

INNOVATIONS IN TEACHING AND LEARNING

Subject: Embedded & Real Time OS **Class:** T.Y. BTech E&TC

NAME OF THE ACTIVITY: Active Learning through Flipped Classroom Approach

- I. Concept:** The Flipped Classroom approach reverses the traditional learning environment by delivering instructional content, often online, outside of the classroom. Students first engage with new material at home and then apply that knowledge actively in class through discussions and collaborative activities. In this activity, students were introduced to the KPIT Sparkle manual and asked to study and discuss project titles and ideas. This encouraged self-paced learning, peer discussion, and application of management principles through real-world project examples.

II. Objectives (Goal):

- To promote student-centered and self-paced learning.
- To enable students to understand management concepts through applied projects
- To encourage active participation, teamwork, and critical thinking.
- To transform classroom sessions into spaces for discussion and application rather than passive listening.

- III. Appropriateness (Relevance of Selected Method):** The flipped classroom method promotes active, student-centered learning and enhances conceptual understanding through discussion and application.

IV. Effective Presentation (Implementation Details):

- a. The KPIT Sparkle manual was shared with students in advance.
- b. Students were instructed to go through project topics before the class.
- c. During classroom sessions, students formed small discussion groups to share insights.
- d. Faculty facilitated interactive sessions analyzing selected project titles and challenges.
- e. Students presented their findings connecting theory with practical, industry-based examples.

VI. Reproducibility and Reusability by Other Scholars for Further Development

Sr.No	Innovation Used by	Details of User	Purpose of Reproducibility and Reusability
1.	R.P. Mane	Faculty of another Div	To conduct activity in subsequent batches

VII. PEER REVIEW AND CRITIQUE

Category: Internal/External/Interdepartmental

Score: (1:Least 2: Moderate 3:Highly)


Question 1. Is this Innovative Teaching and Learning Methodology useful during content delivery?


Question 2. Did this innovation increase student motivation or participation?

Question 3. Will it show improvement in student learning?

Question 4. Suggestions for improvement in future iterations.

Category	Name of Peer	Organization	Q.1	Q.2	Q.3	Q. 4 Suggestion/Critique
Internal	R.P. Mane	RSCOE	3	2	3	Help to add prerequisite knowledge check
External	Nutan Deshmukh	cummins	3	2	3	Repeat the activity for future batches


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