CHALAPATHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

Chalapathi Nagar, Lam, Guntur – 522 034
Accredited by NAAC with A Grade, NBA Accredited CE, CSE, ECE & EEE
(Approved by AICTE, affiliated To ANU, ISO 9001 – 2008 certified)

Best Practices
(Academic Year 2022-23)

BEST PRACTICE-I

Title of the Practice: **Implementation of outcome-based education (OBE) in the teaching-learning process effectively.**

Objectives of the Practice:

- To concentrate on the knowledge levels and make teaching more student-centered.
- To encourage the faculty with better planning of their teaching and learning strategies.
- To progress knowledge, acquisition through integrated learning strategies, elective courses, and core courses.
- To support the students in developing their critical thinking and problem-solving abilities.
- To develop technical skills through the use of contemporary tools.
- To exploit MOOCs to enhance one's capacity for self-learning.
- To improve curriculum to align with modern industrial demands.

The Context:

Effective strategies for instruction offer a substantial influence on student learning, and this is the expected result and primary goal of educational institutions. Faculty strives to follow the best practices in methodology with the objective to offer students with the highest quality education possible. OBE in Teaching-Learning is thereby being implemented at our institution.

The Practice:

- The Course Coordinator Committee (CCC), Module Coordinator Committee (MCC), and Department Academic Committee (DAC) are all involved with the teaching-learning process to ensure effective content delivery.
- Preparing course handouts and choosing Course Outcome (CO) targets in accordance with BoS recommendations.
- The course coordinators are essential in the creation of course materials, defining CO targets, tracking attainment gaps, creating

high-quality tests, and recommending the best delivery strategies for particular courses.

- Every year, DAC and PAC evaluate the POs and PSOs of the graduating class. Following analysis, the following steps are performed to improve the teaching-learning process in order in deploying OBE successfully.
- Delivery strategies are modified in accordance with COs' completion of the relevant courses.
- To meet stakeholder expectations, curriculum adjustments are made depending on PO and PSO achievement levels.

II) IQAC performs two academic audits every semester to ensure that OBE is being employed correctly. The academic audit team verifies the following criteria and notifies the IQAC Coordinator of any violations.

- Course Objectives and Course Outcomes (COs).
- Course articulation matrix (Mapping of COs, POs and PSOs).
- Lesson Plan Schedules.
- Details of learning material as well as e-content developed by the faculty.
- Posting of attendance in attendance registers.
- HODs weekly assess the lesson plan and attendance registers.
- Syllabus coverage as per the schedule or not.
- I Mid, II-Mid and End Semester Question Papers and Scheme of valuation.
- Action Taken Reports (ATRs) on I-Mid and II-Mid marks.
- Posting of Internal Marks in attendance registers.
- Semester End Examination result analysis and ATRs.
- COs attainment computations.
- Gap analysis between COs attainments and Target levels & ATRs.

III). IQAC evaluates faculty performance and subsequently makes recommendations that need to be made with the goal to implement OBE.

It is recommended that faculty members take use of the Faculty Development Programmes/STTPS offered by esteemed universities, in along with virtual certification programs notably SWAYAM and COURSERA, to increase their expertise in teaching and learning.

Evidence of Success:

Problems Encountered and Resources needed:

1. More than 95% of the faculty accepted improvements regarding OBE procedures. But it appears that adjusting to the changes takes a while.

Title of the Practice: **Ensuring holistic development of students**

Objectives of the Practice:

- To develop technical clubs and professional associations that is unique to each department.

- To investigate students' innate abilities through National Level Technical and Cultural Symposiums.

- To improve students' physical and mental skills through games, athletics, and yoga.

- To acknowledge the significance of community services and improve social empathy through NSS activities.

- To cultivate youngsters with the ideal qualities of a responsible citizen, including bravery, character, leadership, cooperation, discipline, and a spirit of adventure.

The Context:

In addition to gaining the requisite information in their field of engineering, students must additionally acquire the requisite soft skills and coding talents in order to pursue employment or advance in a start-up. Pupils that take part in all of the co-curricular, extracurricular, and extension programs that are offered will surely be prepared for any kind of responsibility.

The Practice:

1. Empowering students the tools they need to learn practical skills through co-curricular activities that are student-centric platforms.

- IEEE Student Chapter: Through a variety of technical challenges, including quizzes, project expos, rapid circuits, garbage health, etc., the chapter has been highly effective in examining the knowledge levels of students. In addition to this, training programmes, workshops, and guest lectures are organized.

- CSI Student Chapter: The goal of this chapter is to consistently improve students' technical skills in the newest programming languages as well as their leadership abilities.

- ISTE Chapter: Through specialized skill development programmes, students gain knowledge that meets emerging industrial needs. The students are assisted in becoming familiar with the most recent

advances in technology by workshops and hands-on sessions that are carried out after identifying the thrust areas.

- IETE Student Chapter: It makes it easier to provide guidance and encouragement to students so that they can become better learners and citizens.

- Department Technical Clubs: The primary goal of these clubs is to disseminate information on the most recent technological advancements related to their primary disciplines. They also hold competitions and publish department technical publications that cover both technical and nontechnical topics to help members stay up to date on current issues. These clubs are regarded as being quite important, and students have been actively participating in all activities. Every department has a technical club of its own.

II). Student development through extracurricular activities, both mentally and physically.

Sports and Games: It aims to improve students' physical competence, awareness of movement, and understanding of safety, as well as their capacity to use these to participate in a variety of activities associated to the promotion of an active and healthy lifestyle. Sports facilities that are suited for training are made available.

III).Development of student's attitude towards social service by Extension Activities.

NSS Unit: Through the NSS Unit, the institute encourages regular interaction between students, faculty, and support staff and the local community for complete and future community development. It helps students to develop social empathy and grasp the real-world issues that everyday people face in our society. Additionally, it aids in understanding the importance of civic responsibility, public morality, resource efficiency, excellent traffic sense, public safety, and moral conduct.

Evidence of Success:

Problems Encountered and Resources Required:

Students' participation in Co-Curricular, Extra-Curricular, and Extension activities has been impacted by time constraints and strict adherence to the regular academic schedule of teaching and learning.

Principal, CIET.