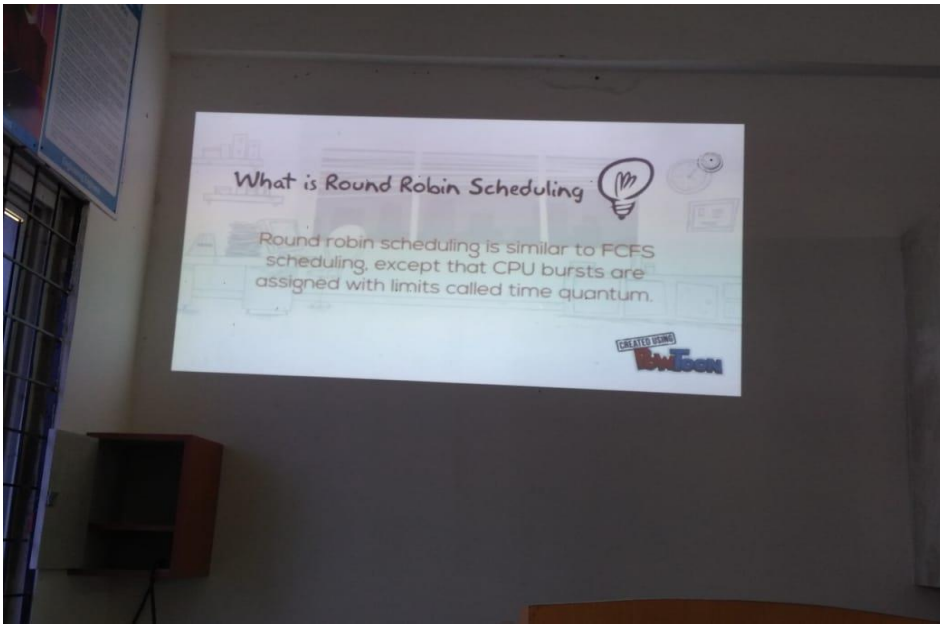
Photographs:

Fig 1: Demo of Scheduling algorithm

Fig 2: Visual presentation