



Rayat Shikshan Sanstha's

Karmaveer Bhaurao Patil College of Engineering, Satara

Department of Basic Sciences and Humanities

Innovative Teaching–Learning Activities

Report on Flipped Classroom Activity

The Department of Basic Sciences and Humanities at Karmaveer Bhaurao Patil College of Engineering, Satara, conducted a Flipped Classroom activity in the Physics Laboratory for First Year (FY) engineering students. The main goal of this activity was to make physics learning more practical, engaging, and easy to understand by involving students more actively in the learning process.

In the traditional approach, students usually learn the theory in class and perform experiments in the lab without much prior understanding. To improve this, the department tried a flipped classroom approach in the laboratory setting. Here, the basic concepts and theoretical background of the experiments were introduced during earlier classroom sessions. Teachers used simple language, visual aids, and real-life examples to explain the aim and importance of each experiment.

Students were encouraged to review their class notes, discuss with peers, and think about the experiment before coming to the lab. They also came prepared with questions and points they didn't understand. This helped build curiosity and a sense of responsibility among the students.

During the lab sessions, the focus shifted from explaining theory to hands-on learning. Students were better prepared and knew what to expect. They performed the experiments with more confidence and showed greater accuracy in observations and calculations. Teachers guided them through the process, helped clear doubts, and discussed the real-world applications of each experiment.

The response from students was very positive. Many students said they felt more confident and understood the experiments better. They enjoyed the lab sessions more because they were not confused or lost. The teachers also observed improved performance, better teamwork, and a noticeable increase in student participation and interest.

Overall, the flipped classroom activity in the Physics Laboratory was a successful and meaningful experience for both students and faculty. It helped students shift from passive listening to active learning. This approach not only improved conceptual clarity but also encouraged students to think critically and apply their knowledge. The department now plans to adopt similar flipped strategies in other practical subjects to enhance student learning and academic outcomes.



Rayat Shikshan Sanstha's
Karmaveer Bhaurao Patil College of Engineering, Satara

Department of Basic Sciences and Humanities



Course Coordinator
Ms. Jadhav V.V